City to Waterfront – Wellington October 2004

Public Spaces and Public Life study

Absolutely
POSITIVELY
Wellington
Me Heke ki Pōneke
Wellington City Council

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Disclaimer
This study has been undertaken by Gehl Architects acting as consultant on behalf of Wellington City Council.

The views expressed and the recommendations set out in the report are those of the consultants and these do not necessarily reflect the views of the client.

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Foreword

In February this year Wellington City Council commissioned renowned Copenhagen urban designer Jan Gehl of Gehl Architects to undertake a study on how Wellingtonians use public spaces in the central city.

I am pleased to now present Jan Gehl's report.

This report looks, in some detail, at how people use public spaces in the central city, including the waterfront. It assesses how people move around the city, and more specifically, how public spaces could be used better. It has a number of interesting recommendations.

This report provides us with a useful benchmark to assess our city against others that have been studied by Gehl Architects including London, Copenhagen, Adelaide and Perth.

It is pleasing to note that Wellington compares well. Our central city is thriving and successful and we're heading in the right direction. There is, of course, still much to be done to unlock the full potential of the central city. This report challenges us make changes to achieve this potential, particularly in respect of traffic and parking.

The timing of this report coincides with a number of significant milestones in planning and urban design within the central city and beyond. These include the initiation of the first Wellington Regional Strategy project and the first integrated city strategy. Both these projects will recognise the importance of the central city for Wellington and the region. An implementation plan is currently being prepared. That plan will give full consideration to the ideas in this report. Transport in the central city is a critical issue for the city and the region, and future plans for this area must be fully integrated with wider transport solutions.

Gehl Architects has provided the Council with a timely and comprehensive set of ideas and recommendations. Some we are already doing, some may be factored into future plans and some may not.

Jan Gehl's report will help us refine our plans for the central city and unlock its true potential as the vibrant, dynamic, modern and successful capital city of New Zealand.



Kerry Prendergast
Mayor

Project description

The purpose of this project is to identify issues and opportunities in the city as observed and offer advice on how general improvements can raise the urban quality and to investigate the possibilities of uniting the city and the waterfront to make a strong unity giving extra qualities to the city and its citizens.

The project will recommend a strategy for the development of strong links between the city and the waterfront and include general recommendations for further development of the Golden Mile (including Lambton Quay) and the waterfront. As such an assessment will be undertaken of the two areas to be connected (the City and the waterfront), while the main focus will be on the connecting areas in between, in particular streets running between the city and the waterfront. What kind of activities go on at either end and what goes on in the connecting streets, and how they connect will be looked at.

Study area

The study area is defined as the area of the city where the major public spaces, commerce and the cultural institutions are concentrated. The area is defined by the rail tracks to the North, the motorway to the West, Vivian Street to the South and Cambridge /Kent Terrace to the East.



Study area

The study area in Wellington comprises 2.155 000 m^2 and includes most parts of the central city.

The City



Wellington enjoys an excellent natural landscape formed by the hills and harbour.

The compact city centre includes a thriving business district, the Parliamentary Precinct, a number of educational and cultural institutions and a lively retail area - the Golden Mile and connecting streets. Heritage buildings form a strong building tradition from which a complementary design tradition has been formed.

Although prevailing winds are a challenge, the beaches, the town belt and the waterfront provide Wellington with wonderful outdoor opportunities to be explored.









The People



Wellingtonians are a mixed group of teenagers, students, families with children and the elderly. All age groups are well represented in a city much loved by its inhabitants.

25,000 students visit universities in Wellington bringing vitality and life to the streets by their extensive use of the outdoor spaces, while 9,000 people live in the city centre, quite remarkable numbers for a city the size of Wellington. (179,100 inhabitants in the city region). (Copenhagen has half as many students and 7,000 residents while Edinburgh is visited by the same number of students and inhabited by the same number of residents).

Colourful events, such as the Dragon Boat Races and the Rugby Sevens are much anticipated and provide Wellington with an extra flavour reflecting its geographical locationt.

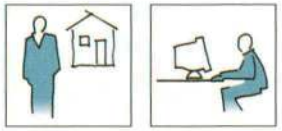




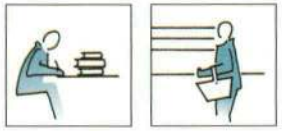




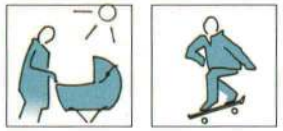
Which types of user groups can be expected to use the public spaces ?



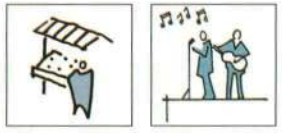
1. The every day users: People that live and work in the area or walk through.



2. The visitors/customers: People that visit the functions in the area.

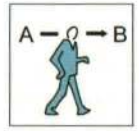


3. The recreational visitors People that visit the area because the public space is delightful or use the public space for recreation, pleasure, exercise, play etc.



4. The visitors to events: People that visit the public space because of special events.

What kind of activities can be expected in the public spaces ?



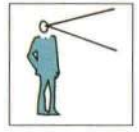
A Daily necessary activity:
To walk to and from or walk through



B Daily recreational activity:
Breaks and pauses



C Recreational activity:
Recreation and play



D Planned activity:
To be spectator/participant

The good public space

The key to establishing lively and safe public spaces is pedestrian traffic and pedestrian activities.

The arrival into the public space will - in different combinations - happen via five forms of "traffic" - people will arrive on foot, by car, by train, by bus or on bicycles. Eventually everybody will be pedestrians leaving their mode of transport behind and entering the public spaces experiencing the surroundings at a slow walking speed and at eye level.

The movement in good public spaces will primarily be dominated by walking, cycling and limited vehicular traffic. How the traffic will be distributed depends on the quality of the public spaces.

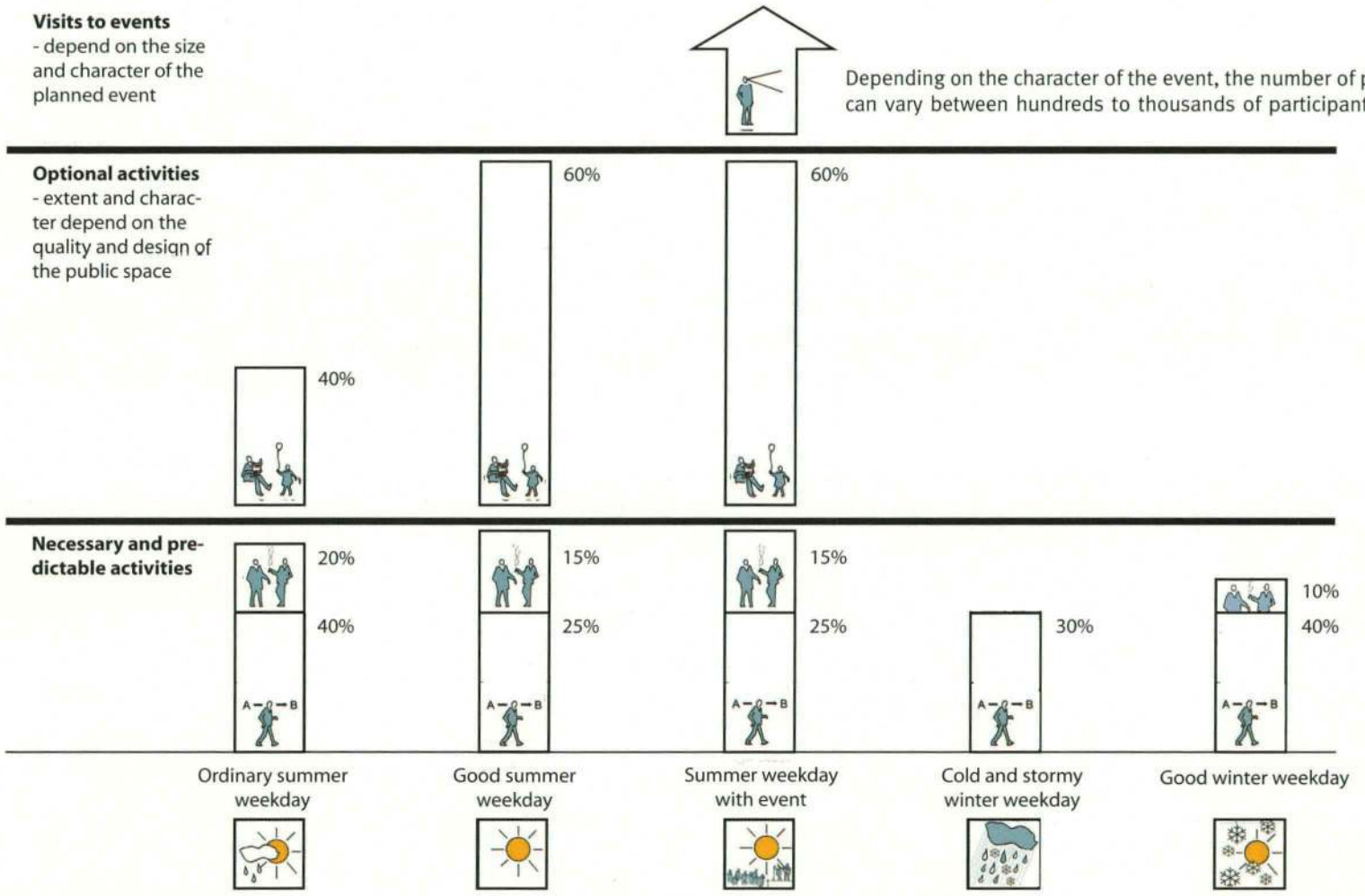
If good conditions are provided for pedestrians more people will walk and many recreational and interesting activities will be generated.

A public space of high quality will always be recognized by people opting to interrupt their walk or daily activities in order to rest, enjoy the city, the public spaces and be together with other people.

If on the other hand vehicular traffic is too dominant the public spaces will neither be exciting for people nor lively. Worldwide examples show how public spaces with unfortunate compromises for pedestrians result in unattractive and deserted public spaces.
Good conditions for walking and for life on foot, along with a possibility for stationary activities, for pauses and experiences are the key to attractive and lively public spaces.

Focus

When planning public spaces the most important group are those people who visit the area because the public spaces are delightful and who use the public space for recreation, pleasure, exercise and play.
To ensure that public spaces are lively and popular this group of people must be provided with good conditions. This means that the public spaces must be highly attractive. Within this user group the focus can be on children, teenagers, adults or the elderly and the public spaces can be designed to meet the different needs of different groups.



City life barometer

The city life barometer illustrates the relationship between climate and various activities. The optional activities are the most sensitive to poor climate and low urban quality.

part 1 - Public Spaces and Public Life




www.state.co.nz





Much of the downtown area is occupied by wide roads and car parks.



24 hr vehicle flows

Over the years unlimited vehicular traffic has been allowed into the city which has caused deterioration of the streetscape and problems with the pedestrian landscape. From observation, Wellington today is lacking an overall street hierarchy. Today most streets are treated in similar terms regarding road layout, traffic management and design. Some streets even suffer from a layout that could be described as urban motorways e.g. Cambridge and Kent Terrace and Jervois Quay.

A stronger emphasis on urban quality and improved conditions for walking, cycling and public transport is needed if major improvements are to take place. City streets need to be reclaimed for what they are - city streets and city boulevards.

Vehicular traffic still has a most important role to play as many people are dependent on their car getting to and from the city. Therefore the following is not to be seen as a promotion for getting rid of vehicular traffic in Wellington but more to aim for a healthy balance between the various traffic forms and promote alternative transport modes.



Cambridge Terrace



Taranaki Street



Willeston Street



Wakefield Street

Parking is at present dominating in Wellington city centre.

Comparison to other cities:

Wellington:	15,833 parking spaces
Copenhagen:	3,100 parking spaces
Stockholm:	8,000 parking spaces
Oslo:	4,800 parking spaces
Adelaide:	35,000 parking spaces

In order to reduce vehicular traffic through the city and start improving the streets a parking strategy identifying parking needs and goals for reducing parking in the city centre is needed.

Copenhagen has developed an effective parking policy where 2-3% of inner city parking has been removed each year during the last ten years. Alongside the positive side effect of less traffic the road space has been used for cycle lanes and widened footpaths. At present the excess width of the Wellington streets is used for car parking. A better use is possible.



Tory Street



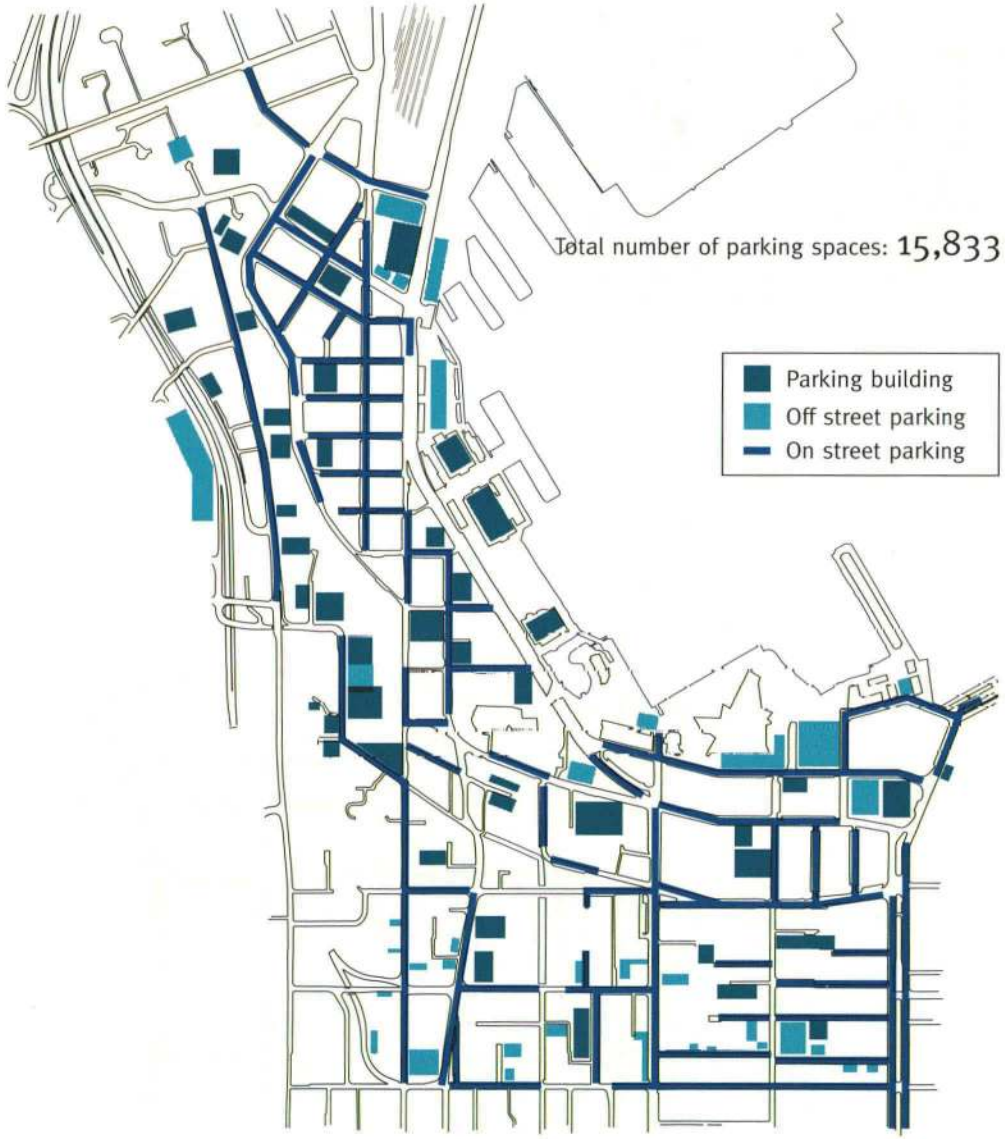
Panama Street



Grey Street



Johnston Street



Parking in the city centre

Jervois Quay - Separating the city from the water





The six lanes of Jervois Quay are a major obstacle when it comes to linking the city and the waterfront and letting the city take full advantage of the potential to develop a successful recreational and economically viable waterfront.

Low pedestrian priority





Car dependency is prevalent in Wellington and this impacts significantly on the pedestrian landscape. Pedestrian priority is generally low and the quality of the streetscape is poor in many areas.

Side streets - lacking functional hierarchy





All side streets between Lambton and Jervois Quay serve as thoroughfares for vehicular traffic and parking. In terms of developing side streets into strong connections to the waterfront, a hierarchy needs to be developed in order to distinguish primary from secondary streets.

A few and traffic dominated public spaces





The Railway Station Forecourt and the western part of Courtenay Place are dominated by unfortunate traffic solutions allowing parking and slow traffic to move through otherwise pedestrian designated areas. The spaces are thus divided into bits and pieces.

