ATTACHMENT B

DRAFT GEORGE STREET 2014 BENCHMARKING STUDY

BENCHMARKING STUDY

GEORGE STREET, SYDNEY

DATA COLLECTION 2014



DRAFT 18.11.2014



Sydney City Council Town Hall House 456 Kent Street Sydney NSW 2000 Australia



www.gehlarchitects.com

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HOW TO USE THIS DOCUMENT

This document is part of a suite of documents as displayed below.

PUBLIC SPACES PUBLIC LIFE 2007

The Public Spaces and Public Life study developed by Gehl Architects in 2007 identified George Street as the main spine in Sydney. George Street was pointed out as the main street connecting three main squares - Railway Square, Town Hall Square and Circular Quay.

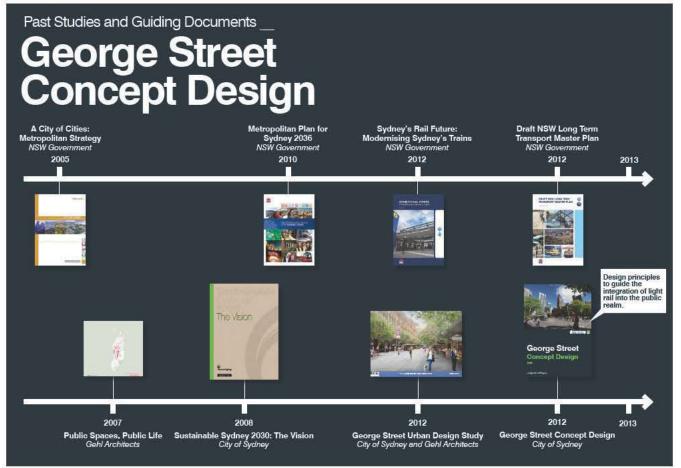
Subsequently to the Public Space and Public Life study a light rail feasibility study was carried out by Transport NSW, which also pointed towards George Street as the key spine.

GEORGE STREET CONCEPT DESIGN

The George Street Concept Design was developed by City of Sydney and identified a number of elements to be considered when developing a design scheme for George Street that would include future light rail. The concept design identifies a number of parameters to be considered and also points out the aspirations for a transformed George Street.

This report seeks to provide a benchmark on the current state of George Street to enable future comparisons and measurements for success or failure.

Whilst providing a benchmark for George Street it is broadly considered that the transformation of George Street will have an intrinsic effect on adjoining streets and spaces and that the entire CBD will benefit in positive terms.



INTRODUCTION

George Street is in a process of great change. With a new lightrail, George Street will be a strong corridor for sustainable transport. The transformation of George Street, however, is much more than just a transport project; it is the making of a great street, which will help transform the city of Sydney. The present document is a tool for measuring and steering this transformation process.

PORTRAIT OF A STREET AS A PUBLIC SPACE

What is George Steet today? What does it look like? How is it used? These and many other questions will be adressed in this report, and the aim is to paint a comprehensive and integrated picture of George Street. By compiling a wide range of data such as mobility patterns, retail structure, air quality, street furniture and many others the document demonstrates that the transformation is about more than just design – it's about the effect that the change has on the quality of life on George Street and the wider city. With the comprehensive set of data the document draws a number of conclusions on the overall conditions for 'Identity', 'Mobility, 'Public Life' and 'Economics'.

THE ROLE OF DATA IN A PROCESS OF CHANGE

Processes of change are often characterised by uncertainties – is this the right path of development? How can we be sure that the plan will be a success? To collect comparative data over time is a way to infuse the development process with more certainty rather than just belief, and this is valuable – not only for the planners involved, but also for the politicians in their communication with the broader public. The present document describes the current situation of George Street and highlights how the change process can be measured. It proposes a number of key performance indicators related to the goals and strategies for the transformation of George Street. As such it becomes an important tool for measuring success and building public support.

The intention is that the various types of data presented in this report will be collected comparatively over time. This allows for a continous monitoring of the process of change, and if needed it allows to test and refine strategies and concrete initiatives along the way, and these learnings can also inform the design of other future projects. The transformation of Swanston St. in Melbourne is an example of this, where continuous monitoring resulted in re-adjustments of strategies and design solutions.

A BENCHMARK TOOL

In addition to helping steer the transformation process, the comprehensive collection of data will also serve as a possible bench mark tool. How is George Street performing in relation to comparable great streets around the world? What is the result and experience of implementing strategies similar to those in other cities?

The transformation of George Street is more than a transport project; it is a leveraging of the unique qualities of George Street and the potential it holds as a spine and a great street in the city centre. The coming investments will greatly benefit George Street but also its immediate surroundings and the city centre as a whole. These targeted transformations will serve as a catalyst of change towards a healthier urban environment in central Sydney. This report presents the data that illustrates these benefits.

TRANSFORMING GEORGE STREET

DESIGN PRINCIPLES

Seven design principles have guided the development of City of Sydney's Concept Design for George Street's transformation.

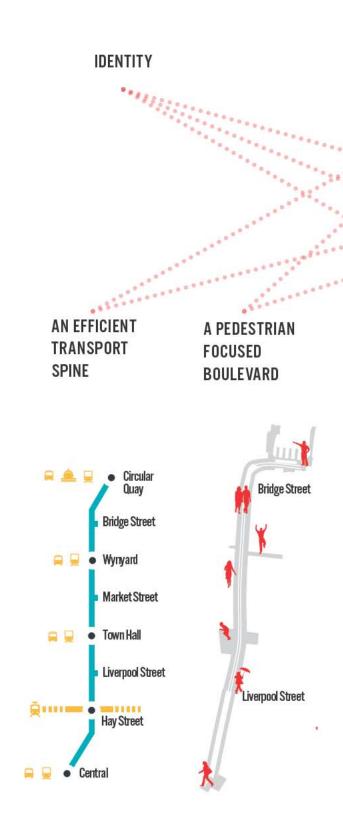
The overall targets of the design principles are to deliver a strengthened identity, an improved mobility, an invigorated public life, and a more resilient economy. Through achieving these four overarching goals George Street will experience an improved business economy that will benefit the entire city centre as more visitors are attracted and people are invited to stay longer.

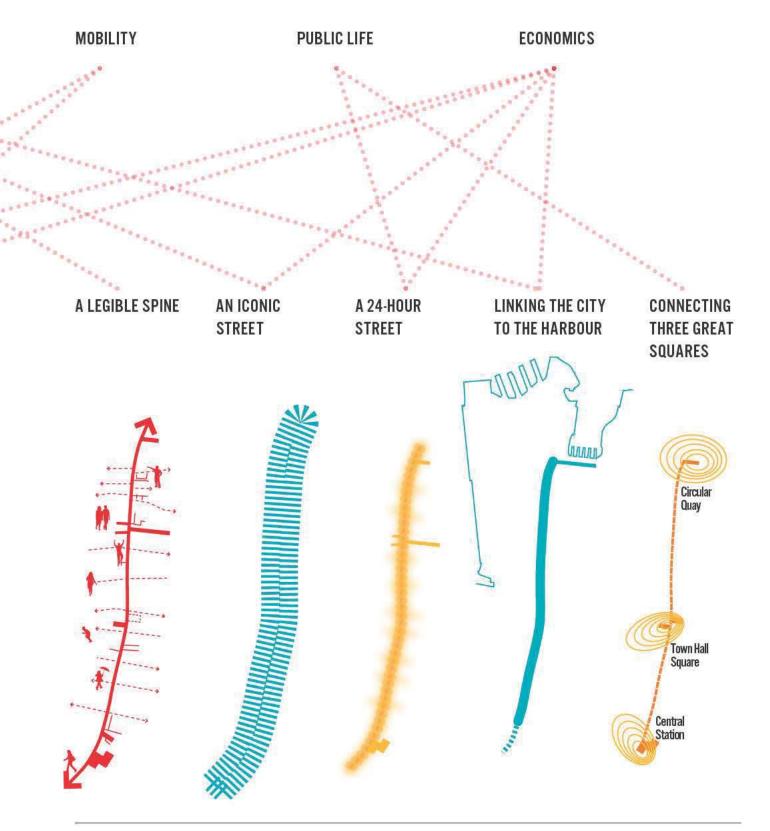
The links between the overall targets and the design principles are shown on this page.

KEY PERFORMANCE INDICATORS

The following pages describes central key performance indicators which can be used for measuring the transformation process of George Street. They have been selected based on their ability to deliver the above targets and principles. Based on these indicators four success criteria are suggested. In the coming years other indicators and success criteria could be added to the list.

The data collected for this report have been organized in four chapters, Identity, Mobility, Public Life and Economics. The first three chapters focus on conditions and impacts on George Street, whereas the Economics chapter also considers the transformation of George Street in relation to the whole of Sydney's central business district.





KEY PERFORMANCE INDICATORS

IDENTITY

- INCREASED POSITIVE PERCEPTIONS OF GEORGE STREET
- INCREASED AMOUNT OF ACTIVE FRONTAGES
- MORE AVAILABE PEDESTRIAN SPACE
- MORE TREES / BETTER CANOPY COVER ALONG GEORGE STREET

"IN 10 YEARS GEORGE STREET WILL BE PERCEIVED AS A DESTINATION IN SYDNEY"

MOBILITY

- INCREASED PERCENTAGE OF PEDESTRIAN TRAFFIC
- INCREASE IN EVENING PEDESTRIAN TRAFFIC
- DECREASE IN PEDESTRIAN INJURIES
- REDUCED TRAVEL TIME ALONG GEORGE STREET

"IN 10 YEARS PEDESTRIANS AND PUBLIC TRANSPORT USERS WILL BE ABLE TO MOVE MORE EFFICIENTLY THROUGH GEORGE STREET"

KEY PERFORMANCE INDICATORS

PUBLIC LIFE

- MORE STAYING ACTIVITY ALONG GEORGE STREET
- MORE NIGHT LIFE ACTIVITY ALL ALONG GEORGE STREET
- MORE OUTDOOR CAFÉ SEATING
- REDUCED NOISE LEVELS & IMPROVED AIR QUALITY

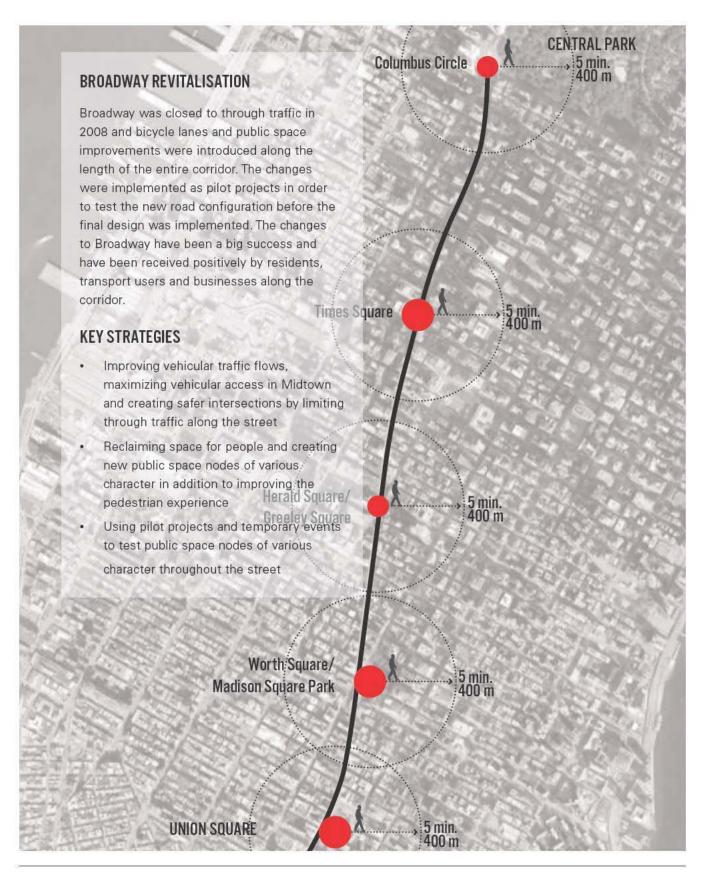
"IN 10 YEARS LINGERING ACTIVITY ALONG GEORGE STREET WILL INCREASE BY MORE THAN 100%"

ECONOMICS

- INCREASED DIVERSITY OF USES IN BUILDINGS ALONG GEORGE STREET
- INCREASED NUMBER OF RESIDENTS IN THE CBD
- MORE CUSTOMERS ON GEORGE STREET
- DECREASE IN OFFICE VACANCY

"IN 10 YEARS GEORGE STREET WILL BE A THRIVING RETAIL LOCATION"

BEST PRACTICE: BROADWAY, NEW YORK





RECLAIMED PUBLIC SPACE

- 35,800 m² of new public space, nearly 3 times as much space as Federation Square in Melbourne
- Times Square: 10,000 m² of reclaimed space – 5 times more space for people
- Herald Square: 7,400 m² of reclaimed space – twice the space for public life
- Worth Square: 9,300 m² of reclaimed space – 8 times more space for people

INCREASE IN PUBLIC LIFE

- 80% fewer pedestrians walking in the roadway
- 11% increase in pedestrian traffic throughout the area 2008-2012





- 74% say Times Square has improved dramatically
- 84% increase in stationary activities
- 42% of locals now shop more often
- 26% more leave offices for breaks throughout the area 2008-2012



BEST PRACTICE: SWANSTON STREET, MELBOURNE

KEY STRATEGIES Pedestrian, bicycle, and light rail priority. Limited vehicular access More space for walking & staying Excellent light rail stops A string of public spaces of diverse uses TATE LIBRARY FORECOURT Bourte Street Mall Pocket Corner City Square A PROCESS OF REFINING

Swanston Street is the main civic spine of Melbourne. In 1991 the City of Melbourne made a landmark decision to close Swanston Street to vehicle traffic and in 1992 Swanston Street was closed to through traffic. Pedestrian and bicycle space was upgraded with widening footpaths, provision of bicycle lanes, new street furniture, clearer signage, tree planting and installation of artworks.

Despite these efforts and successful during the day, the street was largely empty during the evening. In response, the decision was made in 1999 to open the street to vehicles between 7 pm and 7 am More recent upgrades including increased retail, restaurants and residential uses have increased nighttime activity.

In 2012 Swanston Street went through another upgrade featuring four light rail zones with no vehicular access and improved conditions for transit users as well as an elevated path for bicycles.

RECLAIMED PUBLIC SPACE

- 29,900 m² of new public space from 1994-2004
- 71% more space for people and activities on streets, squares, malls and promenades



INCREASE IN PUBLIC LIFE

- 40% increase of daytime pedestrian traffic
- 100% increase of nighttime pedestrian traffic
- 300% increase of stationary activity
- 62% more students in the central city throughout the area 1993-2004

IMPROVED ECONOMY

- 275% more cafes & restaurants
- 177% more cafe seats
- · 60% increase in bar and pub capacity
- 44% increase in CBD employment
- 62% decrease in office vacancies throughout the area 1993-2004



IDENTITY

KEY PERFORMANCE INDICATORS

- INCREASED POSITIVE PERCEPTIONS OF GEORGE STREET
- INCREASED AMOUNT OF ACTIVE FRONTAGES
- MORE AVAILABE PEDESTRIAN SPACE
- MORE TREES / BETTER CANOPY COVER ALONG GEORGE STREET

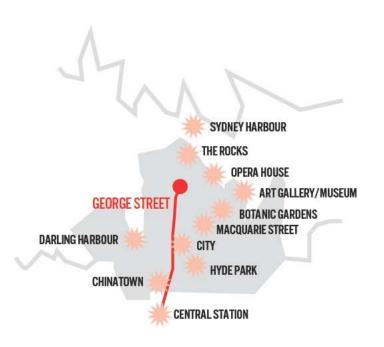
IN 10 YEARS GEORGE STREET WILL BE PERCEIVED AS A DESTINATION IN SYDNEY



01/ LINKAGE POTENTIAL



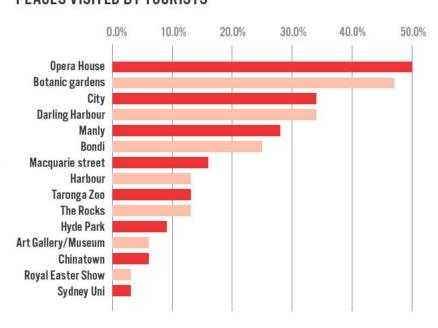
02/ VISITOR DESTINATIONS





PLACES VISITED BY TOURISTS

...BUT IS NOT PERCEIVED AS A DESTINATION IN ITSELF



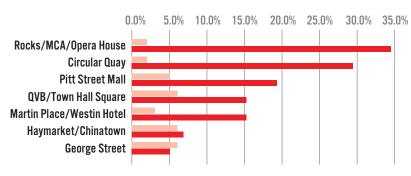
Source: Visitor Wayfinding in Sydney, August 2011 Destination NSW, University of Technology Sydney

03/ PERCEPTIONS OF GEORGE STREET

ONLY 5% OF VISITORS PLACE GEORGE STREET AMONGST THE PLACES IN SYDNEY THAT THEY LIKE, BUT SLIGHTLY MORE REFERENCE GEORGE STREET AS A PLACE THEY DISLIKE

Source: Page 14, City of Sydney Pedestrian Study Ref No. 2490, Nov 2007, Environmetrics, City of Sydney

VISITOR PERCEPTIONS OF DESTINATIONS



% RESPONDENTS WITH POSITIVE PERCEPTION

% RESPONDENTS WITH NEGATIVE PERCEPTION

ELEMENTS THAT DETER PEOPLE FROM THE SYDNEY CBD SHOPPING ARE THE CROWDS OF PEOPLE, TRAFFIC CONGESTION AND THE EXPENSIVE PARKING, SHOPPING AND DINING THE COST OF PUBLIC TRANSPORT TO THE CITY AND ALSO BETWEEN CBD SHOPPING DESTINATIONS IS A PROMINENT DETERRENT

Source: Page 4, Perceptions of The City Retail Environment Ref No. 21029/30, May 2011, V2, Sweeney Research, City of Sydney



04/ IMAGES OF GEORGE STREET

SEARCH RESULT FOR GEORGE STREET IN DECEMBER 2013

Google

george street, sydney







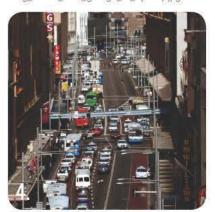
Source: CC by Adam.J.W.C. http://upload. wikimedia.org/wikipedia/commons/a/a5/ King_street_near_george_st_sydney.jpg



Source: CC by Adam.J.W.C. http:// en.wikipedia.org/wiki/George_Street,_Sydney



Source: https://c1.staticflickr. com/3/2369/2523652819_ac04dd9f8c_z.jpg



Source: http://www.abc.net.au/news/ stories/2011/05/16/3217661.htm?site=sydney



Source: http://www.jenius.com.au/2006/12/ anti-ir_rally_george_street.php



Source: http://upload.wikimedia.org/ wikipedia/commons/a/a5/King_street_near_ george_st_sydney.jpg



Source: http://www.sydney-australia. biz/photos/wyd/sydney-city-01.php#. Uq7UDPTuLjg

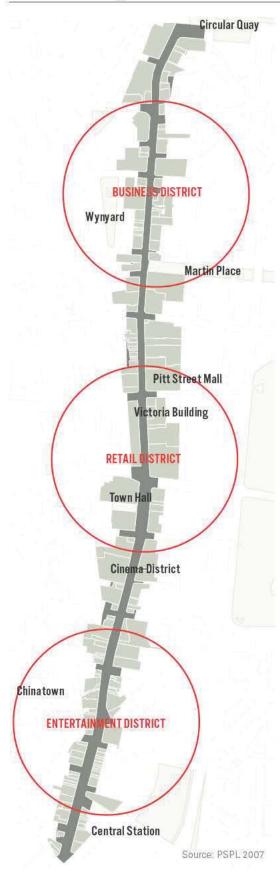


Source: http://www.brushtail.com.au/ost_ v0606/george_st_c.1905.html



Source: http://publictransport.about.com/od/ Pictures_Of_Transit/ig/Transit-Pictures-from-Sydney/Bus-on-George-Street.htm

05/3 DIFFERENT CHARACTERS



George Street covers a strech of 2.5 km. from north to south and offers various characters along the way. Three prominently distinguishable areas are:

THE BUSINESS DISTRICT

This area is characterised by large scale plot sizes, a high proportion of offices, privately owned open space and no residential dwellings.

THE RETAIL DISTRICT

This area contains the most popular shopping destinations in the CBD – Pitt Street Mall and Queen Victoria Building.

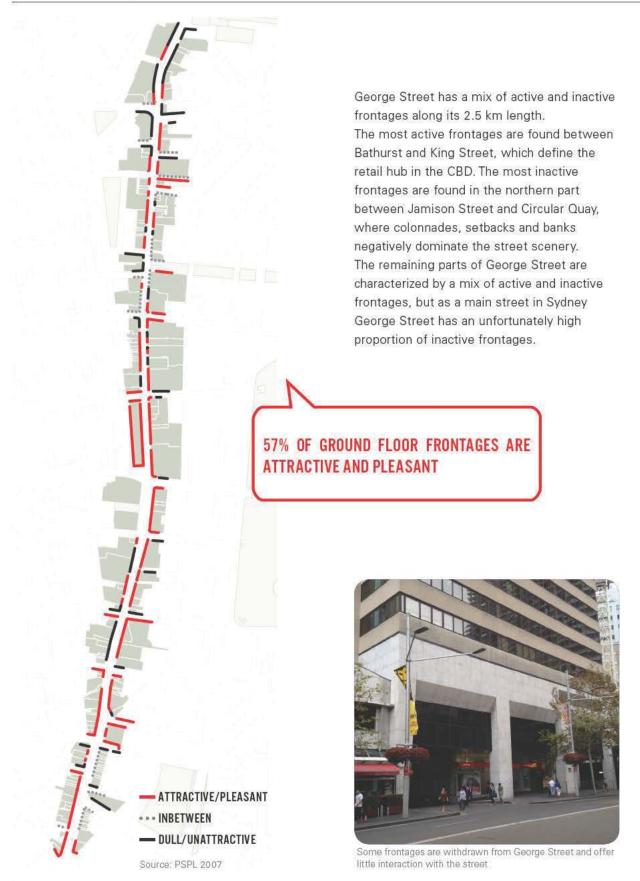
THE ENTERTAINMENT DISTRICT

This area is characterised by small plot sizes and, compared to other districts, has more shops/restaurants and pubs/bars open after midnight. This area also has a higher proportion of residential dwellings.