The main pedestrian activity in Wellington is along the Golden Mile and Cuba Street while other areas, e.g. along the waterfront and around the Railway Station area, experience a much lower level of activity.

Golden Mile

The pedestrian traffic along the Golden Mile is quite significant for a city the size of Wellington. Although improvements can be made and higher numbers of pedestrians can be expected in an improved city centre, the pedestrian traffic in Lambton Quay at present equals the pedestrian traffic in Tottenham Court Road or Charing Cross Road in London.

Pedestrian numbers are generally consistent along the Golden Mile. Lambton Quay is the highest with 28,430 pedestrians. Both Willis Street and Manners Mall are roughly 17% lower than Lambton Quay, while Courtenay Place has 50% of the pedestrian traffic on Lambton Quay.

Other parts of the city

Cuba Mall experiences pedestrian traffic 20% lower than Manners Mall due to the more convenient location of Manners Mall, while Cuba Street has 8,320 pedestrians or 45% of the pedestrian traffic in Cuba Mall.

Featherston Street and the northern part of Lambton Quay link to the Railway Station and are mostly used by commuters during peak hours.

Evening Pedestrian traffic

While most of the Wellington streets experience a dramatic decrease in pedestrian traffic in the evening, Courtenay Place has 50% of its daytime pedestrian numbers and is the most used street in Wellington at this time. The Malls are under-used given the lack of activities in the evening. Lambton Quay experience a 92% decrease compared to daytime levels and becomes almost deserted.

Note: Detailed information about the pedestrian flows recorded in Wellington during Summer 2004 can be found as an Appendix to this report.



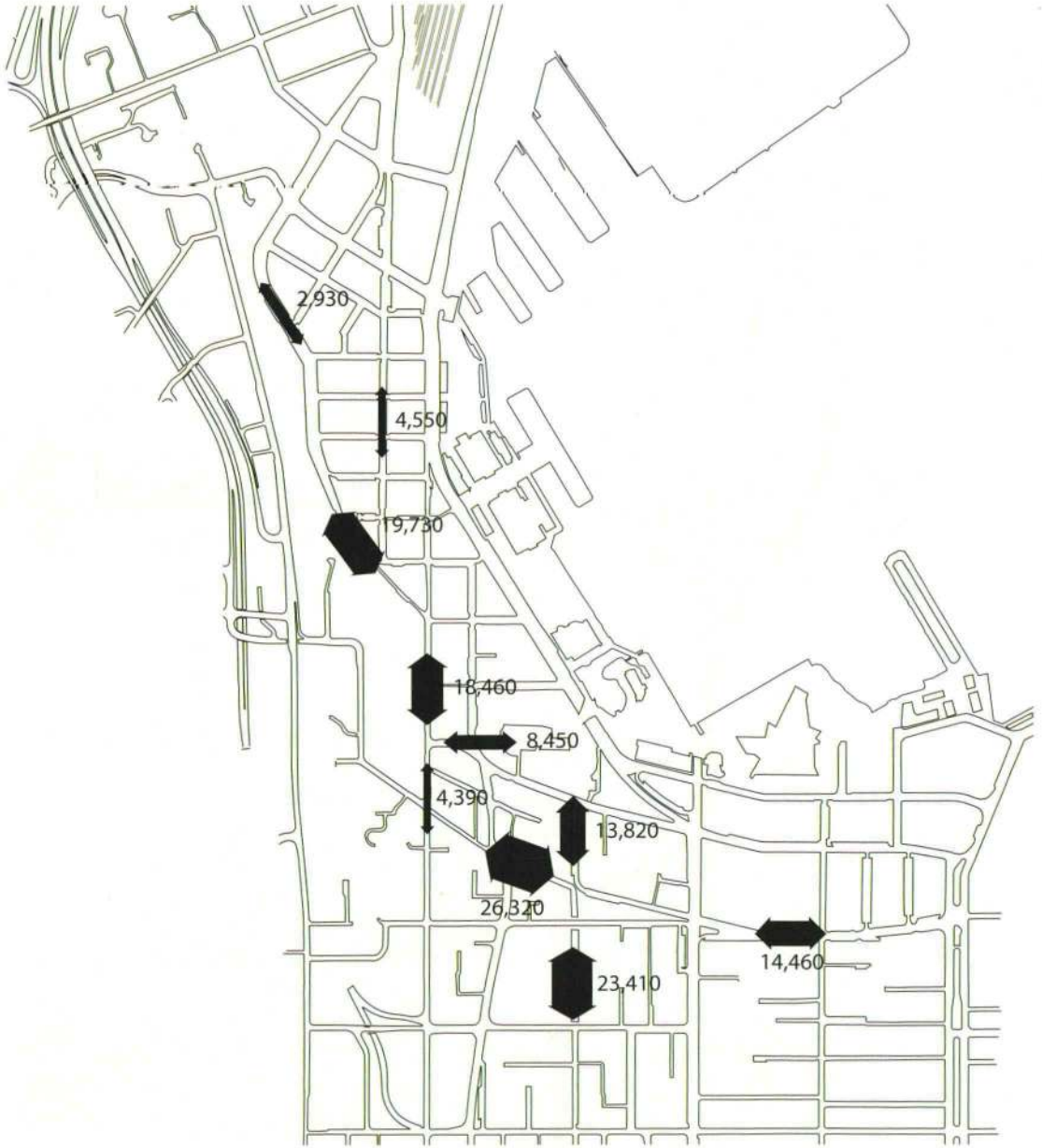
Weekday pedestrian Traffic 6pm - 10pm

Recording was done 12 February 2004, sunny with light winds 23°C

Weekday pedestrian traffic 10am - 6pm

Recording was done 12 February 2004, sunny with light winds 23°C

Pedestrian traffic on a summer Saturday



Saturday - pedestrian traffic - 10am - 6pm
Recording was done 6 March 2004, sunny and no clouds, 22°C

Saturday would normally be the busiest day in a city's retail district eg. Copenhagen, London, Adelaide and Melbourne. However, pedestrian flows in Wellington point to a different picture. In general pedestrian traffic is lower in Wellington on Saturdays except for a limited number of streets which maintain their weekday flows or experience an increase. In part this is due to the number of commuters who walk to work.

Golden Mile

Saturday pedestrian traffic - compared to weekday traffic on Lambton Quay - is marked by the absence of office workers in that area and therefore more pedestrian traffic takes place in the malls. Lambton Quay and Willis Street experience a 20-30% decrease while Cuba Mall and Manners Mall experience a 15-30% increase. The pedestrian traffic in Courtenay Place is unchanged.

Other city streets

The streets linking to the Railway Station are relativly quiet in comparison. Pedestrian traffic decreases by 60-80%. Cuba Street has successfully achieved a remarkable increase of 66% compared to weekdays.

Conclusion: Weekday and Saturday

In general the pedestrian survey points to a street scene where there is potential to be developed. Wellington enjoys high flows of pedestrians in certain areas, but more could be expected if a coherent pedestrian network was developed including new and enhanced centrally located recreational public spaces. A general strategy regarding walking routes in the city needs to be laid out and measures taken to improve the existing walking routes and how they link together.

Note: Detailed information about the pedestrian flows recorded in Wellington during Summer 2004 can be found as an Appendix to this report.

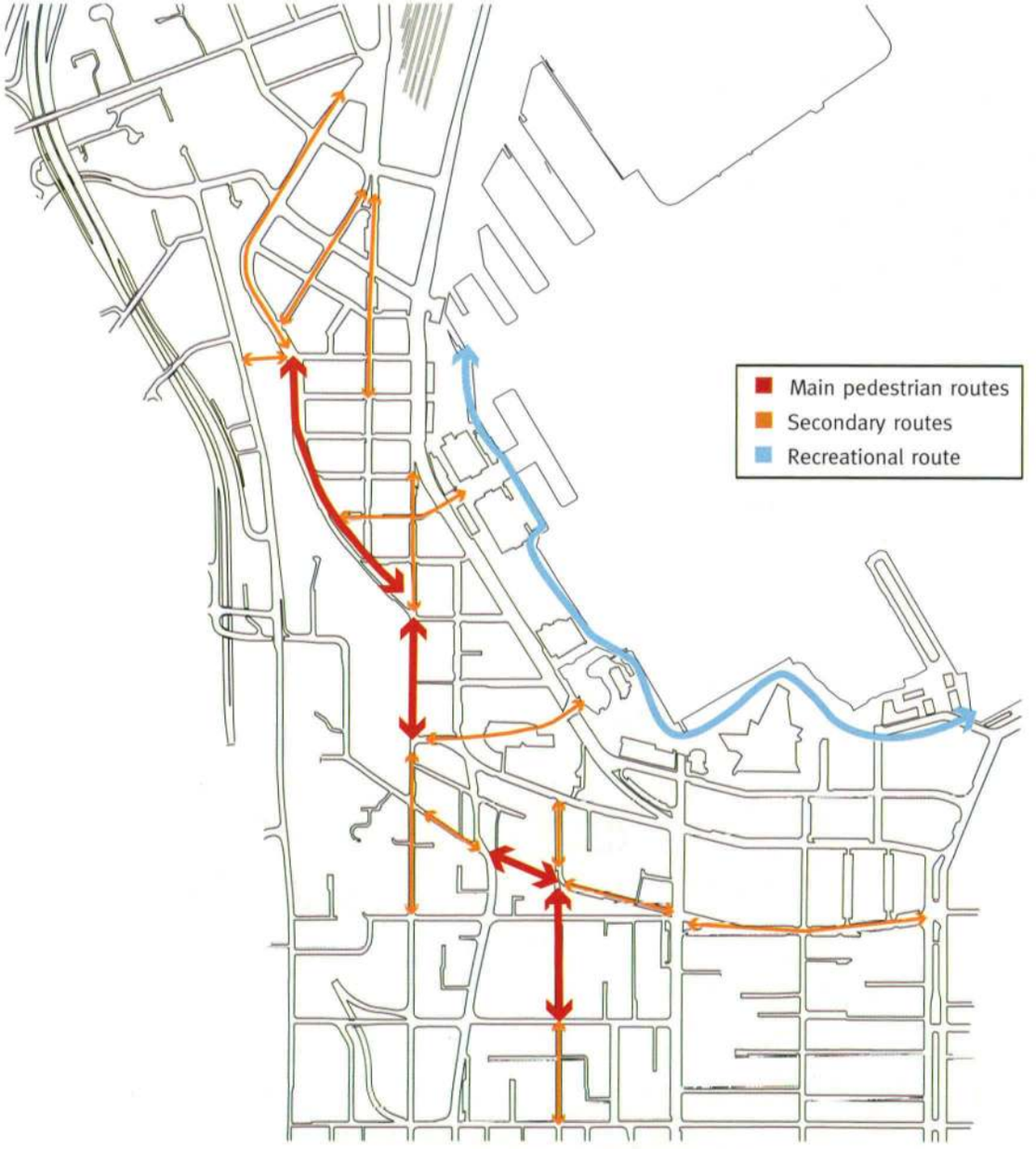
Wellington enjoys a series of beautiful streetscapes and interesting attractions creating the potential for a good walking city for pedestrians. Over the years a number of street improvements have been made. These improvements include pedestrianisation and upgrading of Cuba and Manners Malls and the significant improvement of Courtenay Place which could serve as a role model for a number of other streets, given the fact that footpaths here have been taken across minor side streets and a distinct identity in design of street furniture etc. has been developed. (There are still unsolved areas at either end of Courtenay Place, Te Aro Park, the linkage to Manners Street and the intersection with Cambridge and Kent Terrace).

As shown on the map the current situation consists of a series of pedestrian routes of shorter distances. The waterfront is not at present part of the pedestrian routes but more a tour in itself. The connections to the waterfront are equally poor and thus the city is "one-sided" offering an interesting walk along the Golden Mile but not much more than that.

The challenge is to create strong links within the city by connecting the main walking routes creating a strong and viable pedestrian network offering multiple opportunities for getting around in Wellington on foot and thus bringing more life and a better economy to the city as a whole.



Manners Mall



Existing pedestrian network



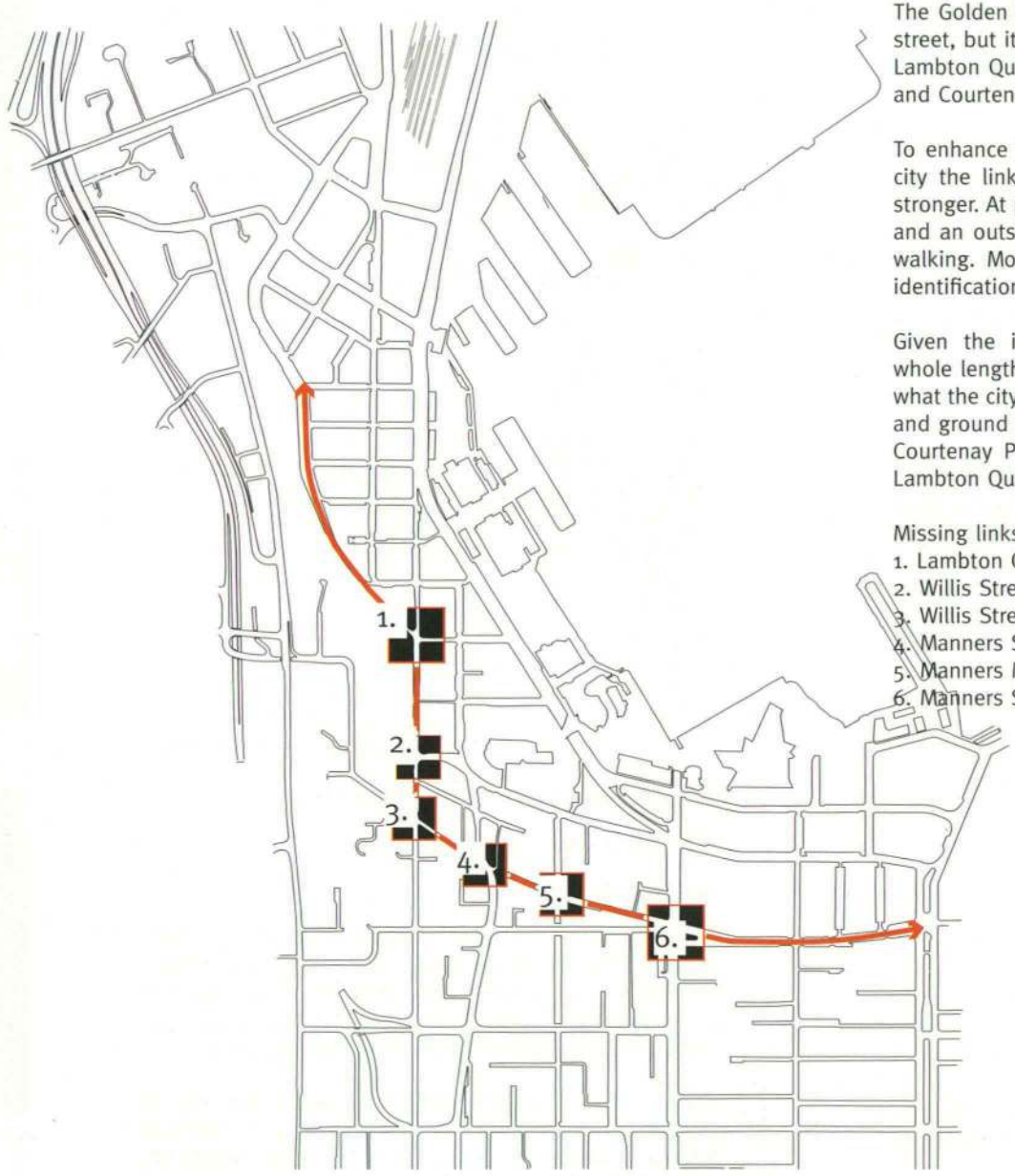
1.Lambton Quay // Willis Street



3.Willis Street // Manners Street



4.Manners Street // Manners Mall



Missing links on the Golden Mile

The Golden Mile is the overall name for Wellington's main street, but it is in fact made up of 4 streets:
Lambton Quay, Willis Street, Manners Street /Manners Mall and Courtenay Place.

To enhance the quality of this important link through the city the links between the individual streets need to be stronger. At present the Golden Mile is not really joined up and an outside visitor might lose track of the route while walking. More emphasis needs to be made on the clear identification of the Golden Mile.

Given the importance as Wellington's main street, the whole length needs to be upgraded to provide the best of what the city is capable of regarding design, street furniture and ground floor frontages. First steps have been made in Courtenay Place, Manners Mall and the southern part of Lambton Quay.