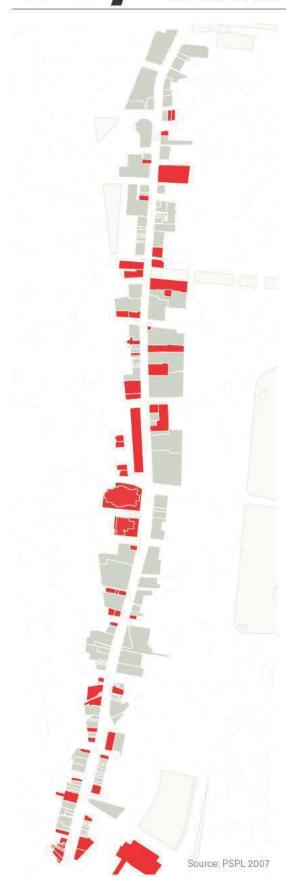


The middle part of George Street is characterized by Town Hall and the retail precinct around Pitt Street Mall

06/ GROUND FLOOR ACTIVITY



07/ HERITAGE BUILDINGS

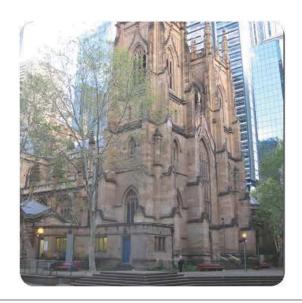


In total 58 buildings are listed under the NSW Heritage Act along George Street. Amongst the listed buildings some stand out as exemplary of the identity of Sydney;

- ANZ Bank (1904)
- St. Laurence Anglican Church (1845)
- Town Hall House (1889)
- St. Andrews Cathedral (1868)
- Queen Victoria Building (1898)
- The Strand (1892)
- State Theatre (1929)

The St. Andrews Cathedral is among Sydney's most prominent Gothic-revival churches and has often served as the 'State' church since its completion in 1868. The building was designed by Edmund Blacket and took 31 years to complete. Today it continues to serve as an important religious site and historical marker of identity for central Sydney.

Source: NSW Government Environment & Heritage







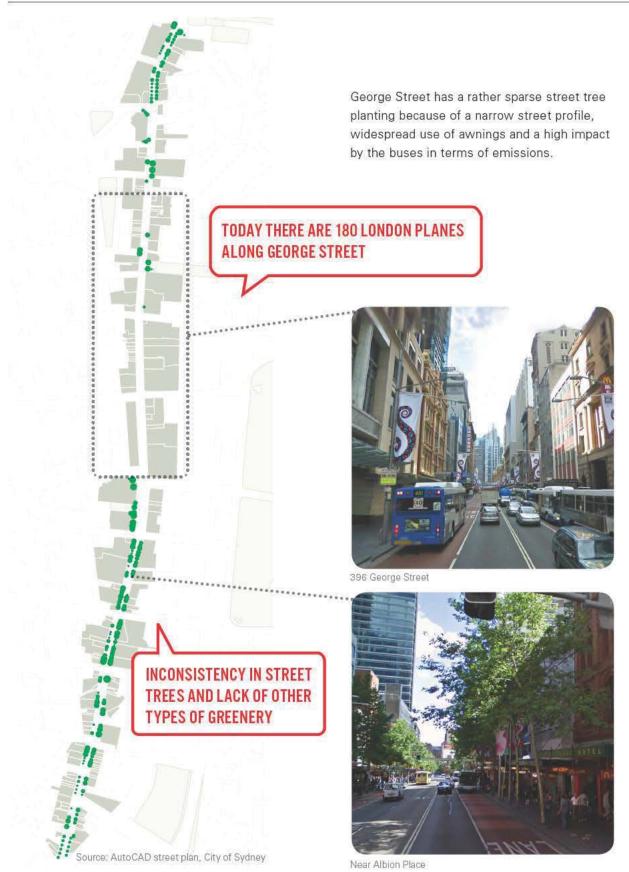
08/BUILDING HEIGHTS



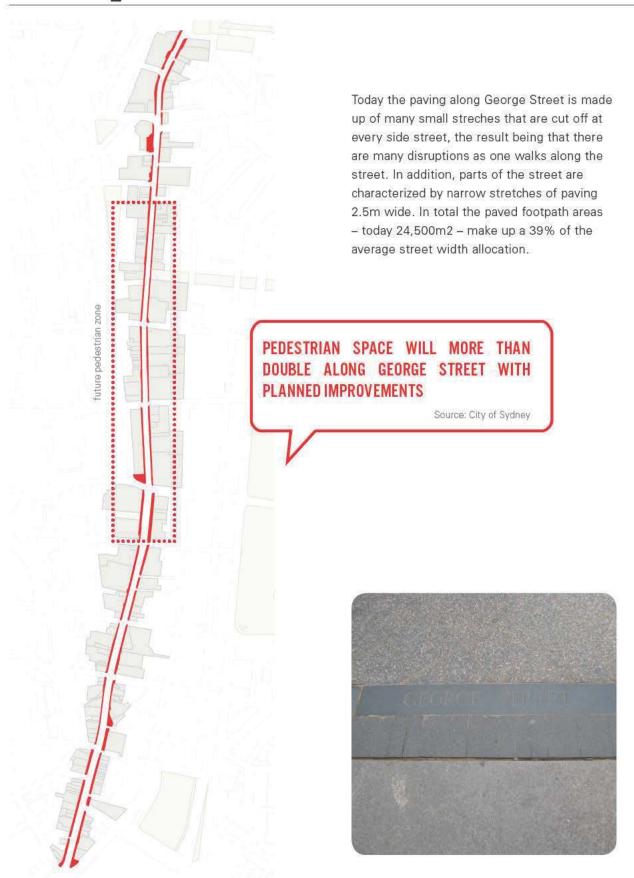
Source: PSPL 2007

Building heights create cavernous effect along George Street

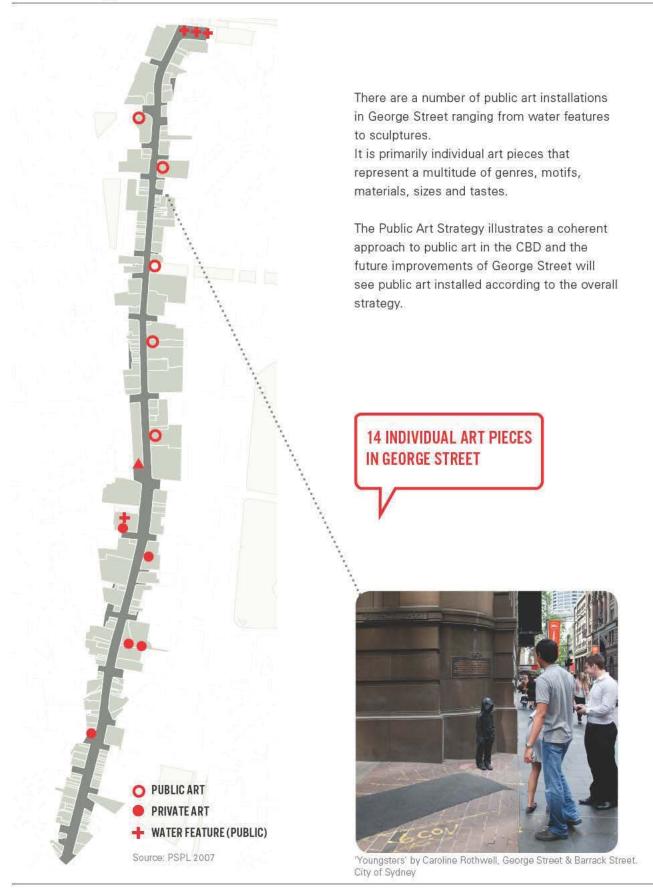
09/street trees



10/PAVING



11/ PUBLIC ART



MOBILITY

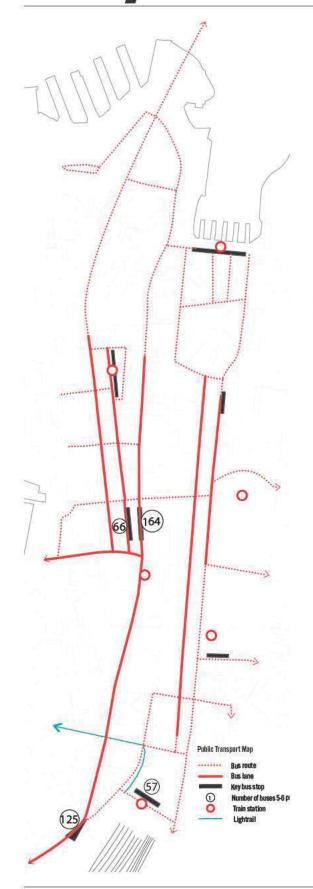
KEY PERFORMANCE INDICATORS

- INCREASED PERCENTAGE OF PEDESTRIAN TRAFFIC
- INCREASE IN EVENING PEDESTRIAN TRAFFIC
- DECREASE IN PEDESTRIAN INJURIES
- REDUCED TRAVEL TIME ALONG GEORGE STREET

IN 10 YEARS PEDESTRIANS AND PUBLIC TRANSPORT USERS WILL BE ABLE TO MOVE MORE EFFICIENTLY THROUGH GEORGE STREET



01/ PUBLIC TRANSPORT NETWORK



OVER GEORGE STREET CARRIES 36,000* BUS PASSENGERS A DAY

* Sydney Buses Cordon Counts, 19th September 2012, Transport for NSW

IT CAN TAKE UP TO 30 MINUTES TO TRAVEL FROM CENTRAL TO CIRCULAR

* Sydney's light rail future. Transport NSW

"THERE WAS GENERAL DISQUIET ABOUT USING BUSES BECAUSE OF UNCERTAINTY ABOUT ROUTES AND WHERE TO ALIGHT, AND THE BELIEF THAT THEY SIMPLY TAKE TOO LONG. TRAINS **WERE SEEN AS MORE EFFICIENT"**

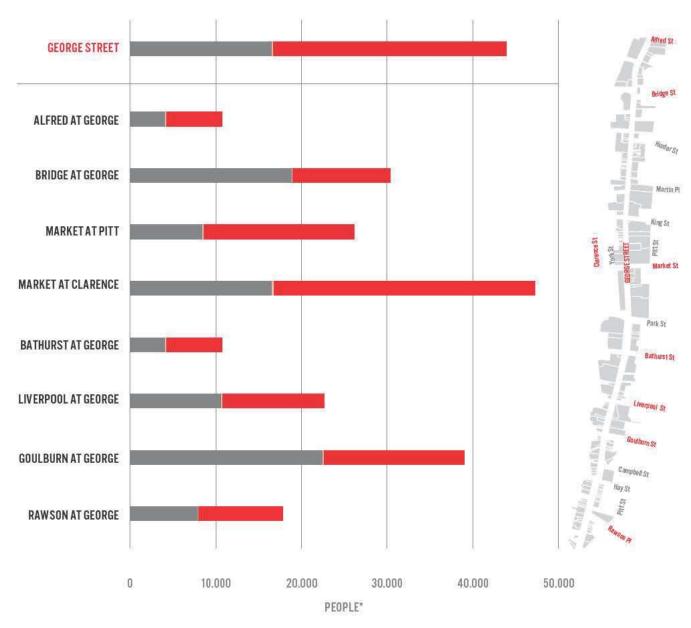
Source: Visitor Wayfinding in Sydney, August 2011 Destination NSW, University of Technology, Sydney



02/MODAL COUNT

GEORGE STREET AND SURROUNDING AREAS





*NOTE: Vehicle numbers include buses, ridership numbers not available for cross streets. George St represented by average of George St at Bridge St, Bathurst St, Liverpool St, and Goulburn. St.

03/ PEDESTRIAN NETWORK

Pedestrian Count 6am-12am, 4th and 8th of December 2012

GEORGE AT GOULBURN

64,300

51,100

Pedestrian activity varies drastically throughout the week in upper George Street, with weekday volume levels over three times as high as weekends in certain locations. Lower George Street sees much more consistent public life into the weekend, with pedestrian activity occasionally topping weekday levels in the entertainment district.

MARTIN AT GEORGE

48,500

13,300

KING AT GEORGE

17,200

17,600

MARKET AT GEORGE

50,000

48,000

BATHURST AT GEORGE

21,300

17,200

LIVERPOOL AT GEORGE

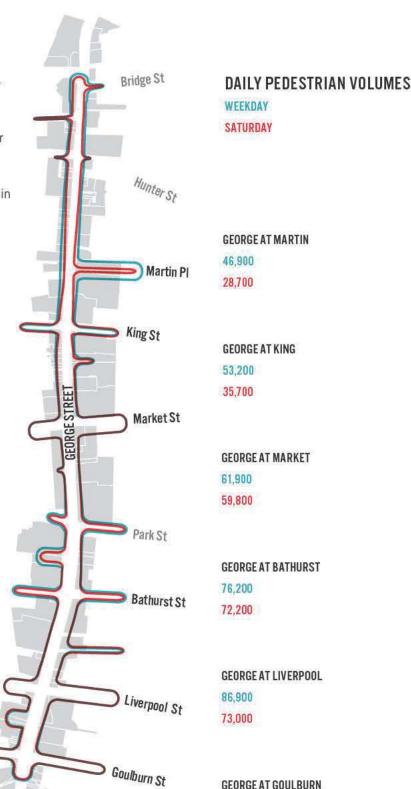
39,900

40,900

GOULBURN AT GEORGE

21,300

29,200



Bridge St Throughout most of George Street, pedestrian **PEAK WEEKDAY HOUR** levels are lowest in the morning and peak PEDESTRIAN VOLUMES in the afternoon. South of Market Street, 8:00AM pedestrian activity persists and sometimes 1:00PM increases after 5:00pm whereas activity drops 5:00PM slightly in upper George Street. Hunter St MARTIN AT GEORGE **GEORGE AT MARTIN** 6,280 3,360 Martin PI 4,560 5,390 6,320 4,420 King St KING AT GEORGE **GEORGE AT KING** 230 3,370 1,430 6,400 1,340 4,900 Market St MARKET AT GEORGE GEORGE AT MARKET 3,390 2,760 5,820 7,180 4,520 6,640 Park St BATHURST AT GEORGE **GEORGE AT BATHURST** 1,160 3,600 Bathurst St 1,800 6,730 2,290 7,400 LIVERPOOL AT GEORGE **GEORGE AT LIVERPOOL** 1,480 Liverpool St 4,480 2,890 7,860 3,650 7,510 Goulburn St **GOULBURN AT GEORGE** GEORGE AT GOULBURN 1,180 2,320

2,650

3,090

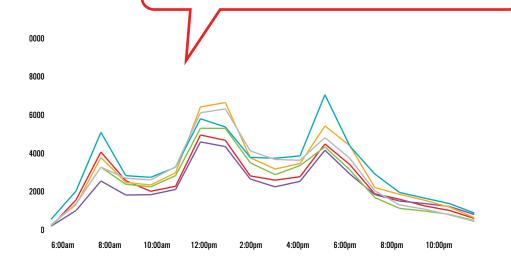
5,460

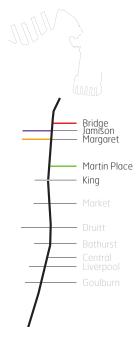
6,570

O4/ GEORGE STREET PEDESTRIAN VOLUME PATTERNS

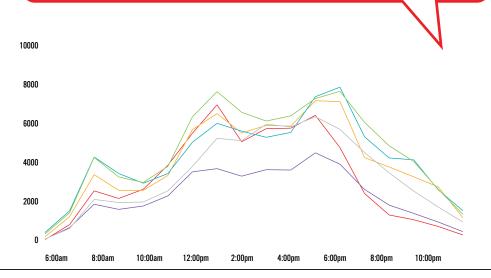
WEEKDAY

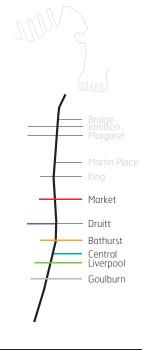
Pedestrian Count 6am-12am, 4th and 8th of December THE FLOW OF PEDESTRIANS THROUGHOUT UPPER GEORGE STREET FOLLOWS A VERY ROUTINE PATTERN, WITH HIGH PEAKS AT 8:00AM, 1:00PM, AND 5:00PM, PUNCUATED BY LULLS OF TRAFFIC IN BETWEEN ON WEEKDAYS. THIS PATTERN IS A COMMON FEATURE OF CENTRAL BUSINESS DISTRICTS WHERE ONLY THE NECESSARY ACTIVITIES OF A STANDARD WORK DAY TAKE PLACE





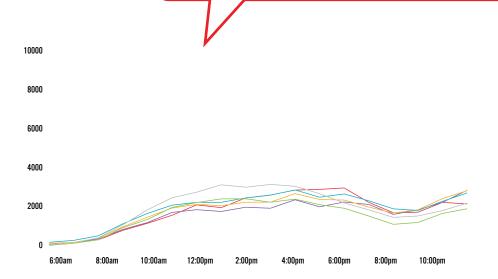
LOWER GEORGE STREET FEATURES PEDESTRIAN VOLUME PATTERNS SUGGESTING A MORE DIVERSE ARRAY OF ACTIVITIES WITH HIGH TRAFFIC LEVELS EVEN BETWEEN PEAK HOURS. THOUGH IT DROPS PRECIPITOUSLY ON WEEKDAYS, GEORGE STREET BETWEEN BATHURST AND GOULBURN MAINTAINS SOME PEDESTRIAN TRAFFIC INTO THE EVENING HOURS

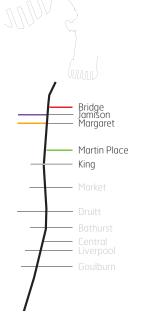




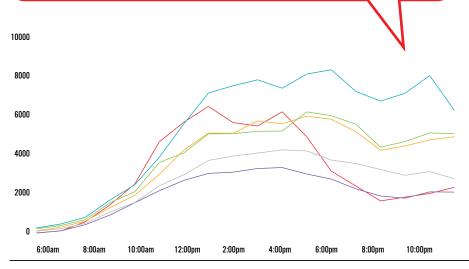
WEEKEND

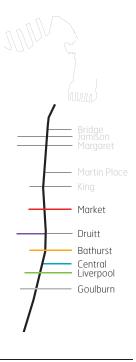
Pedestrian Count 6am-12am, 4th and 8th of December 2012 ON WEEKENDS, THE VITALITY OF UPPER GEORGE STREET HUSHES TO A SHADOW OF ITS WEEKDAY BUSTLE, WITH PEDESTRIAN VOLUMES DROPPING BY AS MUCH AS 42% AT HUNTER STREET. THESE PATTERNS FURTHER SUGGEST A MONO-FUNCTIONAL STRETCH OF GEORGE STREET WITH OPPORTUNITY FOR DIVERSIFIED ACTIVITIES





LOWER GEORGE STREET SEES SIMILAR AND SOMETIMES GREATER VOLUMES OF PEDESTRIANS ON WEEKENDS, ESPECIALLY AT CENTRAL STREET WHERE VOLUME INCREASES BY 24% OVER WEEKDAY LEVELS. HIGH LEVELS OF PEDESTRIAN ACTIVITY PERSIST INTO THE EVENING HOURS BETWEEN BATHURST STREET AND LIVERPOOL STREET

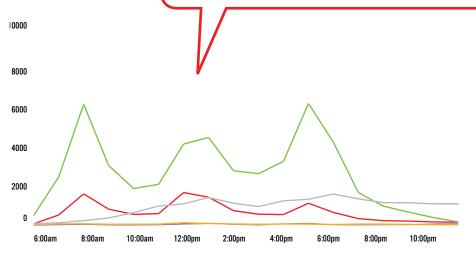


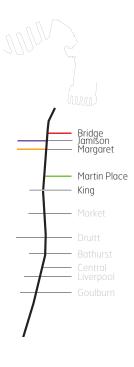


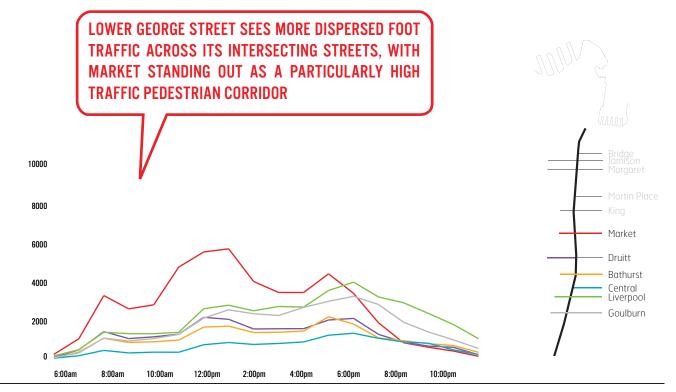
05/ CROSS STREETS PEDESTRIAN VOLUME PATTERNS

WEEKDAY

Pedestrian Count 6am-12am, 4th and 8th of December 2012 PEDESTRIAN VOLUME PATTERNS ON THE STREETS INTERSECTING GEORGE STREET HIERARCHIES OF PEDESTRIAN PREFERENCE AMONG THESE STREETS. MARTIN PLACE AND BRIDGE STREET SHOW PATTERNS OF DISTINCT PEAK HOURS, WHILE STREETS LIKE JAMISON STREET AND MARGARET STREET CURRENTLY HAVE BARELY ANY FOOT TRAFFIC AT ALL