Missing links along the Golden Mile
1. Lambton Quay // Willis Street
2. Willis Street // Mercer Street
3. Willis Street // Manners Street
4. Manners Street // Manners Mall
5. Manners Mall // Manners Street
6. Manners Street // Courtenay Place

Lambton Quay is the most visited street in the city. There is a good mix of shops, high quality buildings, convenient access to public transport and a short walking distance to the waterfront. Lambton Quay has potential to be a world class retail street .

Current issues on Lambton Quay include the widespread use of sandwich boards on the footpaths (especially the western side), breaks in walking rhythm on the eastern footpath caused by frequent footpath interruptions, too much roadspace and too little pedestrian space, split levels lifting activity up to first floor levels, poor connection to the waterfront through the low quality side streets full of parking and few connections to the Terrace.

There is a risk that Lambton Quay will become isolated from the balance of the city due to the poor connections along its length. Easier, more frequent and higher quality access points to and from Lambton Quay along the route would improve the connections to the surrounding city and bring more of the city into play which could generate a positive cumulative effect.



Public or private ??
Links between the Terrace and Lambton Quay need to be made clearly visible and public in order to integrate the Terrace more with the surrounding city.



Footpath interruptions on Lambton Quay

- Footpath interruption
- Road closure

The eastern side of Lambton Quay is dominated by many footpath interruptions created by minor side streets 'breaking' up footpath flows. The interruptions demonstrate the low pedestrian priority and create a one-sided retail street with poor connectivity to the surrounding city.

However there are some good examples in the city of continuous footpaths including Grey Street and Courtenay Place. This pedestrian priority should be given to the full length of the eastern side of Lambton Quay.



One lane roads need not be given highest priority.

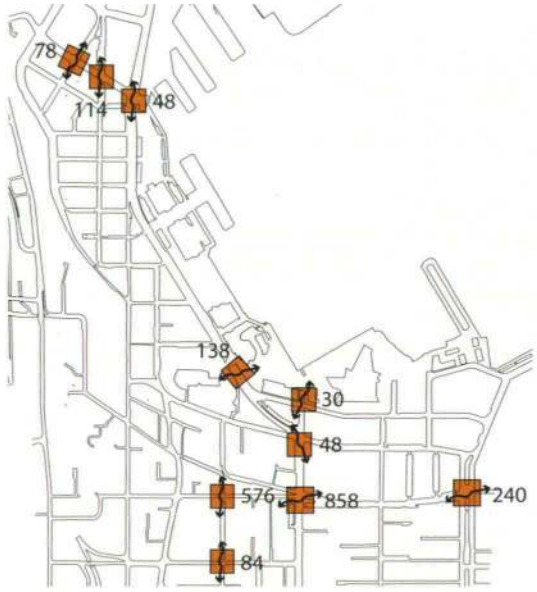


At the ANZ Bank on Lambton Quay the pedestrian space is fragmented and divided.



Grey Street has been closed off to vehicle access.





Number of jay walkers
Recording between 1 and 2 pm on a summer weekday.

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. In Wellington car dominance is high and thus pedestrian priority is low in a number of streets.

A recording of jay walking in these streets was undertaken during lunch hour on a summer weekday in a number of heavy trafficked streets. The jay walking culture and the culture of red crossers is a well-known phenomena which is not a sign of well-behaved versus less well-behaved pedestrians, but merely a sign of a traffic system which is not laid out to meet pedestrian requirements for short waiting periods at lights and easily accessible crossings at level.

There are usually good reasons why people jay walk and put themselves at risk. A high number of jay walkers in the city usually points to a traffic culture which is out of balance. Some people are simply fed up with long detours, long periods waiting at red lights and push buttons so they choose to cross the streets even at considerable risk of

Ghuznee crossing



Distribution of red / green lights
(5 sec of green, 9 sec of flashing red, 85 sec of red light)

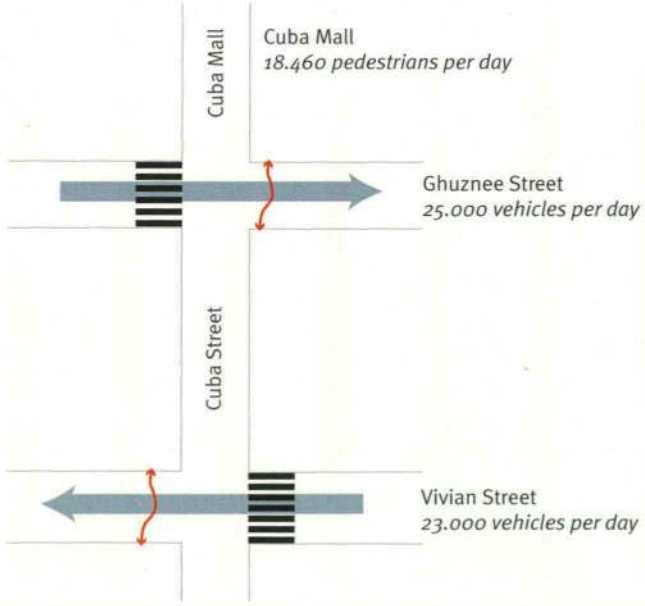
84 jay walkers
(during a weekday lunch hour)

Vivian crossing



Distribution of red / green lights
(8 sec of green, 8 sec of flashing red, 72 sec of red light)

576 jay walkers
(during a weekday lunch hour)



Mismatched crossings on Cuba Street

Because of its variety of small shops and activities Cuba Street holds a position as an attractive retail street with a number of cafes and designer shops. As such Cuba Street is extending Cuba Mall, but in a different character.

Cuba Street is intersected by Ghuznee and Vivian Street each carrying substantial vehicular traffic flows (app. 25.000 vehicles per day), often at high speeds, to and from the motorway.

The present division into Mall and Street is abrupt since the pedestrian crossings leading pedestrians along Cuba Street are of a standard design and do not give high priority to pedestrians or provide logical crossing options. There is only one pedestrian crossing at each intersection which have not been coordinated and are thus placed on the west side at Ghuznee Street and then to the east at Vivian Street. Chain railings put in to keep people from crossing outside designated crossings are disregarded.

The connecting side streets between the Golden Mile and the waterfront are at present under-utilized as pedestrian links between two major attractions in Wellington.

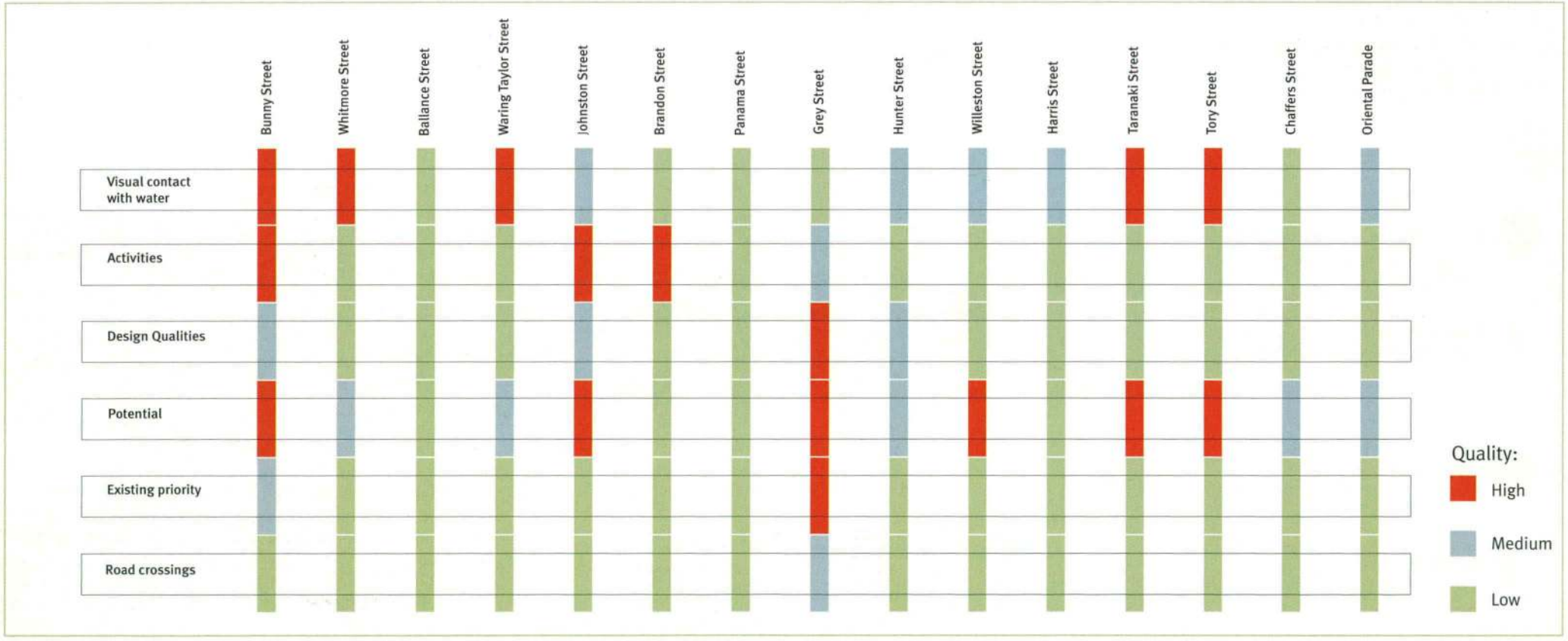
Use as shortcuts for vehicular traffic and as parking facilities has left the side streets as low quality public spaces dominated by vehicles. At present vehicular traffic is equally distributed among the side streets and there is no street hierarchy or identification of primary and secondary connections, Grey Street being the only exception.

Illustration below:
The bar chart below illustrates the quality of the pedestrian linkages along the streets between city and water.

The following criterias for pedestrian linkages have been identified :
- visual contact with the water
- amount of activity taking place in each street
- physical quality of street design (paving, lighting etc.)
- potential for development
- existing pedestrian priorities
- quality of road crossings to the waterfront

Illustration on the opposite page:
Pedestrian usage of the connecting side streets points to a low pedestrian quality in most side streets. Generally, where improvements have been made, as in Grey Street and at the City-to-Sea Bridge, these facilities are preferred and used. The most used side streets are Grey Street, Hunter Street and Mercer Street, while the most used crossings are at Queens Wharf and at the City-to-Sea Bridge. All crossings along Cable Street are under-used.

In order to achieve an integrated waterfront more activity needs to take place in the side streets to attract more visitors. Better crossings to the Waterfront are also needed as only two of the crossings are working at an optimal level at present.





Key links to waterfront

Bunny Street connects the Parliamentary Precinct with the Railway Station and the waterfront.



Whitmore Street enjoys an open view towards the waterfront.



Johnston Street connects Midland Park / Lambton Quay with the waterfront.



Grey Street is the most lively connecting street with several outdoor cafes.



Willeston Street has an open view towards the waterfront and a short distance to Lambton Quay.



Harris Street is at present under-utilized but has potential in terms of Civic Square and the activities here.



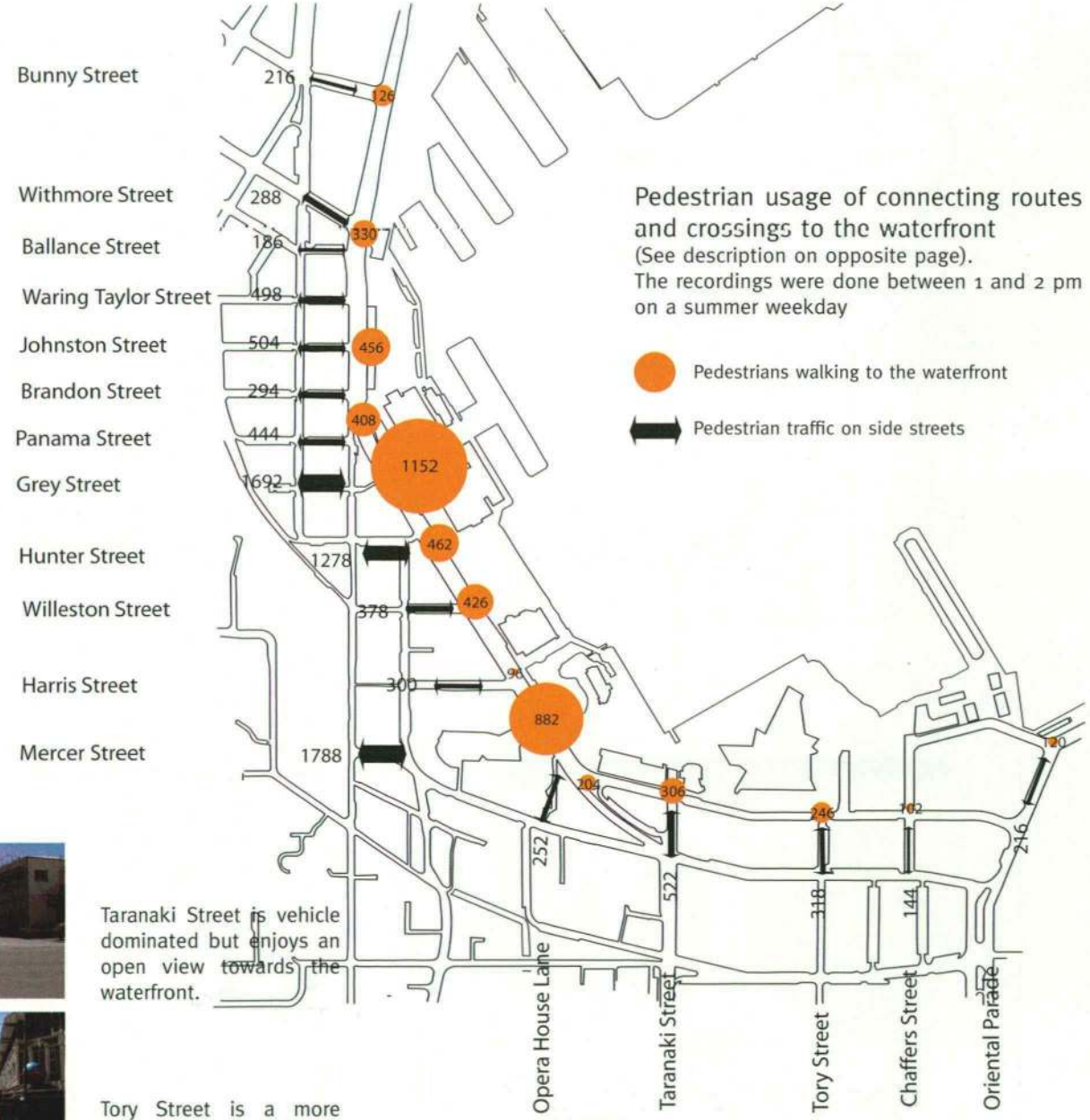
City-to-Sea-Bridge is a direct link to the water from Civic Square.

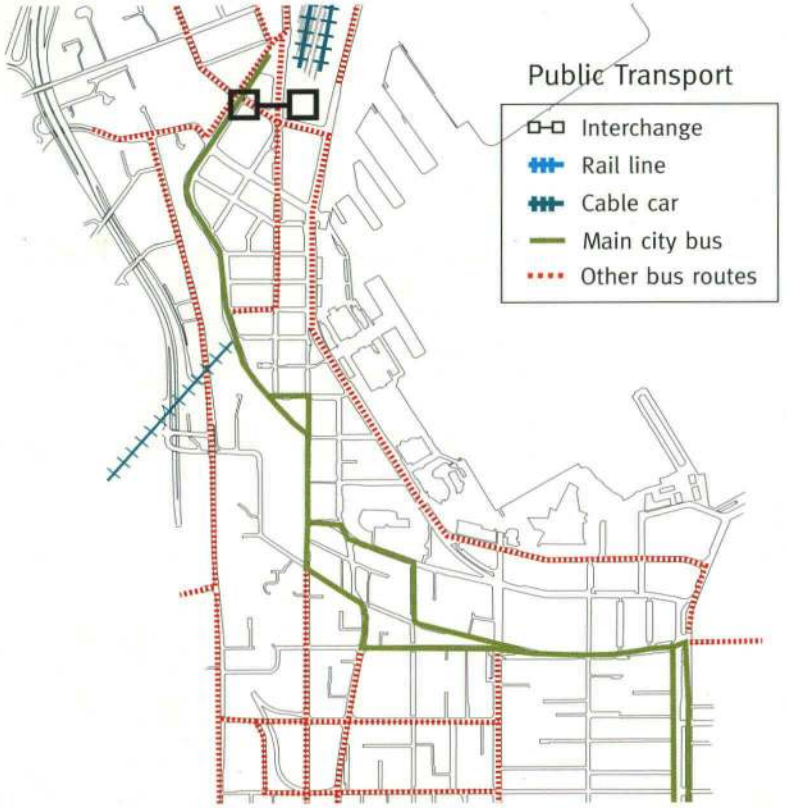


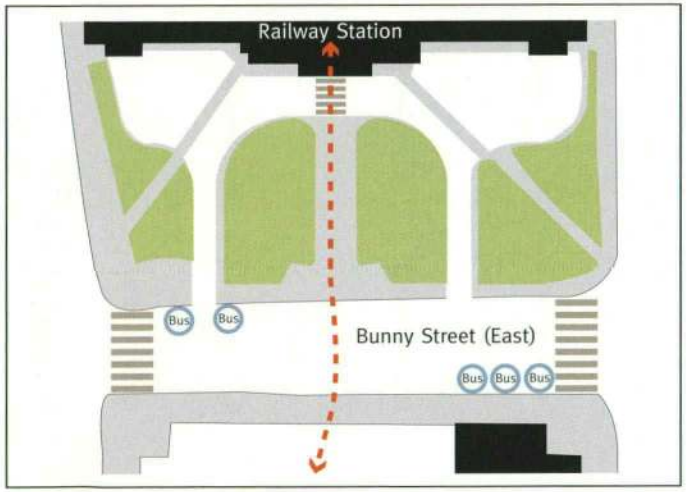
Taranaki Street is vehicle dominated but enjoys an open view towards the waterfront.