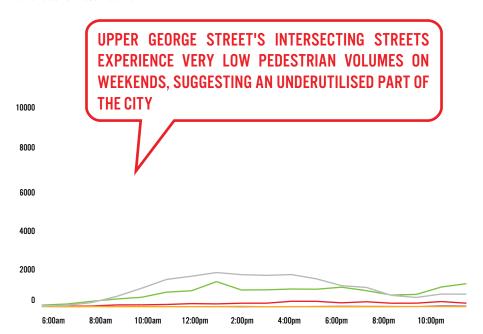


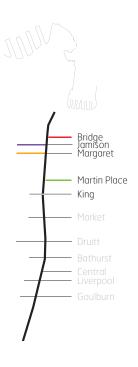




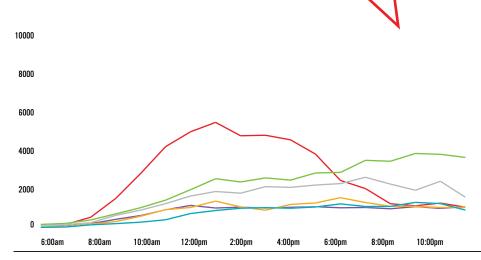
WEEKEND

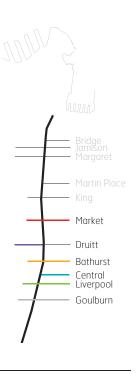
Pedestrian Count 6am-12am, 4th and 8th of December 2012





MARKET STREET REMAINS A PROMINENT PEDESTRIAN CORRIDOR ON WEEKENDS, WHEREAS OTHER CROSS STREETS EXPERIENCE RELATIVELY LOW VOLUMES. LIVERPOOL STREET AND GOULBURN STREET COME TO LIFE MORE PROMINENTLY IN THE WEEKEND EVENING HOURS

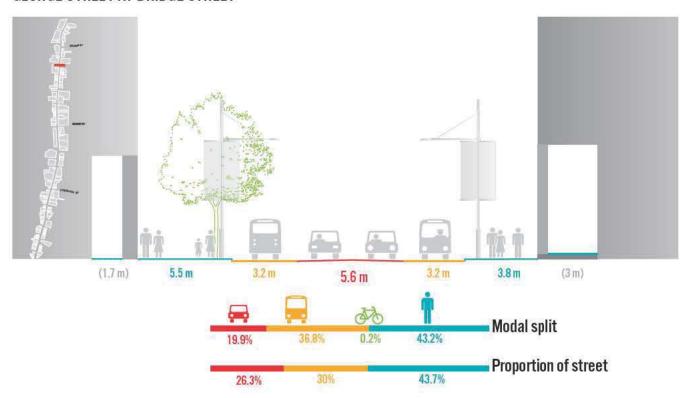




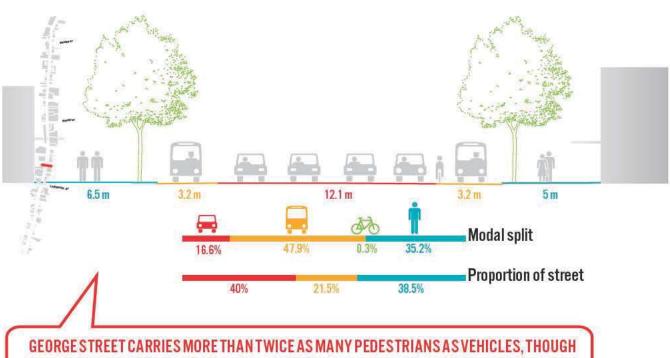
06/ SPACE ALLOCATION

Registration: Pedestrian, Cyclist, Vehicle 6.00am-7.00pm, May 2012 Bus 6.00am-7.00pm Sep 2012

GEORGE STREET AT BRIDGE STREET



GEORGE STREET AT BATHURST STREET

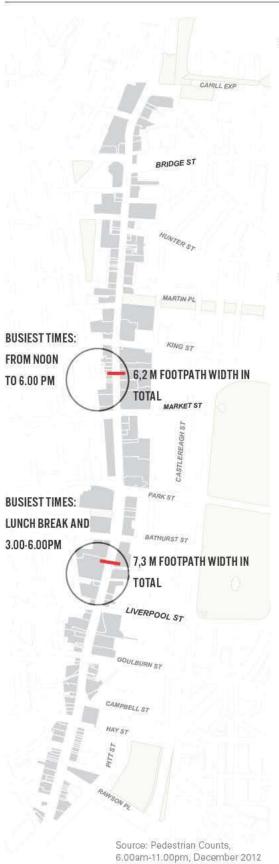


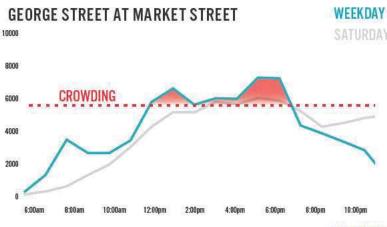
GEORGE STREET CARRIES MORE THAN TWICE AS MANY PEDESTRIANS AS VEHICLES, THOUGH CARS ARE OFTEN GIVEN MORE SPACE. CATERING TO PEDESTRIAN TRAFFIC WILL IMPROVE THE QUALITY OF GEORGE STREET AS WELL AS EFFICIENCY AND CARRYING CAPACITY

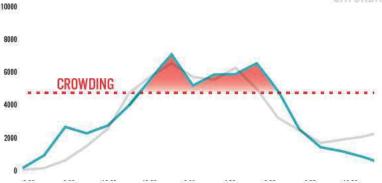
07/ A CROWDED STREET

Pedestrian Count 6am-12am, 4th and 8th of December 2012

WEEKDAY







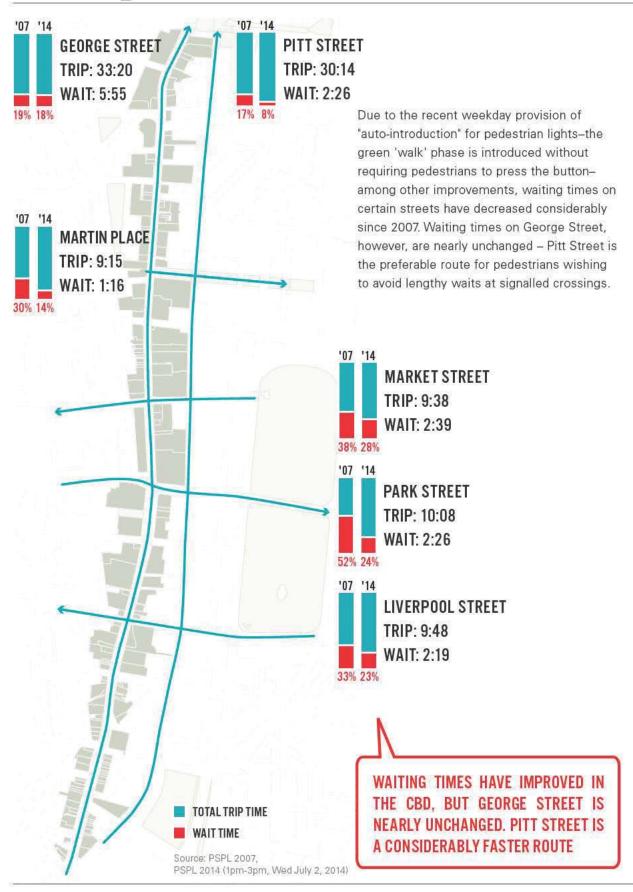
GEORGE STREET AT BATHURST STREET

IN CENTRAL GEORGE STREET THE PEDESTRIAN NUMBERS GO UP AND THE FOOTPATH WIDTH DECREASE CAUSING A HIGHER DEGREE OF CROWDING. THE PEDESTRIAN NUMBERS ARE AT SATURATION

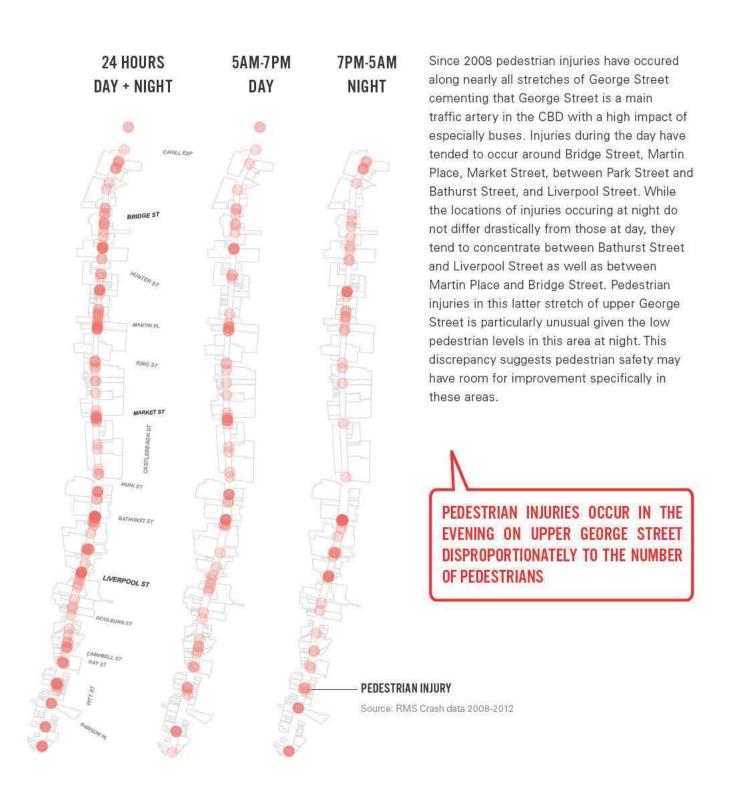
Crowding based on 13 pedestrians/meter of available footpath width/minute