Tory Street is a more intimate street leading directly to Te Papa.







Public transport in Wellington has been developed as an alternative to the private car. During recent years the number of bus routes has been expanded. Dedicated bus lanes have been established and a main transport node has been created by connecting the Railway Station and the new Bus Station by an underground link. Thus Wellington enjoys a good supply of public transport and has experienced a 3-4 % growth every year.

Challenges at present are to further develop the network in order to expand the capacity and present an even better alternative to private transport. A further expansion of bus lanes and bus priority, introduction of higher quality rolling stock such as light rail, electric buses, more real time information for travelers and easy ticketing are key elements.

Another priority connected to the development of public transport is the continuous development of the pedestrian environment in order to secure good quality, interesting routes to public transport nodes and to offer safe walking routes in the evening. A well-integrated city with multiple activities taking place during the day and night can help maintain high passenger numbers on public transport and thus keep private traffic to a minimum. Public transport is part of the pedestrian landscape and needs to be promoted along with quality improvements for pedestrians.

Illustration to the left: Vehicular access dictates the shape and use of the Railway Station Forecourt today.

Railway Station

The Railway Station is an important node in the city being a transit location for high numbers of commuters every day. Recent developments have created strong links between the bus station and the Railway Station offering good opportunities for interchange between traffic modes.

Pedestrian connections to and from the station

The number of pedestrians passing through the forecourt is substantial and given the present poor pedestrian connections to the forecourt a redevelopment of the area incorporating side streets and pedestrian crossings in Whitmore Street, Balance Street and Bunny Street is called for. Bunny Street is at present used as one long pedestrian crossing. People cross from the station to Stout or Featherston Streets walking via the car park opposite.

Quality of recreational space

The existing recreational quality of the forecourt is relatively low given the unfortunate division of space by intersecting vehicle access lanes.

Observations show under-used shelter areas at the sides of the square while the front area which enjoys the most sun and the best views is the most used although there is more wind. The two cafes also attract pedestrians for a quick coffee while waiting for the train. These informal waiting activities are part of the life at a Railway Station where the daily coming and going is part of the entertainment. In order to give more room for these activities and improve the quality of the forecourt vehicular access needs to be reduced.

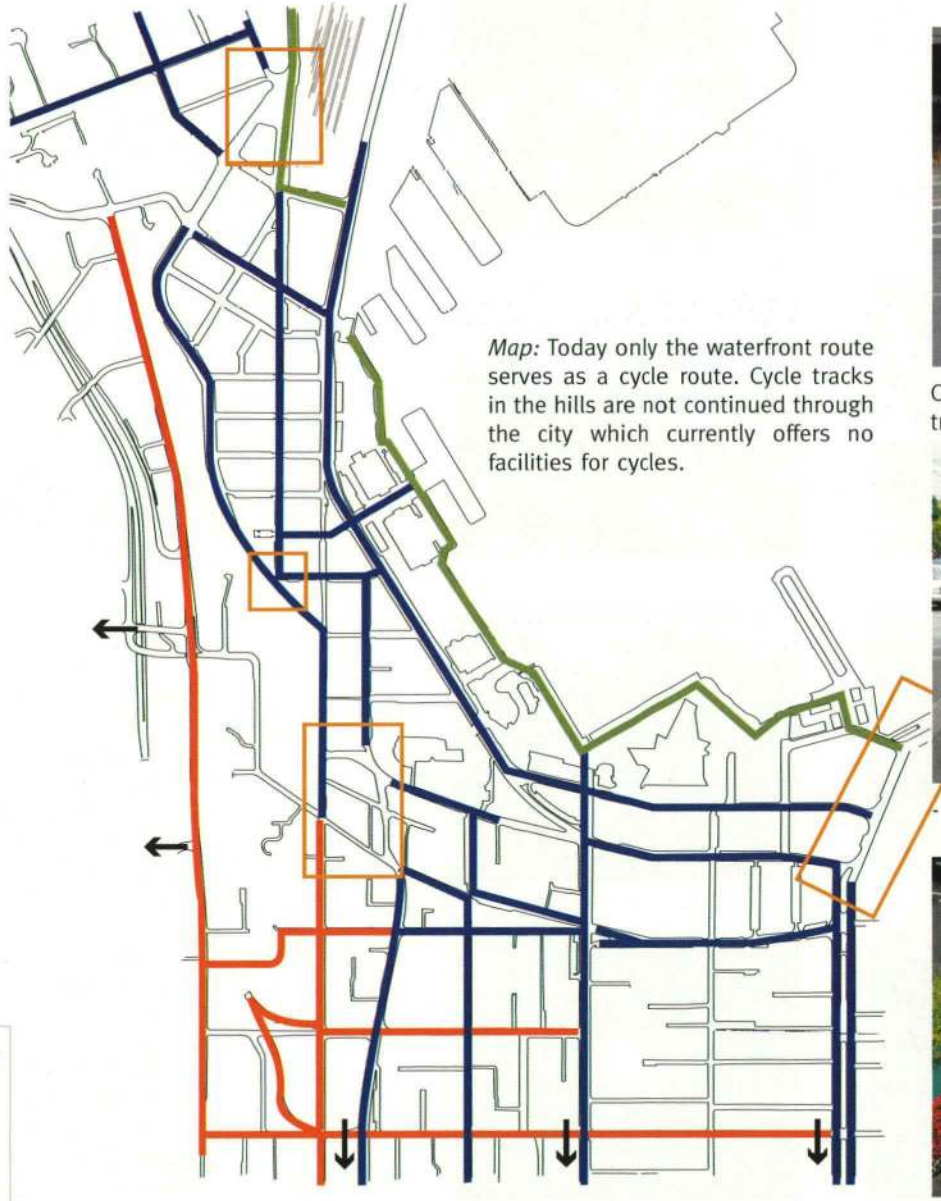
Cycling is a quality alternative transport mode - cheap, effective and an excellent form of exercise. In Wellington the topography does offer challenges but many trips through the city are not greatly hampered by changing levels. Trips from the hills to the city only offer a challenge on the way back, where public transport could offer the possibility of carrying bikes back up-hill.

Wellington is a city without a cycle network - the only cycle lanes are found on Oriental Parade and Thorndon Quay - and no connections have been made to suburban cycle routes. Cycling is a risky experience trying to make way through a traffic dominated city with little room for, and awareness of bikes. Only a few skilled, agile and devoted cyclists dare to take up the challenge to cycle on the streets. Cyclists find themselves in unclear, undefined zones and tend to ride aggressively in order to be noticed by motorists. This behaviour often causes dangerous situations, as well as conflicts with pedestrians.

Summary

Initiatives need to be taken to invite people to cycle and more needs to be done in order to create a safe network for cyclists. Dedicated cycle lanes constructed and sited with safety in mind, special measures at crossings, colours on cycle lanes and information are all means which could create a greater awareness to motorists and a higher number of cyclists.

Experience from overseas shows that the secret to making cycling popular and reasonably safe is to have a sufficient number of cyclists - a critical mass. Experience in other cities shows that motorists only learn to watch out for cyclists when cycling becomes part of a general traffic culture.



Map: Today only the waterfront route serves as a cycle route. Cycle tracks in the hills are not continued through the city which currently offers no facilities for cycles.

Quality of cycle routes



Cyclists ride on the same terms as vehicular traffic



- or in conflict with pedestrians



Dedicated bus lanes are used as cycle lanes

Public life comprises various activities carried out by different people and groups. Together all the activities form a diverse and lively city for all age groups. Conditions for these activities varies, some activities are more responsive to climate, noise, traffic, spatial definitions etc.



Exercise



Promenading



Performing



Resting



Skating + recreational activities



Resting at cafes



Children playing

Waterfront

The waterfront offers vast opportunities and a range of spaces for recreational activities of all types. Present problems include poor accessibility, a poor relationship to the surrounding city, lack of activities along Jervois Quay at city and waterfront sides and lack of spatial definition.



Civic Square

Civic Square has been created as the city´s living room where a wide range of activities can take place. The potential of the square is the location in the heart of the city and the proximity to the water. Civic Square is an introverted space with rather weak links to the city and a lack of visual connection to the water.



Midland Park

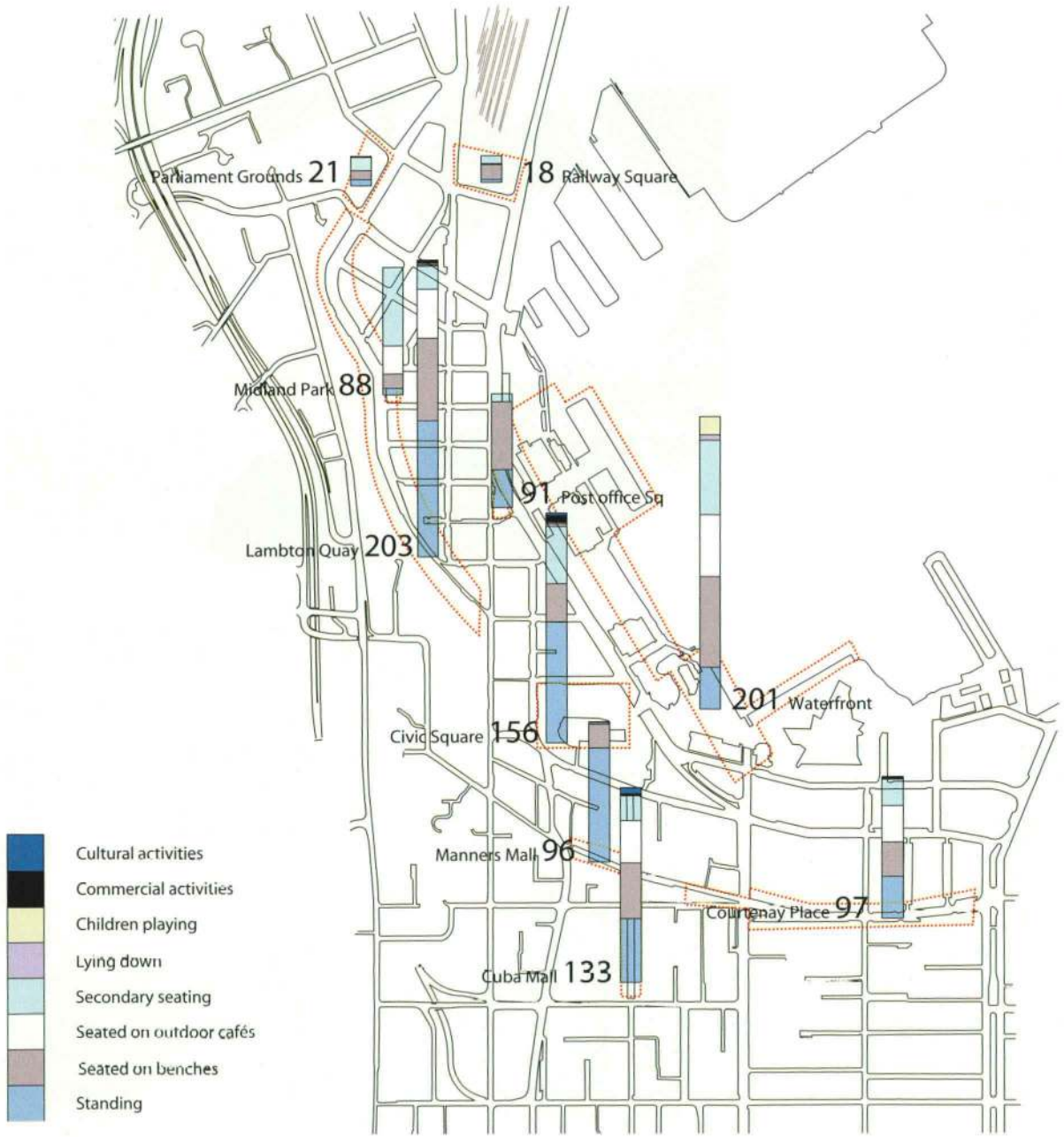
This is the most successfully placed public space in Wellington due to its close relationship with Lambton Quay which allows people to drift between the park and street. Midland Park offers a strong recreational opportunity along a highly used walking route.



Justice Park

This is an under-utilized city park at the northern end of Lambton Quay. The nature of the park is an introverted space with a poor relationship to the street. The possible reuse of this site for the new Supreme Court Building can only improve the space and bring more people to the area.





Stationary activities

Thursday 12 February 2004 - 10 am to 8 pm.
Average in the period between noon and 4 pm:

1104 activities

Comparison ; Average no. of activities (noon to 4 pm)

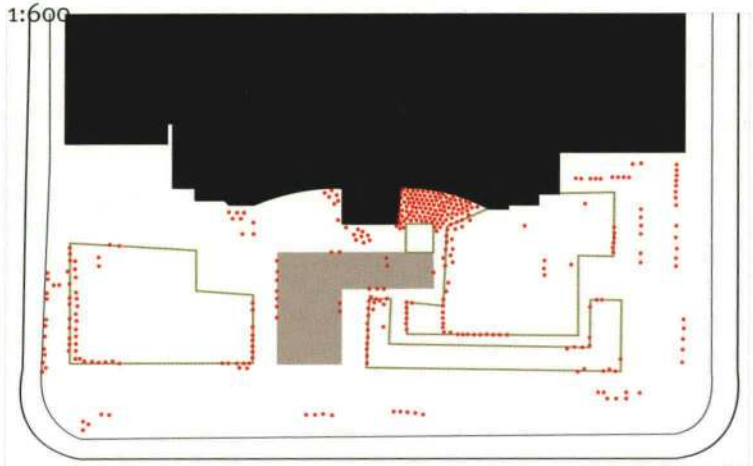
Copenhagen (1996)	5.900	activities
Melbourne (1994)	1.920	activities
Perth (1994)	809	activities
Adelaide (2002)	864	activities
Stockholm (1994)	3.050	activities
London (2003)	4.373	activities

The stationary activities are spread over most of the central city area. Civic Square, Lambton Quay and the waterfront are the preferred areas for resting, socializing, looking at shops, playing etc. The waterfront has the most significant variety of activities where as standing makes most (app. 50%) of the activities in Lambton Quay and Civic Square.

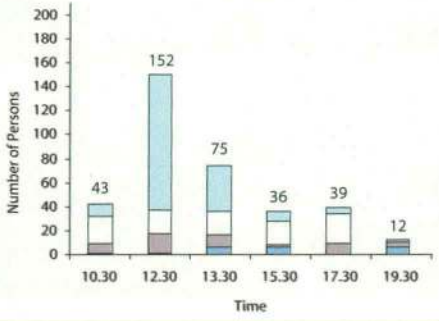
Secondary seating is evident in Civic Square, Midland Park and the waterfront suggesting the potential for more public benches.