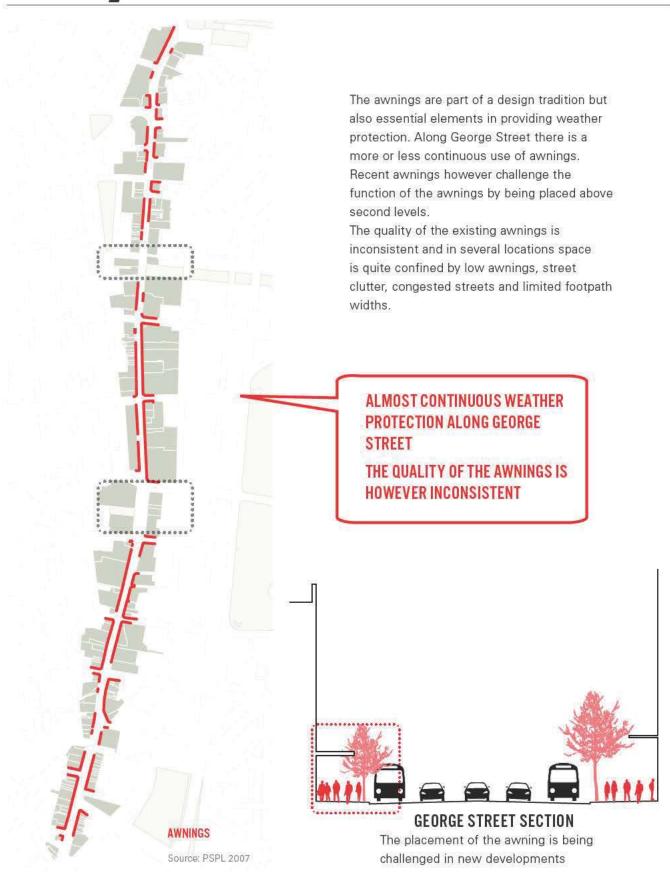
08/ WAITING TIME AT CROSSINGS



09/ PEDESTRIAN INJURIES

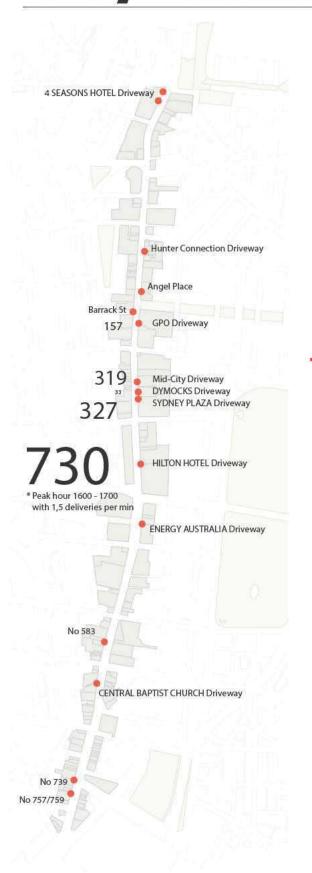


10/ AWNINGS



DRIVEWAY COUNT CENTRAL GEORGE STREET

Registration: 7.00am-7.00pm February 2013, City of Sydney



Driveways tend to be concentrated between Martin Place and Park Street along George Street. These driveways break the footpath and create conflict between pedestrians and delivery vehicles. Between 16:00 and 17:00, these conflicts occur at a rate of 1.5 deliveries per minute.

THERE ARE 15 DRIVEWAYS ALONG GEORGE STREET

THE HILTON DRIVEWAY IS THE MOST FREQUENTLY USED DRIVEWAY



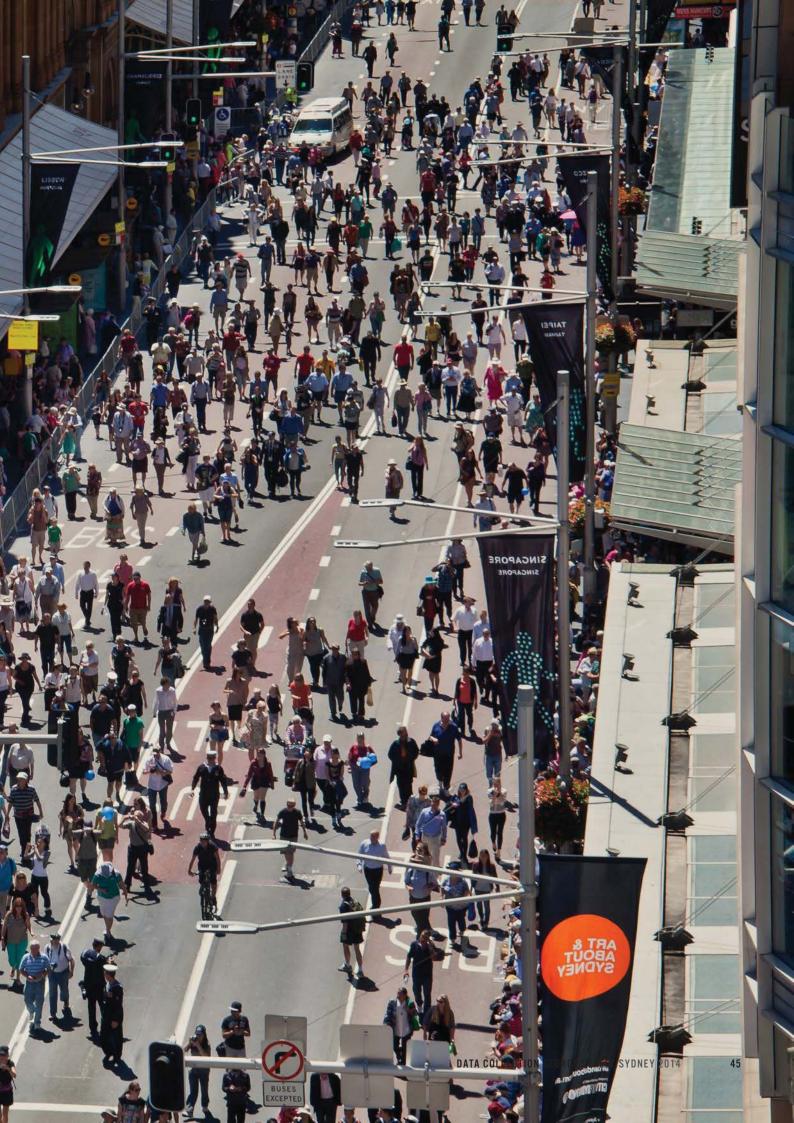
Hilton Driveway, George Street. City of Sydney

PUBLIC LIFE

KEY PERFORMANCE INDICATORS

- MORE STAYING ACTIVITY ALONG GEORGE STREET
- MORE NIGHT LIFE ACTIVITY ALL ALONG GEORGE STREET
- MORE OUTDOOR CAFÉ SEATING
- REDUCED NOISE LEVELS & IMPROVED AIR QUALITY

IN 10 YEARS LINGERING ACTIVITY ALONG GEORGE STREET WILL INCREASE BY MORE THAN 100%



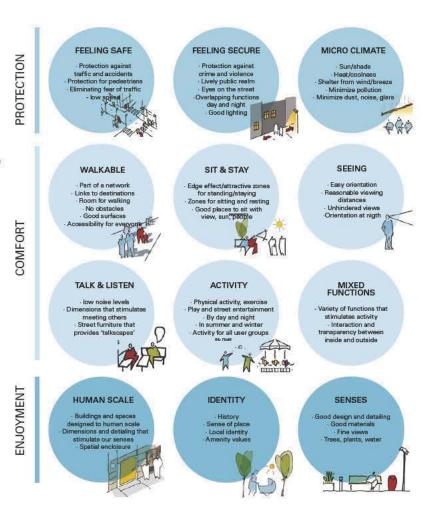
01/ 12 QUALITY CRITERIA

Evaluation of a public space/street based on a set of fundamental qualities is a basic way of assessing the potentials for public life to unfold. These qualities center around **protection**, **comfort** and **enjoyment** and they emphasize the need to consider some basic issues besides aestetics and design. The two first categories are more factural and objective whereas the last category of criteria are more subjective.

The qualities of protection (against risk, physical injury, insecurity and unpleasant sensory influences, the negative aspects of climate in particular) are considerd fundamental to a space.

The qualities of comfort involves invitations for people to activate the space: possibilities for walking, standing, sitting, seeing, talking, hearing and self-expression, as well as mixed functions around the space.

Finally, enjoyment involves aspects of human scale, identity and opportunities for positive sensory impressions and aestetic experiences.



TWO EXAMPLES USING QUALITY CRITERIA TO EVALUATE CITY SPACE



Quayside street in central Copenhagen. This example produces many white (good) fields due to the thoroughly good quality based on all criteria.



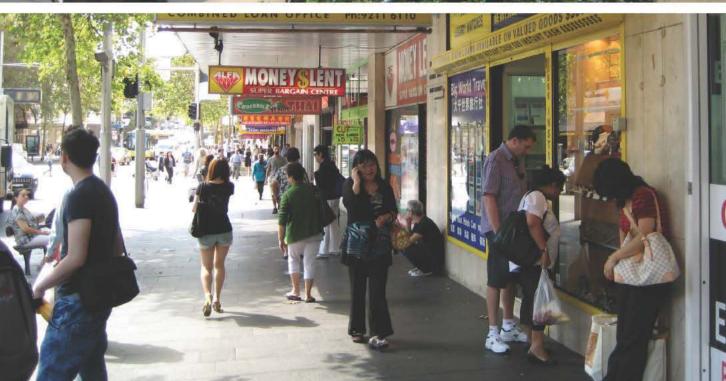
Main square in a new city district in Copenhagen. An example of a square with a very poor rating in most areas covered in the list of quality criteria.

46





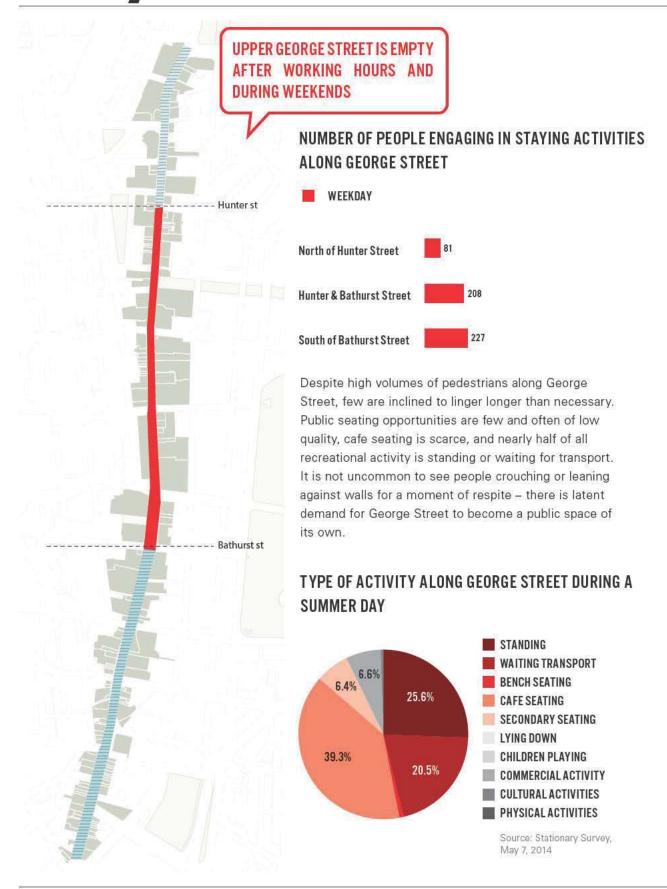






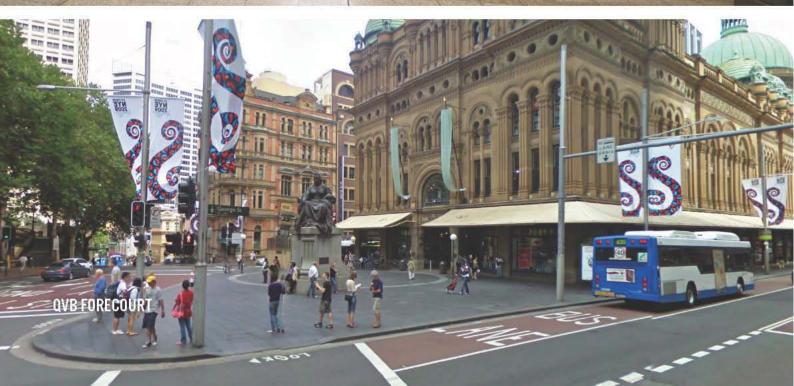
02/STATIONARY ACTIVITY ALONG GEORGE STREET

Registration: 3:15-4:45pm Wednesday, May 7, 2014



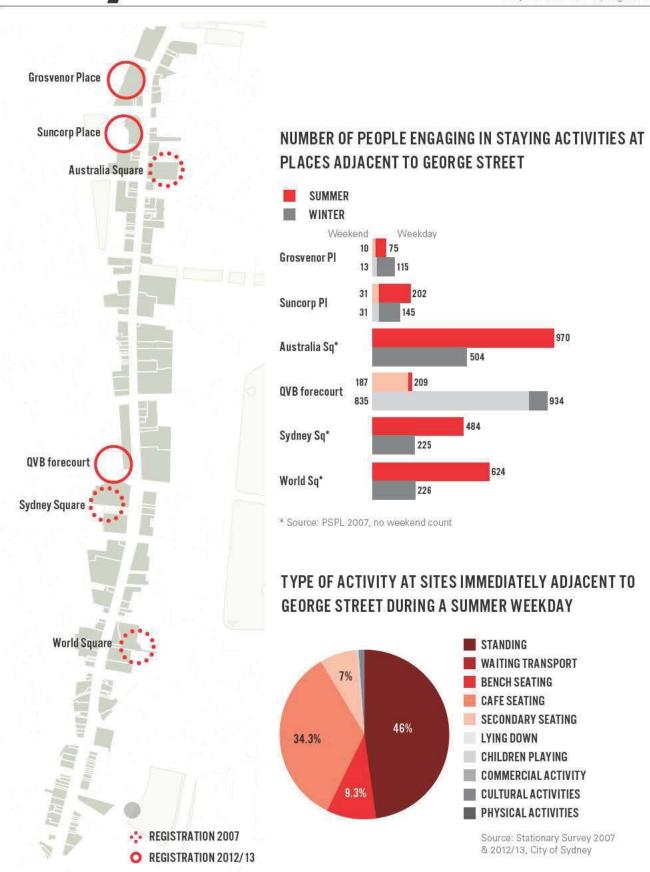




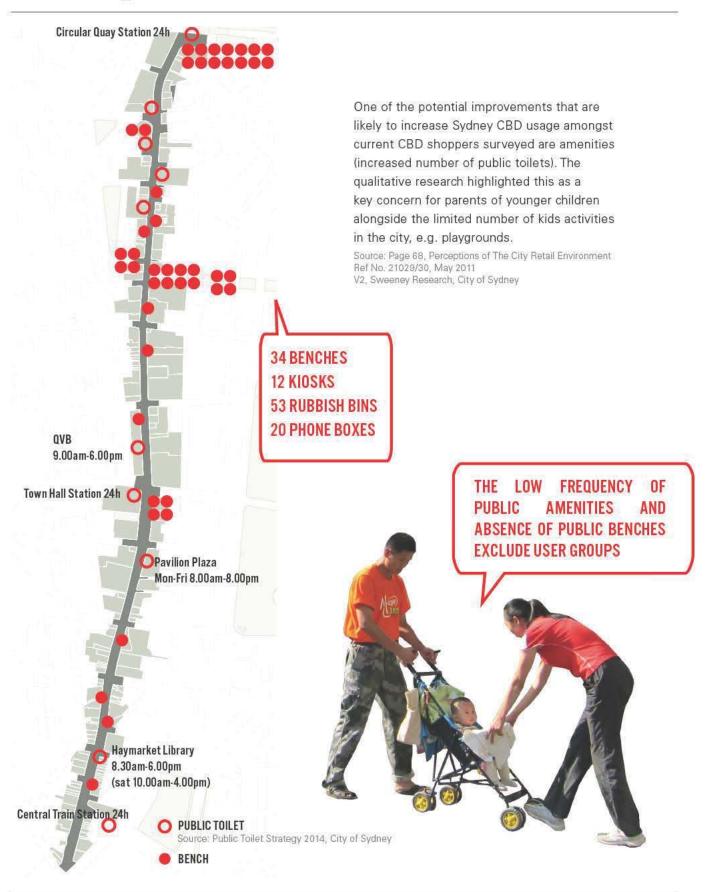


STATIONARY ACTIVITY IN SPACES ALONG GEORGE STREET Registration: 10.00ai Wed, 13th. and Sat. 1 Wed, 8th. and Sat. 1

Registration: 10.00am-06.00pm Wed, 13th. and Sat. 16th, March 2013 Wed, 8th. and Sat. 18th, August 2012



04/ PUBLIC AMENITIES AND BENCHES



05/commercial outdoor seating



OUTDOOR SEATING

Source: PSPL 2007

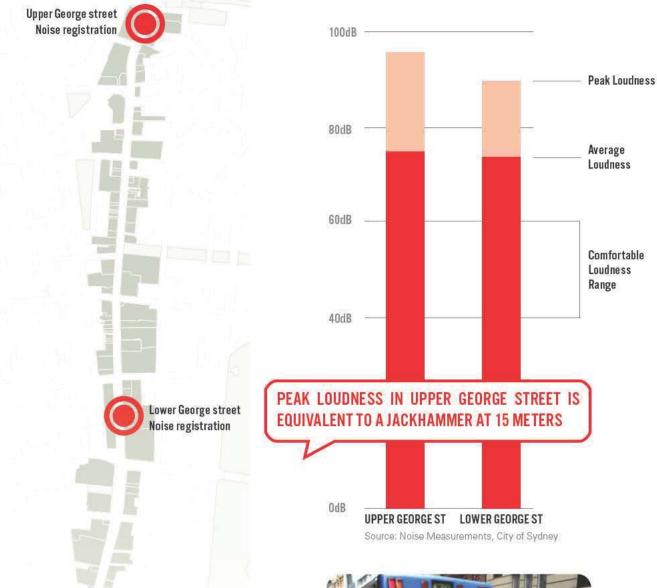
320-330 George Street. City of Sydney

6817

1976

254

06/NOISE LEVELS



Average noise levels along George Street currently stay around 75dB – approximately equivalent to loud singing at 1 meter. This volume makes George Street a difficult place for conversation and social interaction. Peak noise levels were recorded at 96dB, as loud as a jackhammer at 15 meters.



City of Sydney

07/ AIR QUALITY



AIR QUALITY SURVEY
TO BE UNDERTAKEN

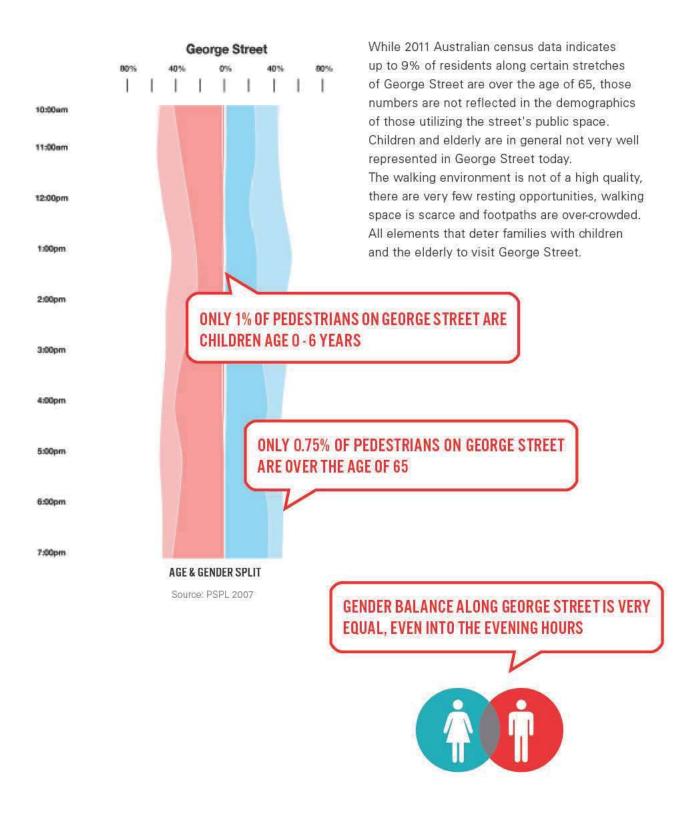


George Street from above

08/

AGE AND GENDER

Registration: 10.00am-19.00pm March 2007



09/ NIGHTLIFE



ECONOMICS

HONG KONG

KEY PERFORMANCE INDICATORS

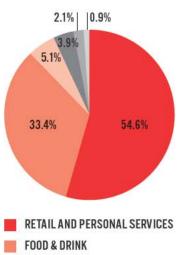
- INCREASED DIVERSITY OF USES IN BUILDINGS ALONG GEORGE STREET
- INCREASED NUMBER OF RESIDENTS IN THE CBD
- MORE CUSTOMERS ON GEORGE STREET
- DECREASE IN OFFICE VACANCY

IN 10 YEARS GEORGE STREET WILL BE A THRIVING RETAIL LOCATION



01/ BUSINESSES ALONG GEORGE STREET

TYPES OF BUSINESSES WITH GROUND FLOOR PRESENCE ALONG GEORGE STREET



George Street has no shortage of diverse retail and food offerings, a major draw beyond employment and a service to the employees working in the area. These businesses attract and support public life along George Street. This diversity should be maintained as George Street continues to transform.

RETAIL AND PERSONAL SERVICES
FOOD & DRINK
TOURIST, CULTURAL AND LEISURE
LIFE SCIENCE (BIO-TECH)

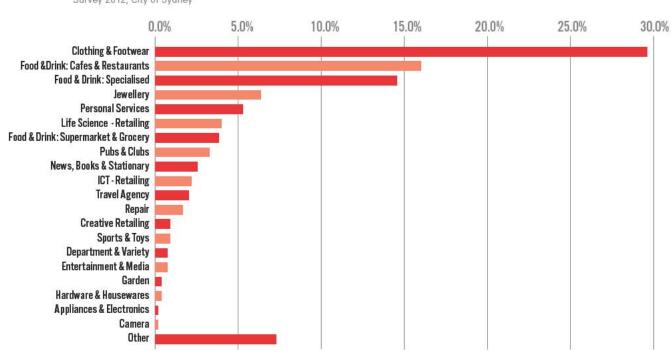
ICT

88% OF GROUND FLOOR BUSINESSES ON GEORGE STREET PROVIDE FOOD & DRINK, RETAIL, OR PERSONAL SERVICES.