Midland Park scale 1:600

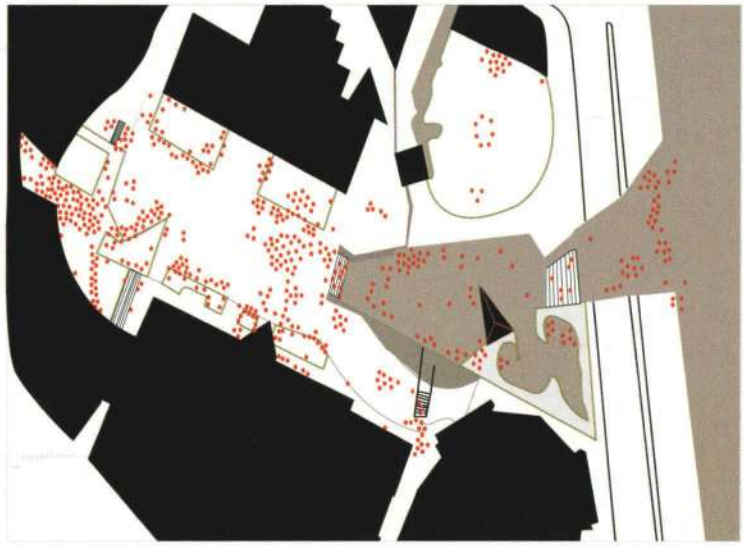


Midland Park enjoys a surprisingly low amount of stationary activities throughout the day given the excellent location right on Lambton Quay and with good sunlight. Despite the good options for a well developed public life Midland Park is at similar level to Post Office Square which is not nearly as conveniently located. Some explanation may be found in the present design of the square which has been divided into different levels with larger grass areas. People are thus restricted to staying at the edges and most flock to the outdoor cafe for lunch, thus spending longer time in this space than the average visitor at Post Office Square.



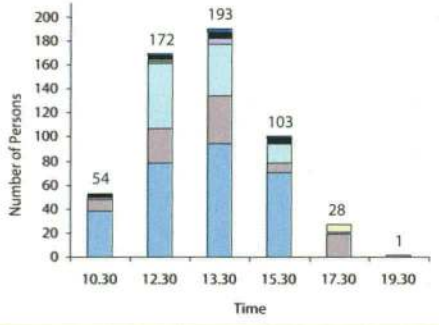
Stationary activities at Midland Park
Recorded: Wednesday 12 February

Civic Square scale 1:2000



Civic Square is a well visited area during the day. The activities are spread over most of the square with a larger concentration at the entrance to the square at Mercer Street. Otherwise people are gathering mostly at the edges near the grass elements and on the City-to-Sea Bridge.

Activities decrease drastically around 4 pm and Civic Square is not part of the night scene in Wellington.



Stationary activities at Civic Square
Recorded: Wednesday 12 February

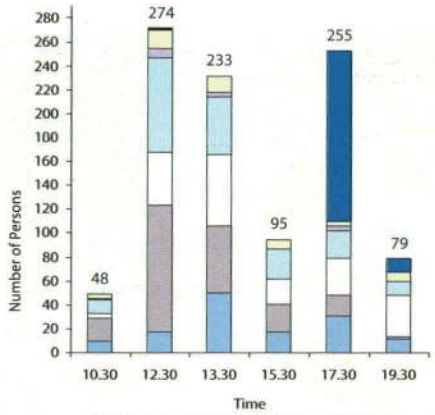
Stationary activities during a summer weekday at the waterfront

Waterfront scale 1:2800

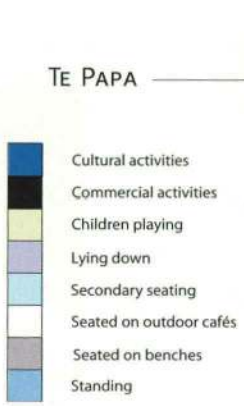
Though there are problems with accessing the waterfront, there is still so much potential here that people insist on coming regardless of the difficulty in getting there. The waterfront is therefore the most visited place in Wellington for recreational activities. Throughout a summer weekday almost 1000 people engage in activities, stop to rest, play or visit cafes on the waterfront. The type of activities here are of a varied nature with many activities going on at the same time. Another significant recording is that the highest number of cultural activities and children playing are found on the waterfront where the space is wide enough for children to run around freely.

As such the waterfront is the playground of Wellington - a potential to be explored.

The map below shows where the stationary activities take place throughout a summer weekday. Given the scale of the waterfront the activities are spread over a large area leaving the overall feeling that some areas are deserted and that a more intimate scale in some spaces would improve conditions for public life and intensify the activities actually happening here.



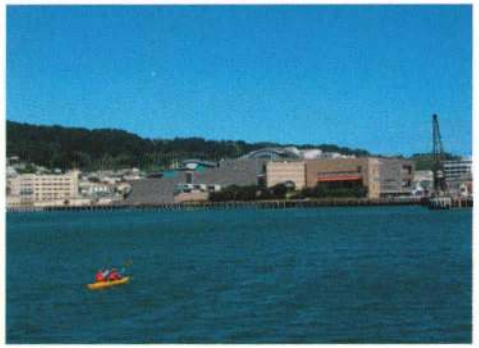
Stationary activities at the waterfront
Recorded: Wednesday 12 February 2004



Total number of stationary activities at the waterfront during a summer weekday
(Accumulation of six recordings carrried out on a summer weekday between 10 am and 8 pm)



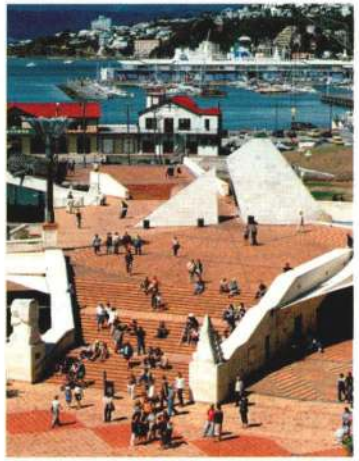
An asset to Wellington's waterfront is the possibility of creating a continous promenade along the water.



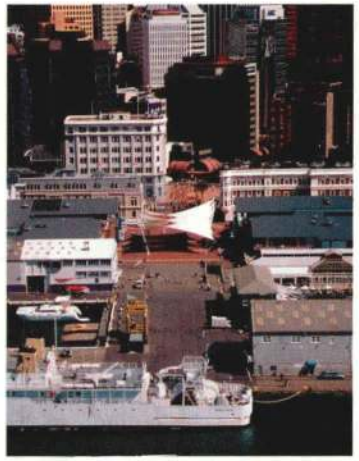
Te Papa is the main cultural institution in Wellington and on the waterfront offering various experiences at different levels.



Water activities are a natural part of a waterfront and could be developed further.



City-to-Sea Bridge offers a direct link from the city to the waterfront.



Queens Wharf represents an important node on the waterfront offering possibilities for a multitude of activities.



Multiple activities are carried out along the waterfront, where cycling, rollerblading, walking, jogging, playing, resting etc. takes place side by side.



Frank Kitts playground is a well-visited site on the waterfront where families with children spend time.



Resting options along the waterfront, enjoying the sun and talking to friends and relatives are popular ways of spending time.



Oriental Bay is a recreational lung close to the city used by many age groups.



The six lane Jervois Quay is the main barrier to accessing the waterfront



Te Papa's exterior is defensive and takes little advantage of a prime location adjacent to the water's edge.



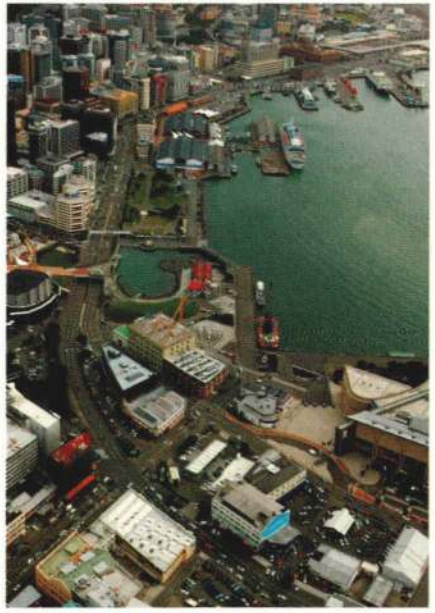
The surfaces have not been treated to indicate where pedestrian and vehicle areas are.



Some entrance points suffer from poor quality and lack of attention to detail.



Pedestrian crossings are of varying quality and quantity and often determined pedestrians jaywalk.



Previous developments on the Waterfront have appeared to leave the overall planning un-coordinated.



Parking occupies valuable space and blocks views towards the water



Most facades along the waterfront are closed and uninteresting.



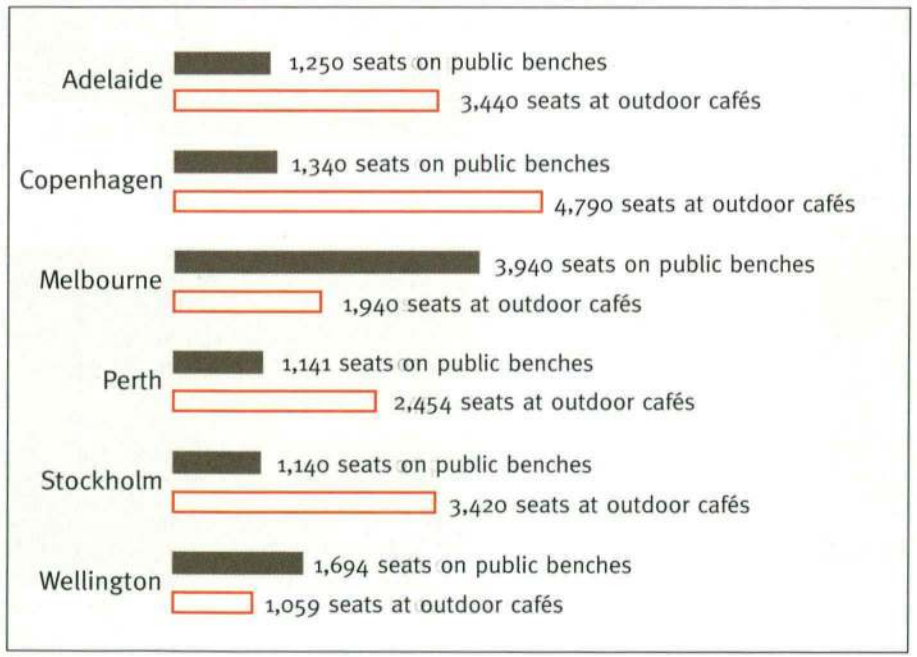
There are few access points to the water.

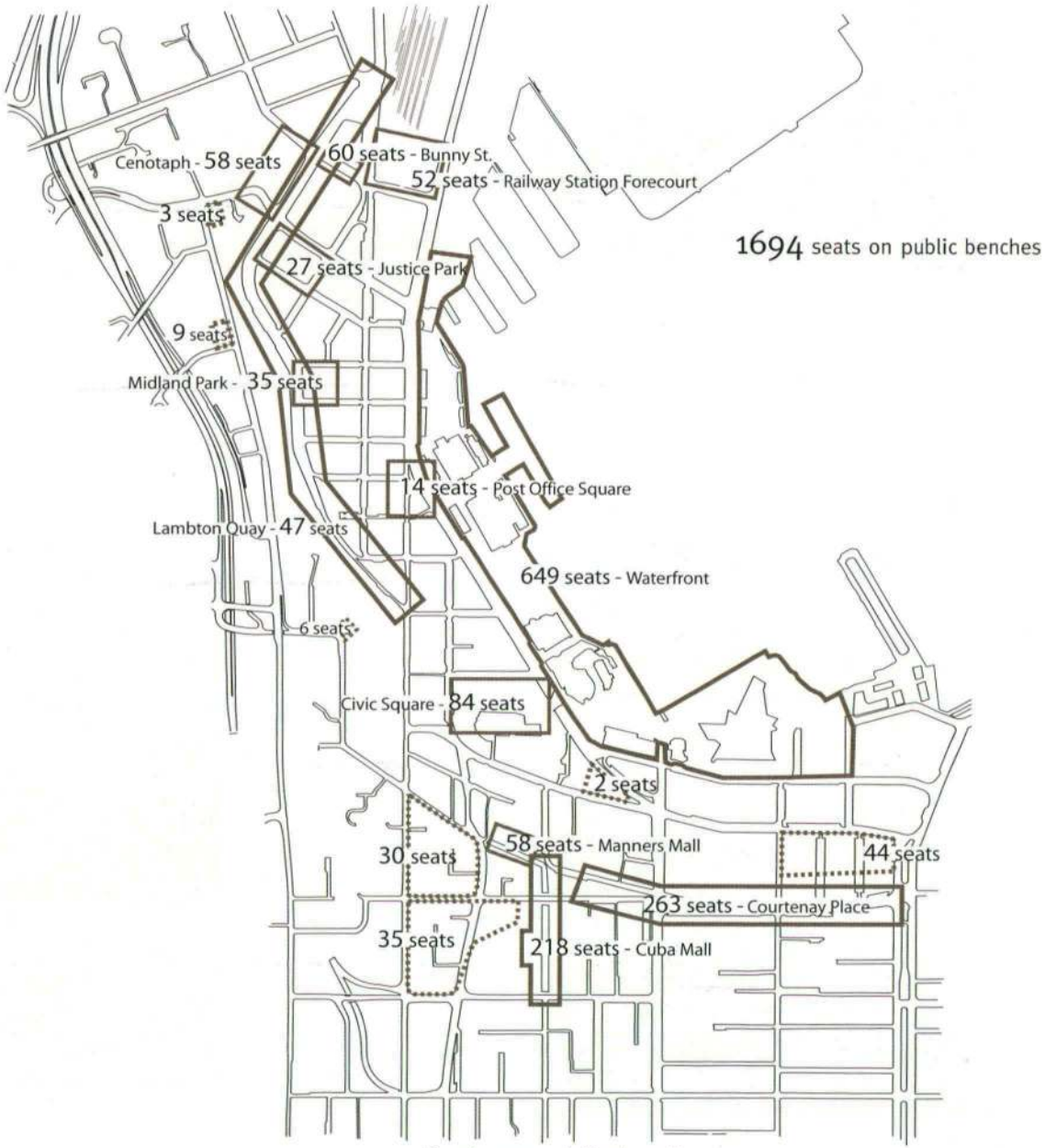
Resting is an integral part of pedestrian activity patterns. Good seating opportunities give people the option to rest in order to be able to walk further and enjoy public life and the hustle and bustle of the city.

Apart from the number of public benches other parameters are important in order to provide good quality possibilities for resting. Views, shade and comfort are all important attributes. Evidence shows that the seating most used is of good quality, has a good view, sufficient shade, and most importantly is located close to important pedestrian links.

Wellington has an extra-ordinarily high number of benches (approximately 25% more benches than Copenhagen). Much has been done to improve possibilities for long or short term stays in most of the inner city, given that the benches have been spread to cover a reasonably large area.

The waterfront stands out significantly by offering 649 seats on public benches (40% of total amount of benches in all of Wellington). A survey of stationary activities in Wellington in 2004 points to a high usage level of the benches. People accept the invitation to rest at Midland Park and Civic Square. The benches on Lambton Quay and in Cuba Mall are the most highly used.

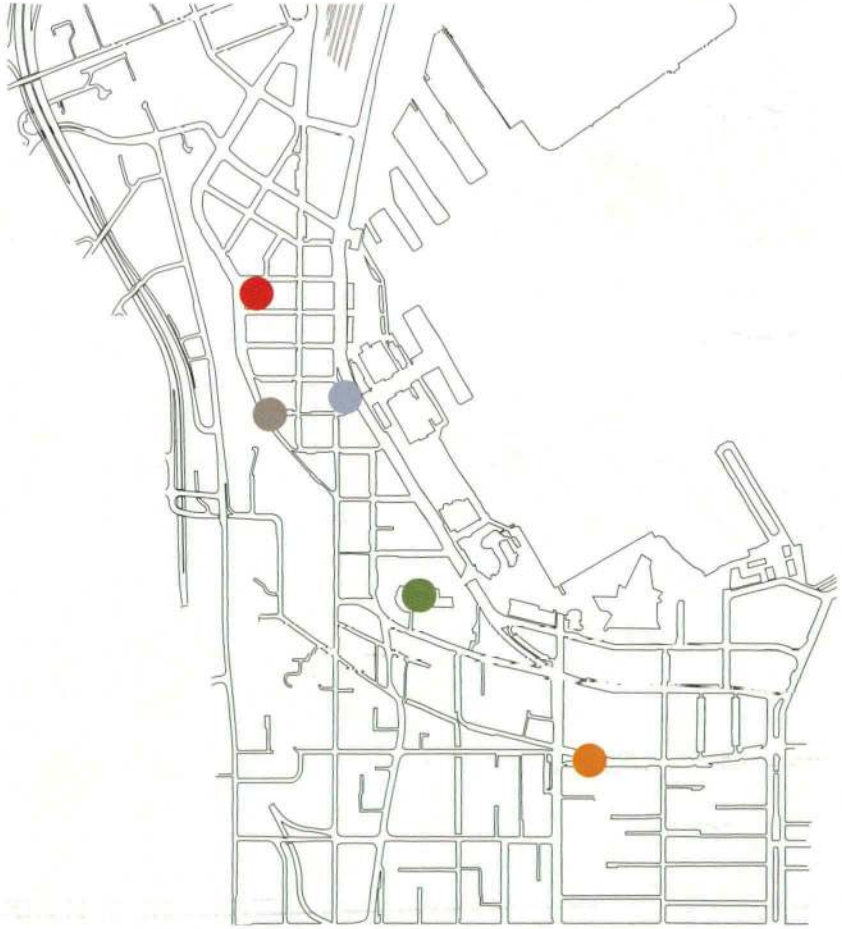




Seats on public benches

The quality of benches is just as important as the number and location of public seating. Studies show that the most used benches offer a combination of pleasant views, protected climate and good comfort.

A set of criteria for quality has been developed to evaluate individual seating areas. The benches evaluated here are selected because they are placed in major pedestrian areas, where good quality seating is to be expected.



Criteria for evaluation of the Bench Quality

C	Climate	1-5
V	View	1-5
N	Noise/pollution	1-5
CO	Comfort	1-5
D	Placement	1-5

Scale: Poor 1 2 3 4 5 Good



Grey Street
Rating: C=4, V=3, N=3, CO=2, D=3
Score: 15



Manners Mall
Rating: C=3, V=3, N=3. CO=1, D=3
Score: 13



Midland Park
Rating: C=5, V=5, N=4, CO=5, D=5
Score: 24 (highest quality score)



Post Office Square
Rating: C=2,V=2, N=2, CO=5, D=3
Score: 14



Te Aro Park
Rating: C=1, V=2, N=1, CO=1, D=1
Score: 6 (lowest quality score)

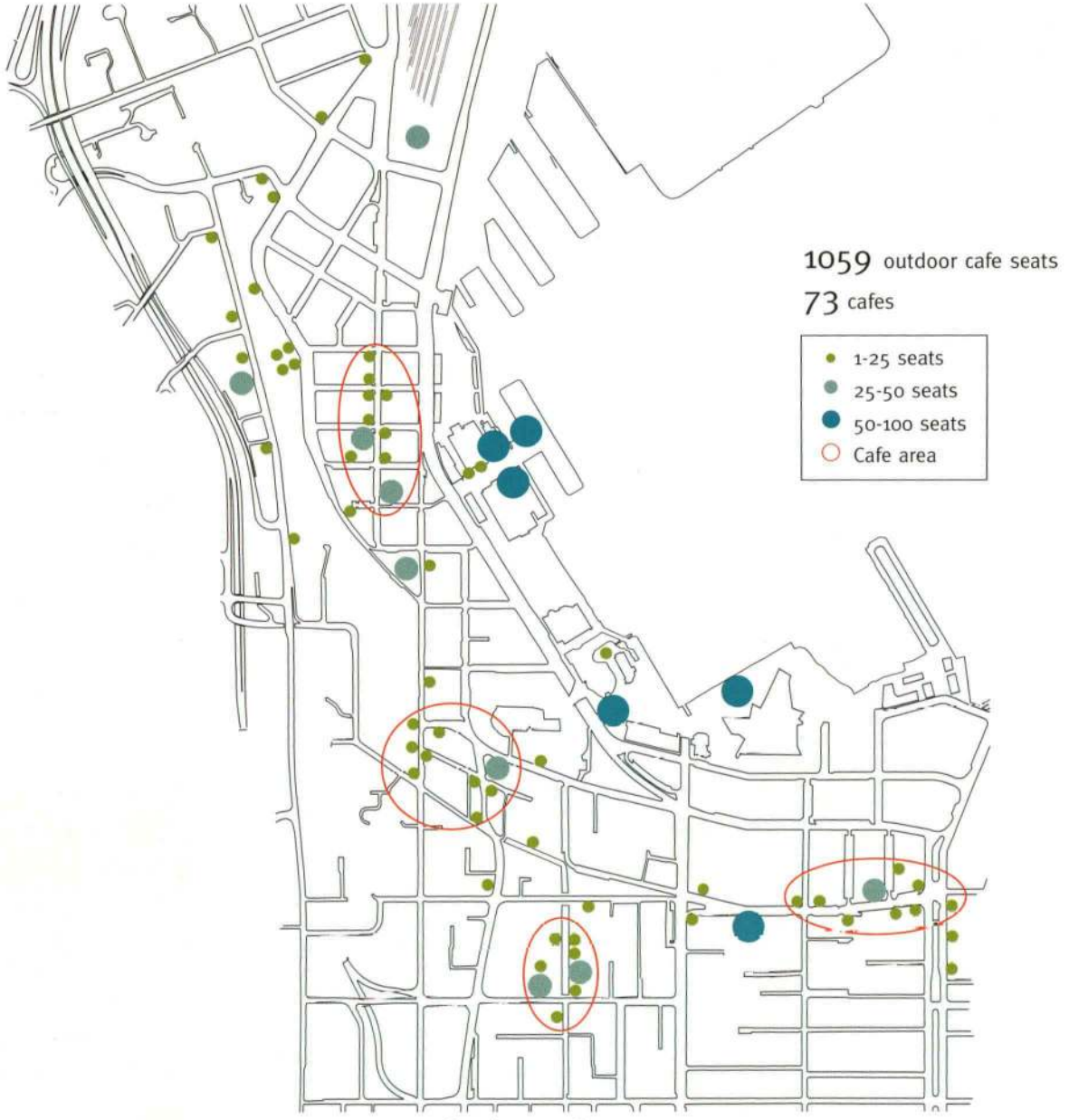
The culture of outdoor cafe life has developed rapidly in many countries around the world. This has significantly changed the usage patterns of city centres. Today summer activities are of a much more recreational nature. Drinking coffee is an uncomplicated way to combine several attractions: to be outdoors, enjoy pleasant views and the ever-present and changing amusement of watching people pass by.

Wellington offers an abundance of smaller establishments offering a wide range of various foods and cultures. Cafes providing outdoor seating (outdoor cafes) are spread over most of the central area with higher concentrations in a number of areas, while Lambton Quay and Manners Mall have practically none of this type.
By encouraging outdoor cafes in these streets public life along the Golden Mile can be maintained also in the evening. Many cafes extend their opening hours into the evening.

The number of cafes in Wellington is expected to increase due to a growing market. By encouraging and supplementing seating in general, including outdoor cafe seats, people are invited to stay longer, which will encourage spending and boost local businesses. As such public life is good value for money.

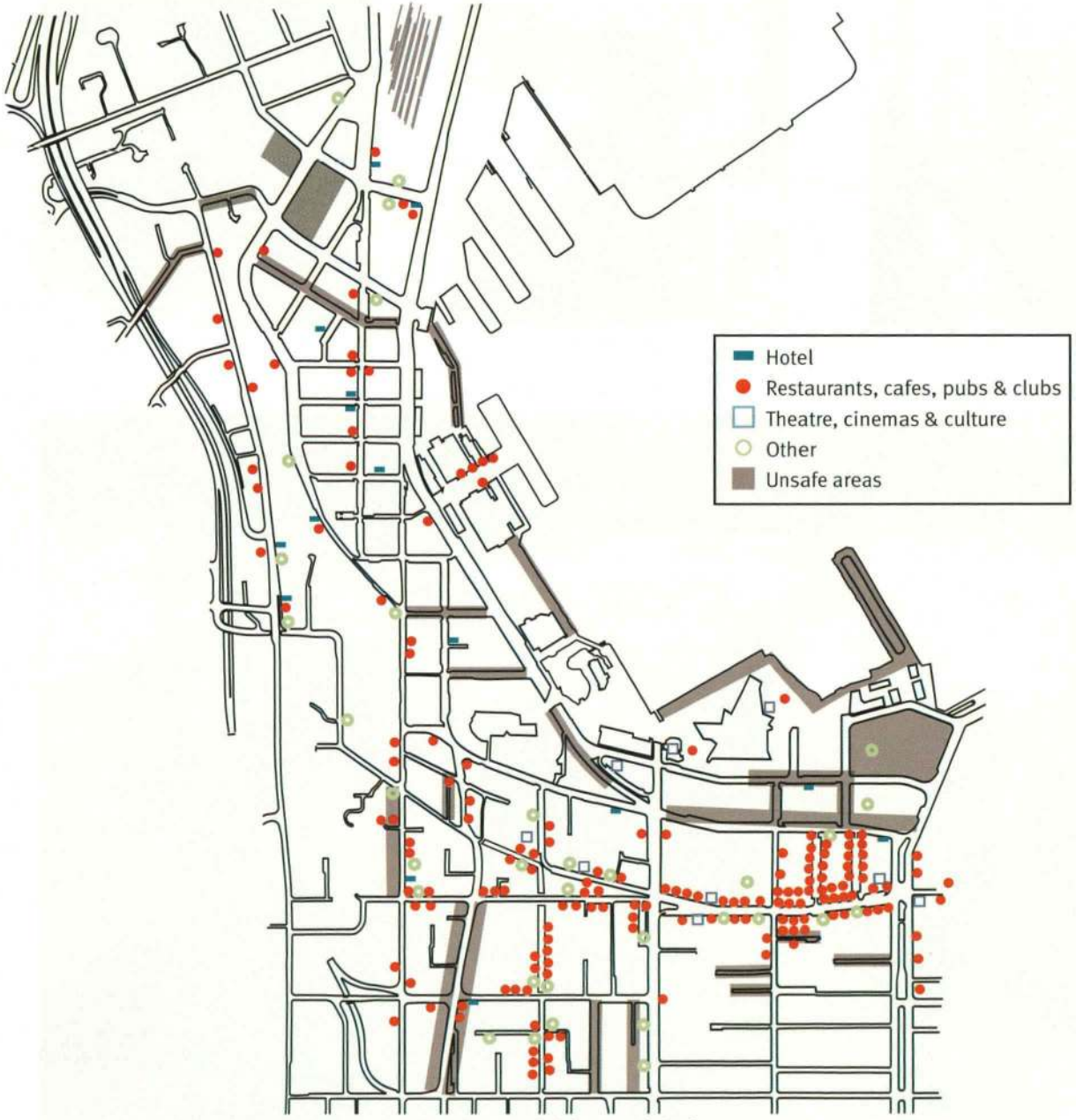


Outdoor serving in Woodward Street



Outdoor cafes

Evening activities and safety



Evening activities and Safety
Recorded on a weekday between 9pm and 11pm

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 inevitably avoids going there in the evening.

The illustration highlights the facilities that are open during the evening hours (after 9 pm) 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 smaller areas of the city.

In Wellington there are two major concentrations of evening activities. One in Courtenay Place and another one in Cuba Mall and Street. The main activity in these areas are bars, clubs, theatres and restaurants. The activity is highly concentrated in Courtenay Place and spills out onto the side streets, especially side streets down towards the harbour including Allen and Blair Street. On Cuba Street and Manners Mall the activity is more spread out, down little alleys or on the first floor.

It is striking that Lambton Quay and the adjoining streets are devoid of evening activities to such an extent that practically nothing is to be found in these streets after 9 pm. It is important to strengthen Lambton Quay, Willis and Featherston Streets as places for evening activities as they make up an important pedestrian link to the Railway Station.

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.

Note: The recording also included a study of which streets were perceived as respectively safe and unsafe to walk through at night.

The quality of the building frontages facing the footpath is an extremely important factor for the quality of an urban area. Good ground floor facades are rich in detail and exciting to walk by, interesting to look at, to touch and to stand beside. Activities inside the buildings and those occurring on the street enrich each other. In the evening friendly light shines out through the windows of shops and other ground floor activities and contributes to both a feeling of security as well as genuine safety. Interesting ground floor facades also provide good reasons for walking around in the city in the evenings and on Sundays, engaging in the age old pastime: window shopping. Blank walls, on the contrary, underline the futility of visiting the city outside working hours.

Narrow units have the effect of making streets more interesting because many doors and different uses provide interest even on a short walk through the city. Many narrow units also provide a predominantly vertical facade which has the important visual effect of making distances feel shorter. This makes it more interesting and comfortable to walk around in the city.

As illustrated on this page the edge is often the most popular place to sit or stand and watch public life. A lively edge can be achieved through lively facades, which with columns, recesses, stairs, niches or stones give people an interesting environment to pass along or to linger by.



The Edge Effect - Stand-



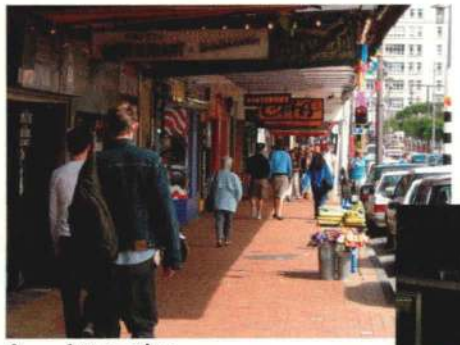
The Edge Effect - Resting



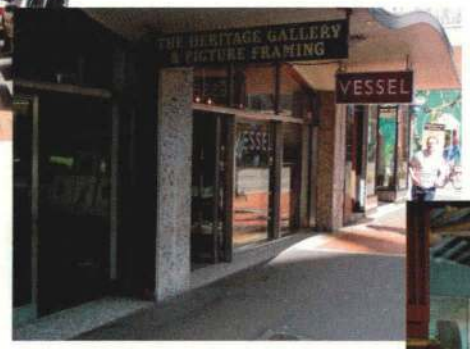
The Edge Effect - Socializing

Below: Transparent ground floor frontages are even more important in the evening where they add light to the streetscape.





A Attractive
Small units, many doors (15-20 units per 100 m)
Diversity of functions
No closed or passive units
Interesting relief in facades
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 facades
Relatively good detailing



C Somewhere-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 facade design
Somewhat poor detailing



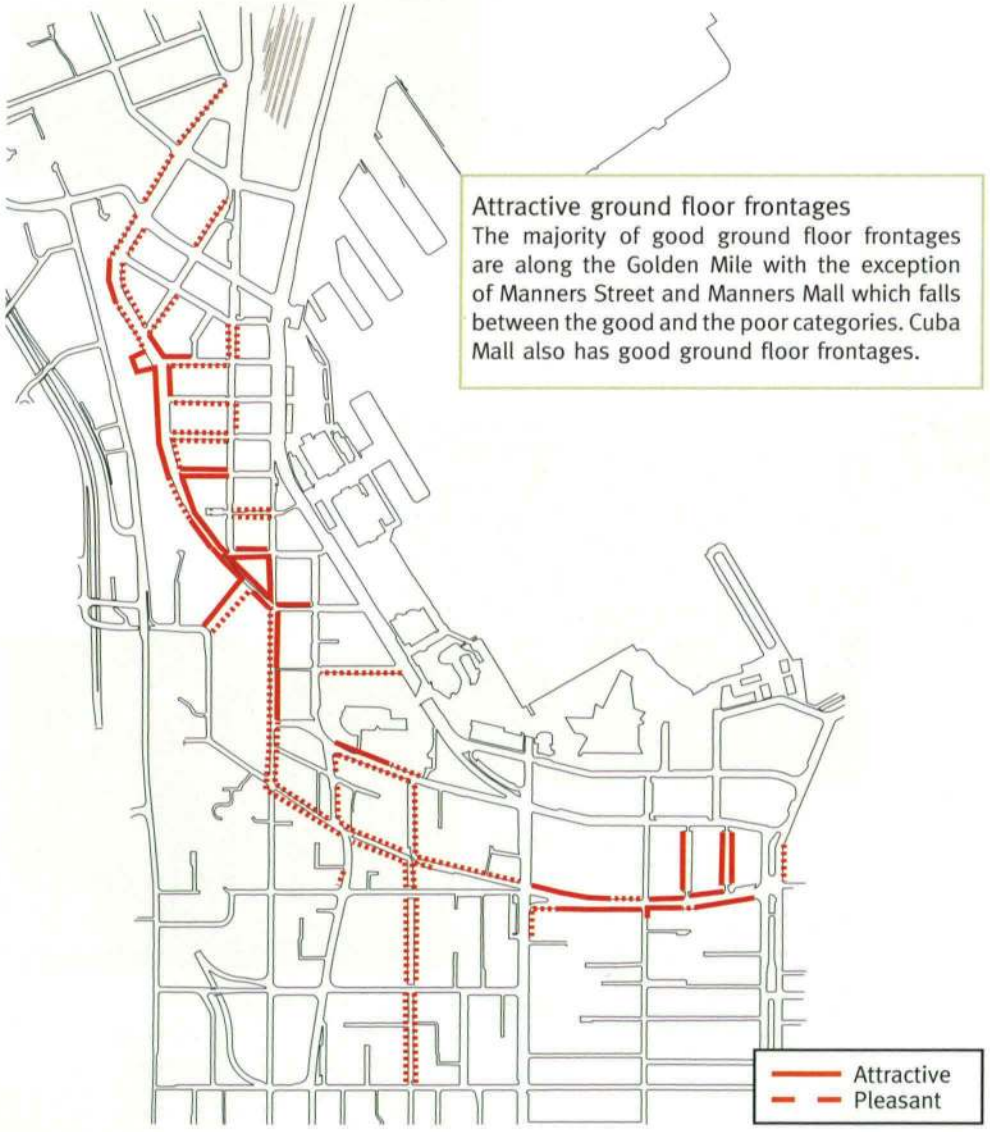
D Dull
Larger units with few doors (2-5 units per 100 m)
Little diversity of functions
Many closed units
Predominantly unattractive facades
Few or no details