Source: Floor Space and Employment Survey 2012, City of Sydney

CREATIVE INDUSTRIES

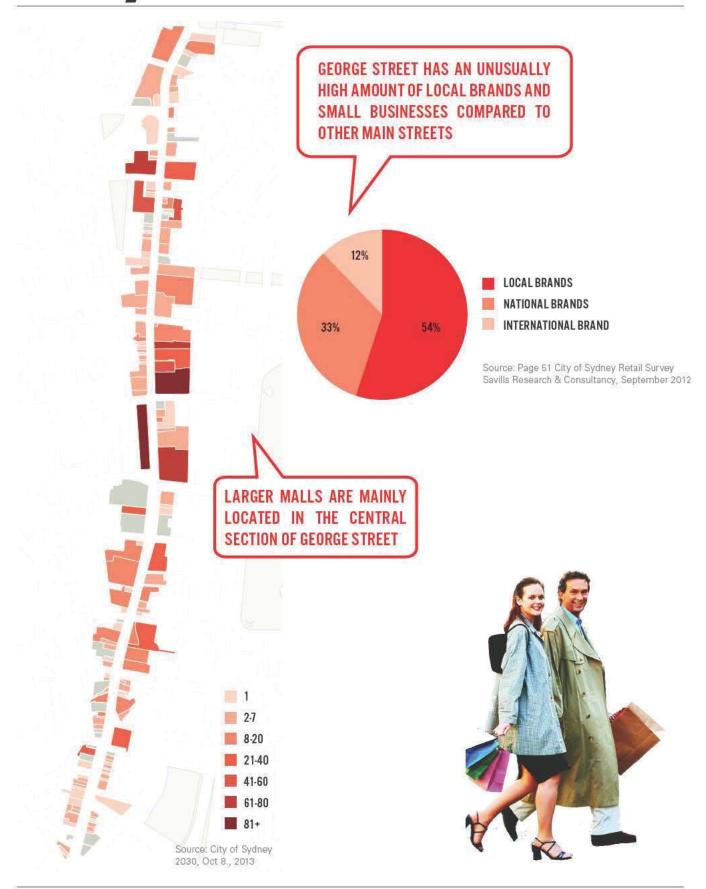
GROUND FLOOR BUSINESSES IN DETAIL



02/ FOOD BUSINESS



03/ RETAIL BUSINESS

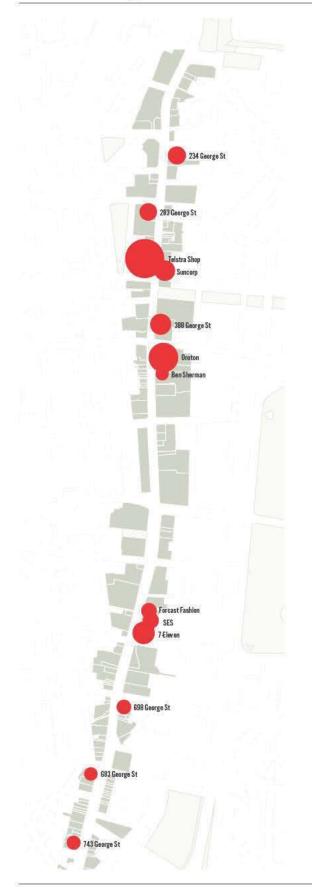








04/ COMMERCIAL RENTS



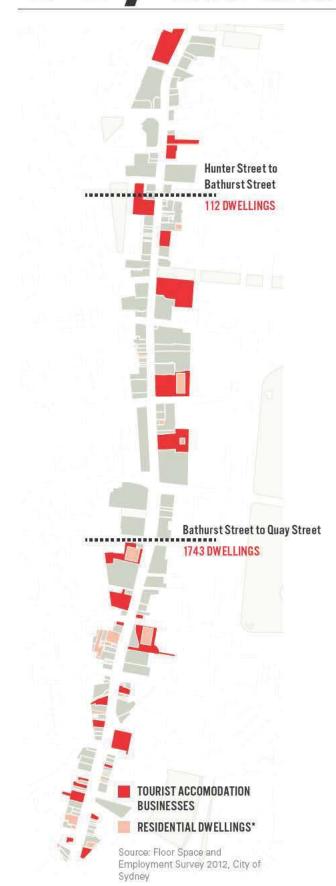
RENTS ON GEORGE STREET TEND TO BE SLIGHTLY HIGHER AROUND MARTIN PLACE

RECENT LEASES STIPULATE THAT RENTS WILL INCREASE BY 4 PERCENT PER ANNUM IN LINE WITH COMMERCIAL LEASES FOR OFFICE SPACES.

LOCATION	ANNUAL RENT/ M2
234 GEORGE STREET	\$2970
283 GEORGE STREET	\$2790
TELSTRA SHOP	\$14444
SUNCORP	\$3853
388 GEORGE STREET	\$4050
OROTON	\$8134
BEN SHERMAN	\$1498
FORCAST FASHION	\$2159
SES	\$2344
7-ELEVEN	\$4606
698 GEORGE STREET	\$1900
683 GEORGE STREET	\$1590
743 GEORGE STREET	\$1740

Source: page 53 City of Sydney Retail Survey Savills Research & Consultancy, September 2012 & http://www.realcommercial.com.au, 2014

05/ RESIDENTIAL DEVELOPMENT



RESIDENTS IN CBD

- Population 2007: 21.950,
- Population 2012: 24.982 (+13.8%)
- Number of dwellings in 2007: 11.611
- Number of dwellings in 2012: 11.865 (+2.2%)
- Population densities between Bathurst Street and Goulburn Street along George Street are among the highest in Sydney at approximately 500 persons per hectare.

Source: CBD Precinct Summary Report 2012: City of Sydney Floor Space and Employment Survey 2012, City of Sydney

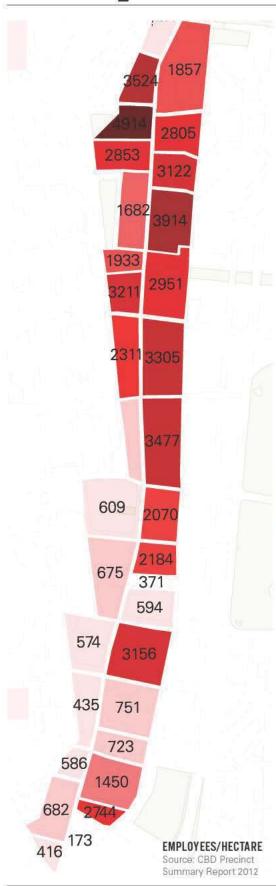
Australian Bureau of Statistics, Census of Population and Housing, 2011 (Enumerated data). Compiled and presented in atlas.id by .id, the population experts.

THERE IS A HIGHER CONCENTRATION OF DWELLINGS IN LOWER GEORGE STREET



Residents in the CBD are growing in numbers

06/ EMPLOYMENT



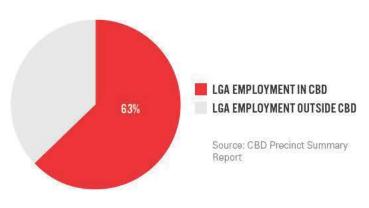
George Street and by extension the surrounding Sydney CBD area is a major employment center – an estimated 63% of the Sydney Local Government Area (LGA) is employed in the CBD, approximately 277,000 workers. This total represents a 5.5% increase since 2012, or 14,400 additional CBD workers. Approximately a third of the CBD – 95,000 people – are employed along George Street. Most of these people leave the CBD after work – the Australian census estimates only 9,000 workers stay along and around George Street at night.

Source: CBD Precinct Summary Report 2012: City of Sydney Floor Space and Employment Survey.

Australian Bureau of Statistics, Census of Population and Housing, 2011 (Enumerated data). Compiled and presented in atlas.id by .id, the population experts.

APPROXIMATELY 95,000 PEOPLE ARE EMPLOYED ALONG GEORGE STREET

PERCENT SYDNEY LGA EMPLOYMENT IN CBD



CONCLUSION

George Street's transformation signals the opportunity for a change not only in the efficiency, quality, and provision of space for people along its corridor, but for Sydney's culture of public life at large. A George Street that invites people to pass time amidst an enjoyable environment will improve the quality of life for residents, workers, and visitors alike.

Today, George Street struggles to effectively serve this purpose, but it is a place of potential. Despite the difficulty in meeting high demand as a transit corridor or providing generous public space, a variety of redeeming qualities – its placement amidst attractions, a diverse array of retail offerings, the energy of the business and entertainment districts, and a rich history as Sydney's iconic street – indicates immense opportunity.

As change moves forward it will be crucial to consider public life as the focal point of development. The metrics outlined in this document provide key performance indicators in line with this goal;

A George Street for people and one where business and retail can thrive.

DATA COLLECTION SOURCES

Identity

03 / Perceptions of George Street
P. 14-15 City of Sydney Pedestrian
Study

November 2007

Environmetrics • City of Sydney

05 / 3 Different Characters
P. 4 Perceptions of The City Retail
Environment

Ref No. 21029/30 • May 2011 • V2 Sweeney Research • City of Sydney

Late Night Management Areas research project October 2011 Parsons Brinckerhoff • City of

Sydney

06 / Ground Floor Activity
07 / Heritage Buildings
08 / Building Heights
11 / Public Art
Sydney PSPL 2007
Gehl Architects • City of Sydney

09 / Street Trees CBD AutoCAD map City of Sydney

Mobility

02 / Modal Counts 06 / Space Allocation Pedestrian & Traffic Count May 23rd, 2012

Widy 2014, 2012

Skyhigh - The Traffic Survey Company

City of Sydney

03 / Pedestrian Network04 / George Street Pedestrian

Volume Patterns

05 / Cross Street Pedestrian Volume

Patterns

Pedestrian & Traffic Count December 4th & 8th, 2012

TCS Instruments • City of Sydney

07 / A Crowded Street
08 / Waiting time at crossings
Pedestrian & Traffic Count
December 4th & 8th, 2012
TCS Instruments • City of Sydney

09/ Pedestrian Injuries City of Sydney, RMS Crash Data 2008-1012

11/ Driveway Counts
George St Driveway Counts
February 2013
R.O.A.R. Data

Public Life

02 + 03 / Stationary Activity
PSPL 2012/2013
Gehl Architects • City of Sydney

04 / Public Amenities and Benches Public Toilet Strategy 2014 City of Sydney &

P. 69 Perceptions of The City Retail
Environment

Ref No. 21029/30 • May 2011 • V2 Sweeney Research • City of Sydney

05 / Commercial Outdoor Seating City of Sydney

06 / Noise Levels
City of Sydney

08 / Age and Gender PSPL 2012/2013

Gehl Architects • City of Sydney

p. 39 Late Night Management Areas Research Project October 2011 Parsons Brinckerhoff • City of Sydney

Economics

03 / Retail Business p. 51 City of Sydney Retail Survey September 2012 Savills Research

04 / Commercial Rents
p. 53 City of Sydney Retail Survey
September 2012
Savills Research & Consultancy

05/ Residential Development George Street Benchmarking: Residential Dwellings September, 2013 City of Sydney

09 / Nightlife