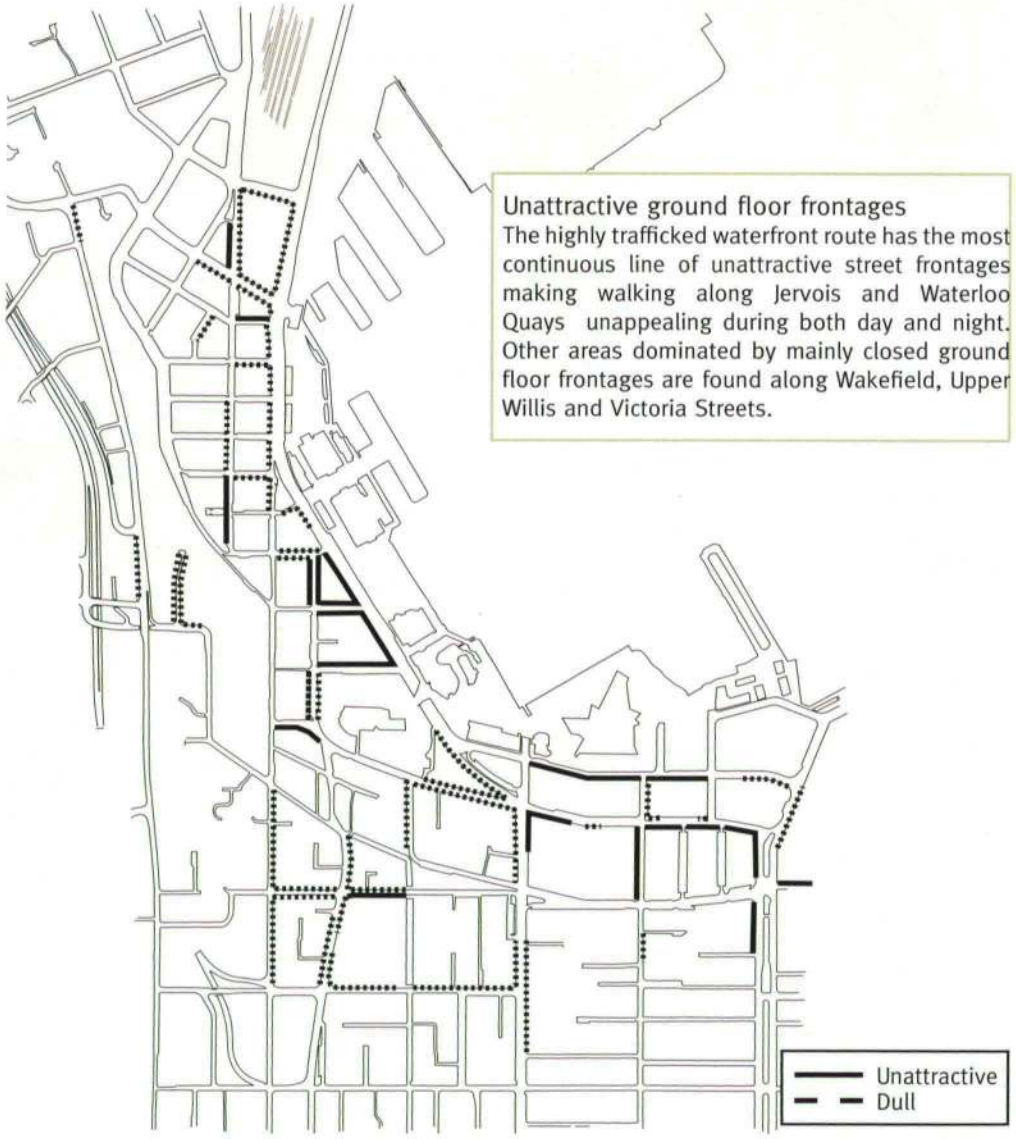


E- Mean Like E but even more unattractive



E Unattractive
Large units with few or no doors
No visible variation of function
Closed and passive facades
Monotonous facades
No details, nothing interesting to look at


Attractive ground floor frontages
The majority of good ground floor frontages are along the Golden Mile with the exception of Manners Street and Manners Mall which falls between the good and the poor categories. Cuba Mall also has good ground floor frontages.
Attractive
Pleasant


Unattractive ground floor frontages
The highly trafficked waterfront route has the most continuous line of unattractive street frontages making walking along Jervois and Waterloo Quays unappealing during both day and night. Other areas dominated by mainly closed ground floor frontages are found along Wakefield, Upper Willis and Victoria Streets.
Unattractive
Dull

Unattractive ground floor frontages along the waterfront route



















DEFINITION ; Unattractive ground floor frontages
Larger units with few doors (0-5 units per 100 m), little diversity of functions, many closed units, predominantly unattractive facades, few or no details.

Street furniture

Wellington has over recent years been upgrading its design profile in terms of bins, lighting, benches etc. specially designed for the urban spaces. The future provides opportunities for a gradual replacement of the worn out street elements with new co-ordinated city furniture.















Lambton Quay

Lambton Quay suffers from a yet incomplete renovation. Narrow footpaths and the widespread use of sandwich boards are obstacles in a busy pedestrian street. Paving and lighting are of poor quality, benches are few and the street layout needs a re-design to upgrade Lambton Quay as a major retail street.

Courtenay Place + Manners Street

A renovation of Courtenay Place shows a good relationship between the amount of space for pedestrians and vehicles which can be used as a blueprint for other main city streets. Footpaths have been widened and repaved, greenery has been planted and footpaths have been taken across minor side streets.

Besides the positive aspects Courtenay Place does suffer from a weak begining towards the west, where two minor parking streets and Te Aro Park obscures the streetscape and create a complicated pedestrian crossing across Taranaki Street.









Cuba Mall
A place for families where children playing, people eating outdoors and people promenading and shopping make a wonderful mix of activities and life throughout the day. The street attracts many visitors and in sheer eagerness to capture consumers, some cafes have utilized large parts of the street width to place their cafe seats thus making walking into an obstacle course. This is partly strenghtened by the somewhat oversized planting areas.





Grey Street
By closing of Grey Street for vehicular passage to Lambton Quay a small area has been created for lingering close to Lambton Quay.

However this lingering is a mixed pleasure since the benches have been placed right next to the parked cars in Grey Street. A way forward could be to move the seating closer towards Lambton Quay and remove parking in the part of Grey Street closest to Lambton Quay.





Manners Mall
A recent upgrade of Manners Mall has updated the street to a modern design standard following a simple paving pattern with few elements in terms of benches, lamp posts, bins etc. Benches have been translated into metal "cages" covering greenery where aluminium seats offer pedestrians a rest. In addition ordinary wooden benches provide a better seating comfort for users of the mall.
Manners Mall suffers from a relatively low quality of shop frontages and a proliferation of sandwich boards.



Summary of Part 1

Movements

Vehicular traffic
Vehicle traffic flows dominate the streetscape.
Consequences are :
- Major road (Jervois Quay) separates the city from the waterfront
- Low pedestrian priority city wide
- Side streets lack a functional hierarchy
- Few and traffic dominated public spaces, e.g. Railway Station Forecourt

Pedestrian movement
- Most pedestrian traffic is situated along the Golden Mile
- Low numbers of pedestrian traffic in the evenings
- Missing links along the Golden Mile
- Un-developed pedestrian network
- Lack of clearly signed connections between Lambton Quay and the Terrace
- Frequent footpath interruptions along the Golden Mile
- Un-developed links between the city and the waterfront

Cycling
- Lack of an inner city cycle network
- No cycle lanes in city streets
- Limited cycle awareness from motorists
- No connections to suburban cycle routes
- No cycle facilities for up-hill transport

Summary of Part 1

Recreation

- Wellington enjoys a reasonably high number of stationary activities
- Stationary activities are spread all over the central city
- Midland Park is not as extensively used as expected
- The waterfront is the largest and also the most used area for a variety of activities
- There are various problems to be overcome in developing the waterfront including:
    - crossing Jervois Quay
    - pedestrian access and crossings
    - extensive parking along the waterfront
    - lack of access to the water
    - incoherent planning leaves the waterfront in unconnected bits
    - lack of re-design for public use
    - unattractive building facades towards the water
- The provision of benches is very high and they are used
- The number of cafes is high and spread across the inner city
- The evening activities are concentrated in two areas leaving the northern part of the city deserted

Visual environment

- Attractive ground floor frontages are concentrated along the Golden Mile
- Un-attractive ground floor frontages are concentrated along the Waterfront
- Lambton Quay is in need of a quality upgrade
- Continuous footpaths along Courtenay Place
- Growing number of elements in Cuba Mall
- Grey Street is a model for the re-development of side streets
- Recent upgrade of Manners Mall follows a modern design standard

part 2 - Recommendations - Major challenges



Taming vehicular traffic



Supporting alternative transport modes



Stepping up pedestrian priority



Improving the City Squares



Creating an integrated waterfront



Upgrading public space quality



Creating a lively city



Integrating the Parliamentary Precinct with the city.



New Zealand is a country rich in beautiful nature providing cities with excellent landscape settings and offering plenty of possibilities to explore the outdoors. A future challenge is to strenghten the urban scene, raise the level of quality of the cities and tame vehicular traffic in order to offer a diverse public life in cities. Wellington, in this context, is a city with a unique setting, an exciting city structure and a range of other potentials and advantages.

Wear and tear, conflicts between modes of transport and the absence of a strong quality of city strategy has over the years resulted in a number of shortcomings, but fortunately these problems can be remedied.
All the basics are right in this fine city,

Future developments will disclose whether Wellington can further develop into a diverse and attractive city not only holding its position as the capital and one of the more interesting cities in Australasia, but also gaining recognition as a leading world city where good urban design practice has established high quality urban spaces and diverse functions as well as the improvements to city economy which accompanies these qualities.

The main challenge in Wellington today is to decide upon the level of through-traffic in the city. If major changes on the urban scene are to take place a firm policy is needed in order to shift present priorities. A large number of cities have started to follow this path and the examples are many and diverse - each city finding its own approach and its own way of strenghtening the special character in that specific city.

Bogota is one of the most recent cities which in the midst of civil war and a low economy has managed to turn the city around, giving the people's issues a top priority. Portland in USA is another example of a city with a firm city policy carried through during a number of years, Curitiba in Brazil, Melbourne in Australia are other examples. These cities outside Europe and without a good bank account have made changes to their priorities - each at their own pace.

It is strongly recommended that Wellington finds inspiration to follow this direction, and thus maintain it's undisputed position as the number one city in New Zealand as well as an internationally respected city.

Uneven traffic balance

Vehicular traffic is dominating Wellington city centre and has a negative effect on a number of streets and public spaces.

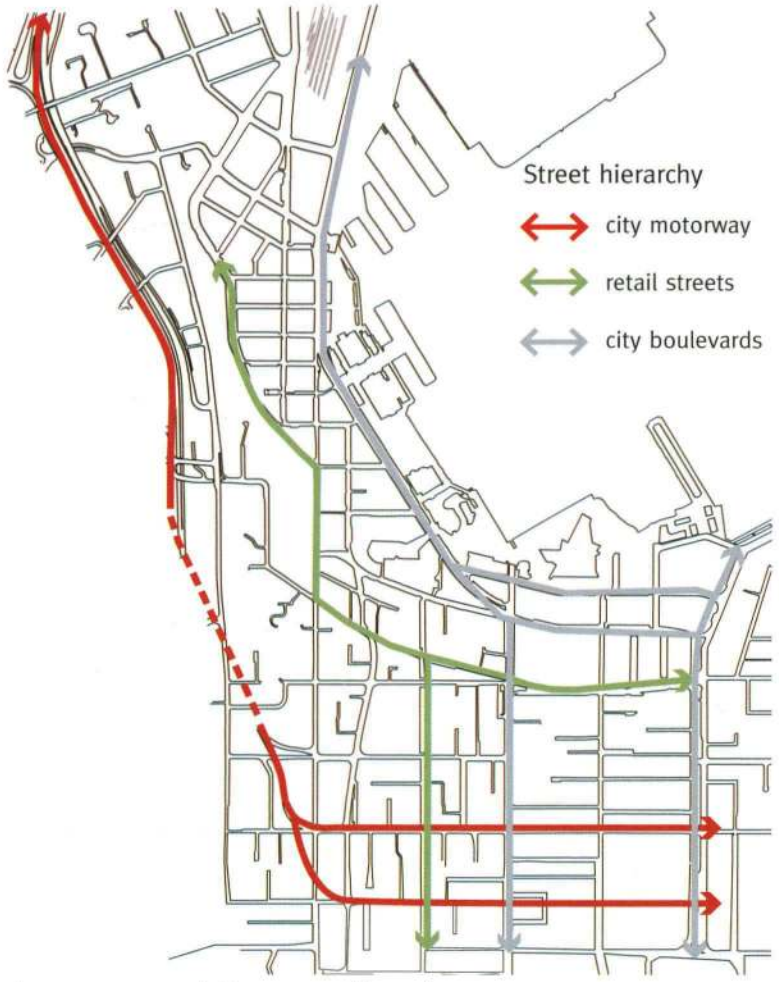
City streets have been turned into highways and the vehicular traffic flows through the city centre are high, much higher than what would be expected of a city the size of Wellington.

While in Europe there is a understanding of the different conditions present in the new world causing high levels of car ownership due to the difficulties of getting around there are still many cities which have taken up the challenge and addressed high vehicular traffic volumes, realizing that vehicular traffic will keep growing as long as it is easy to drive.

Portland, Curitiba and Bogota are cities which have created new policies based on a vision of what the city might be like, and shaped traffic patterns to achieve this vision. Portland is an American city with the typical new world problems of long distances which has been particularly successful in creating a high quality city centre based on public transport, pedestrian traffic, cycling and controlled vehicular traffic.

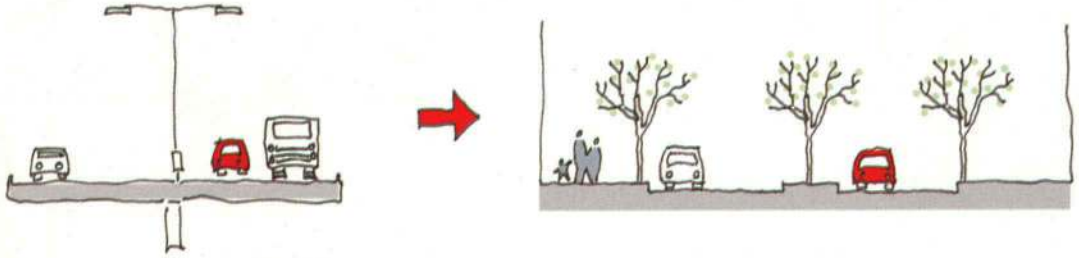
In order to bring prosperity and progress to the city, Wellington needs to address vehicular traffic at a political level by determining a vision for the city. This vision should address the future of the waterfront, how the Golden Mile can be maintained as a high quality retail street, and how large parts of the inner city can be transformed into multi-use precincts for shops, restaurants, offices, theatres, cafes and much more. The vision needs to include clear goals for strengthening of public transport, a higher priority for pedestrians in the city centre in general, a gradual transformation of the city "roads" into city streets, the introduction of a bicycle culture and better facilities for recreational activities.

Much is dependent on such a vision and the need to formulate it now is urgent. Strong leadership and dedicated people will need to stand together to change priorities in the capital of New Zealand.



Develop a strong and clear street hierarchy

Roads need to be identified as motorways, retail streets, side streets or boulevards. Through the development of a street hierarchy pointing out the primary and secondary streets, certain street types can then be refined through the design of lighting, paving, street furniture, planting etc.

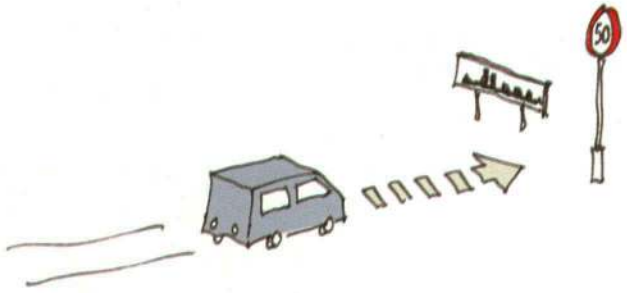


From urban mini-motorways to city boulevards

Urban mini-motorways as e.g. Cambridge and Kent Terrace, Taranaki Street and Jervois Quay ought to be developed into city boulevards offering improved visual and physical quality both for motorists and pedestrians.

Planting trees in the streets tends to soften the street environment and give character to the street and the city. The wide streets could provide room for outdoor cafes, wider footpaths, cycle lanes and street trees.

In many of the wide streets in the city it is perceived that there are too many lanes of traffic relative to the traffic volumes e.g. Cambridge and Kent Terrace and Taranaki Street.



Introducing speed limits

Lowered speed limits and the introduction of speed reduction measures in the inner city area will reinforce the perception of the streets being city streets and not thoroughfares.

Traffic reduction

In order to improve the quality and vitality of inner city Welllington a reduction in vehicle traffic volumes and speeds need to be achieved. The through traffic with no business in the city centre should be redirected. No drastic or sudden measures are suggested, but rather a firm policy over a period of 10 to 15 years with reductions being introduced in small instalments. Wellington city centre is currently automobile dominated. In a gradual process a better balance between walking, public transportation and private motor vehicles can be achieved.

Recommendations

a) Reduce through traffic.
b) Introduce "green waves" at traffic lights to increase street capacity and avoid idling.
c) Make medians in streets to curb traffic and facilitate safe pedestrian crossings.
d) Reduce the amount of parking to control traffic coming into the city centre. Copenhagen has successfully used this policy, gradually bringing the amount of parking spaces down and thus achieving less traffic while encouraging use of public transport, walking and cycling.
e) Improve traffic safety to allow disabled, the elderly and families with younger children to move more freely.
f) Improve the visibility and accessibility of public transport to encourage more bus use and walking. Dedicated bus- and pedestrian streets can improve the bus system e.g. the Golden Mile, Lambton Quay.
g) Improve conditions for walking and encourage people to walk.
h) Create pedestrian priority streets where many people already walk to improve conditions for walking and city life, as well as to reduce traffic.
j) Turn mini-motorways into city boulevards to improve visual and physical quality for motorists and pedestrians.

Introducing a cycle network

A cycle network ought to be established in Wellington city centre accommodating the needs of todays cyclists who are left very much at their own risk.

An important issue is the physical facilities provided for cyclists. Cycle lanes should be between the footpath and the row of parked cars and preferably on a slightly elevated plane in order to make a clear distinction between the street and the cycle lane. This is to avoid unnecessary accidents where cyclists are hit by cars moving between the street and the parking. The system is working very successfully in a number of European cities and has proved to be by far the most attractive solution.

In Copenhagen the cycle network has been developed during the last 30 years and is still being developed. Further kilometres of cycle lanes are added every year providing cyclists with a very good system which is highly compatible with both buses and cars in a highly congested city.

Today 33 % of all commuting traffic to the inner city centre in Copenhagen is done by bike as it is perceived to be both a safe and quick way to move around in the city centre.

Recommendations

a) Create a cycle policy, setting out goals to be achieved.
b) Create a strategy for a gradual development of cycle facilities.
c) Create a coherent cycle network of good, connected routes.
d) Create safe, raised cycle lanes, separated from traffic lanes by kerbs.
e) Run campaigns to encourage cycling and to create greater awareness about cyclists in traffic.
f) Provide clear markings at intersections.
g) Provide cycle signals at intersections.
h) Establish good and convenient bicycle parking facilities.
j) Offer up-hill cycle transport by public transport.
k) Make use of wide roads to create dedicated cycle lanes.
l) Link city cycle routes with existing suburban cycle tracks.



Left: Cycling is a transport mode enjoyed by various age groups under the right safe circumstances. In Copenhagen aggressive riders are a minority out-numbered by so-called slow everyday-riders.

Right: Cycle paths, whether painted or with proper kerbstones, are placed between footpaths and parking.





Left: Many traffic lights in Copenhagen have special lights for bicyclists. Green for bicyclists is app. 5 sec. before green for other transport modes.

Right: Cycle paths are marked blue at major intersections.





Bicycle lift in Trondheim, Norway
The Norwegians are keen cyclists although the hilly terrain offer challenges. In Trondheim a bicycle lift takes cyclists up-hill by offering a sliding foot rest.



Adelaide - free central city buses



The Beeline and the City Loop

Adelaide, Australia, introduced free bus services in the city centre to avoid vehicular traffic moving from one central destination to another. This has been very successful. Mostly tourists, but also the elderly, students and families with children are enjoying improved access to city locations.

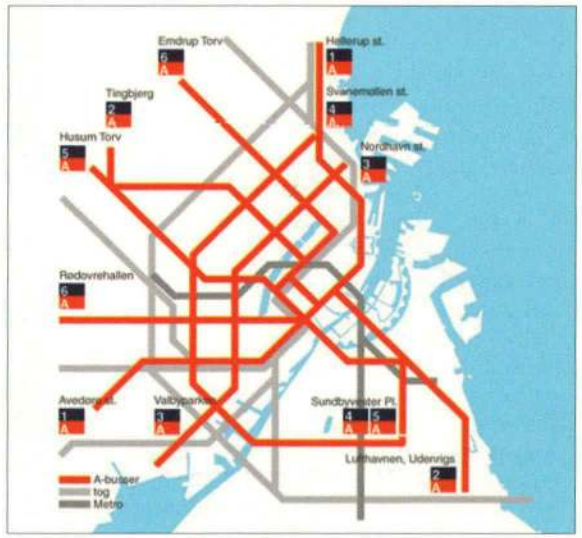
Further suburban buses are kept outside the central city ring, leaving more room for the dedicated, central free bus service to run more frequently.

Central focus points for the free bus service have been:

- easy access for everyone: buses can lower to kerb height and extend access ramps, while the flat bus floor allows people to move around more easily once inside.
- environmentally friendly buses powered by gas.
- display of local events, by letting bus design display e.g. cultural events.
- good information: all stops are announced by drivers, who are trained in customer service and who can tell passengers which connecting transport mode to catch.
- connecting with major transport hubs, such as the train and tram systems.
- connecting with pedestrian desire links, such as museums, the central shopping areas, cultural institutions etc.

Many other cities as Perth, Seatle, Portland and Auckland have introduced similar free public transportation in the city centre.

Copenhagen - buses as tram lines



The A-bus network

A-buses have recently been introduced in Copenhagen to improve linkages to the new metro and existing train lines. The new bus system uses the A-buses as a spine for public transport to and from the city. In addition other, less frequent buses, take care of suburban bus routes.

The A-buses are scheduled to run every 5 minutes during daytime and 10 minutes at night and consist of six lines connecting the most important public transport hubs in the city, encouraging more efficient use of the public transport system.

To make the A-buses clearly distinguishable they are supplied with red corners (buses in Copenhagen are yellow), with the most important stops written on the side. Electronic devices are being installed at every bus stop or bus terminal to show when the next bus will arrive. This technology will also help control the buses in the streets, so they can run as "pearls on a string".

The A-buses are supplied by two ring lines, which with equally frequent running times will make it easy to get across the city without having to go to the centre.

Recommendations

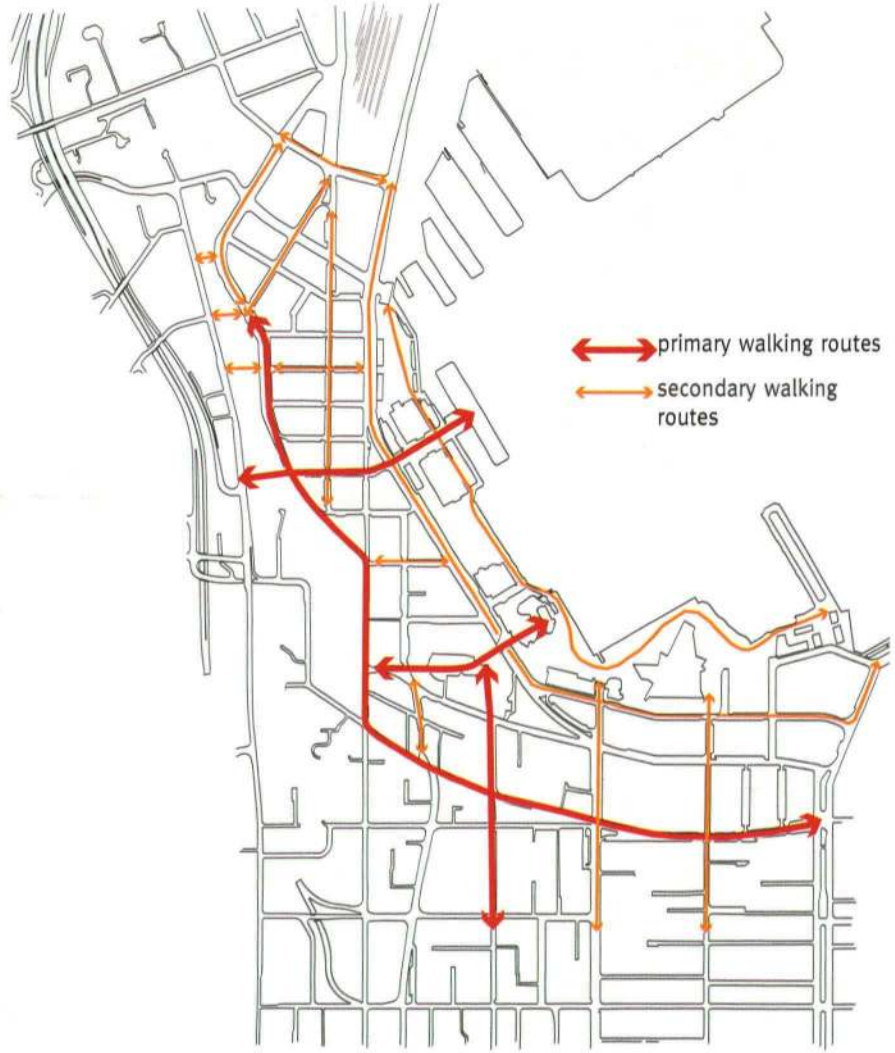
a) Introduce a new balanced traffic culture including walking.
b) Step up pedestrian priority city wide.
c) Introduce pedestrian priority streets.
d) Introduce more walking routes with pedestrian priority, good crossings, good quality surfaces and lighting along the route.
e) Take footpaths across under-used side streets and delivery lanes in main streets.
f) Regulate for good, attractive ground floor frontages and soft edges along major streets.
g) Supply good quality surfaces on footpaths.
h) Ensure free vistas and interesting views
j) Develop a distinct coherent design for walking routes e.g. Golden Mile.
k) Provide "green waves" on key pedestrian routes as has been done in Portland, USA. (Green waves relate to a phased traffic light accommodated to normal pedestrian speed in order to ensure minimal waiting periods at crossings).
l) Provide places to rest in squares and along streets at reasonable intervals.
m) Identify key city streets and create a street hierarchy including pedestrian routes and links between the city and the water.
n) Provide wider footpaths and improved disabled access on central city streets including Lambton Quay.
o) Create good walking routes with few interruptions and short waiting times at traffic lights.
p) Develop an inviting pedestrian network that connects important destinations by limiting traffic in certain streets in order to encourage more diverse activities.
q) Provide good quality lighting for the city streets to improve safety and to upgrade the quality.
r) Enforce the clear zone from the building line for street furniture to free a walking zone for pedestrians e.g. Lambton Quay.
s) Remove the push buttons at pedestrian crossings (pedestrians should be allowed to cross the street without applying).
t) Remove sandwich boards from streets to reduce visual and physical clutter.



Push buttons are left-overs from a traffic dominated culture. Most cities in the world work well without this kind of measure.



Pedestrian lights informing the pedestrians of extent of waiting /walking periods are frequent in China.



Proposed pedestrian network

Create strong links along the Golden Mile, improved connections and walking routes along the water.

Point out primary streets to the water as high priority walking routes to be upgrated.

Barcelona ; Extensive programme for disabled



Barcelona has developed a citywide policy to ensure better access for people with special needs.



Taking footways across side streets at same level has eased access considerably for wheelchair users and prams.

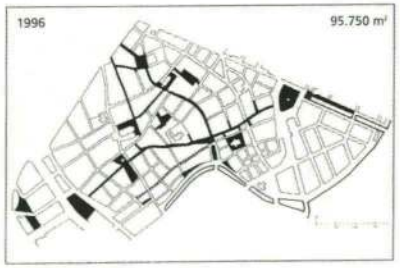


Platforms are at the same level as metro floors.

Copenhagen ; Extensive pedestrian network



Pedestrian Street
Offering free possibilities of movement for all age groups. Restrictions on delivery of goods etc.



Pedestrianized areas
In Copenhagen inner city an extensive network of pedestrian streets and squares have been created linking various parts of the city into a strong pedestrian network.



Pedestrian Priority Street
Restricted vehicular traffic, cycle traffic and pedestrian traffic mix in a successful renovation of a central city street.



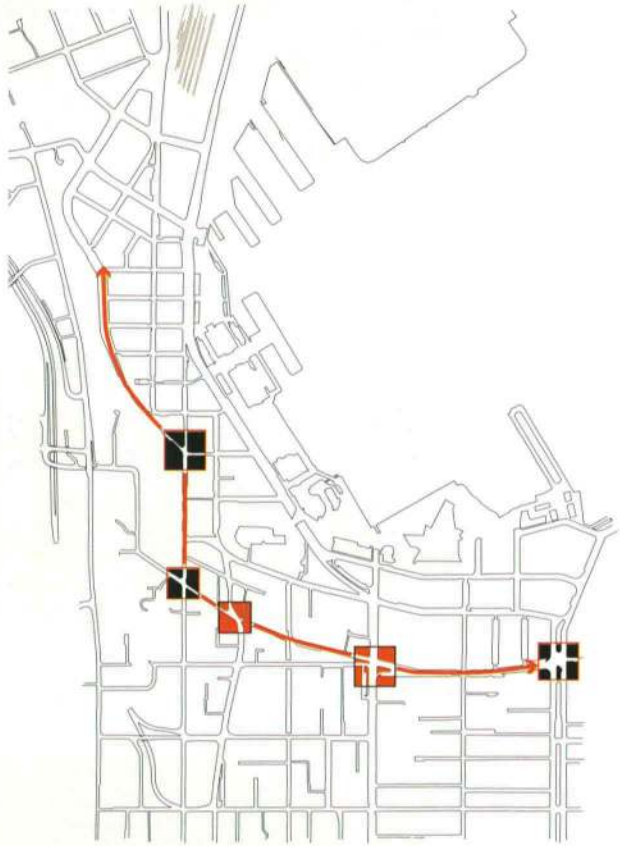
Invitations for all
All modes of traffic go through the pedestrian priority streets but on pedestrian terms.



Boulevards
Important radial links to the city have been transformed to tree-lined boulevards with medians and wide footpaths.

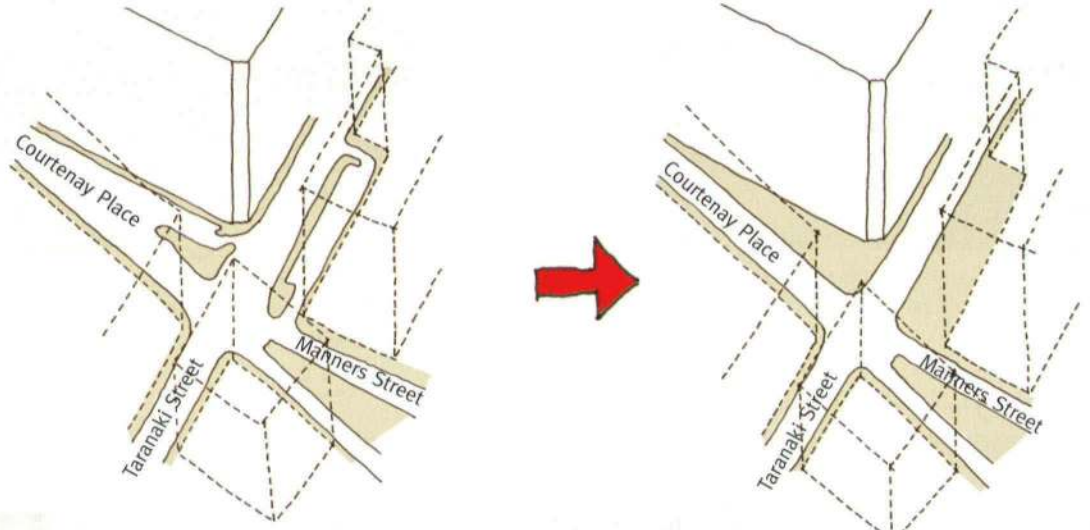


Footpaths across side streets
Turning options are restricted on the major streets and a continuous footpath signalize high pedestrian priority at the intersections with side streets.



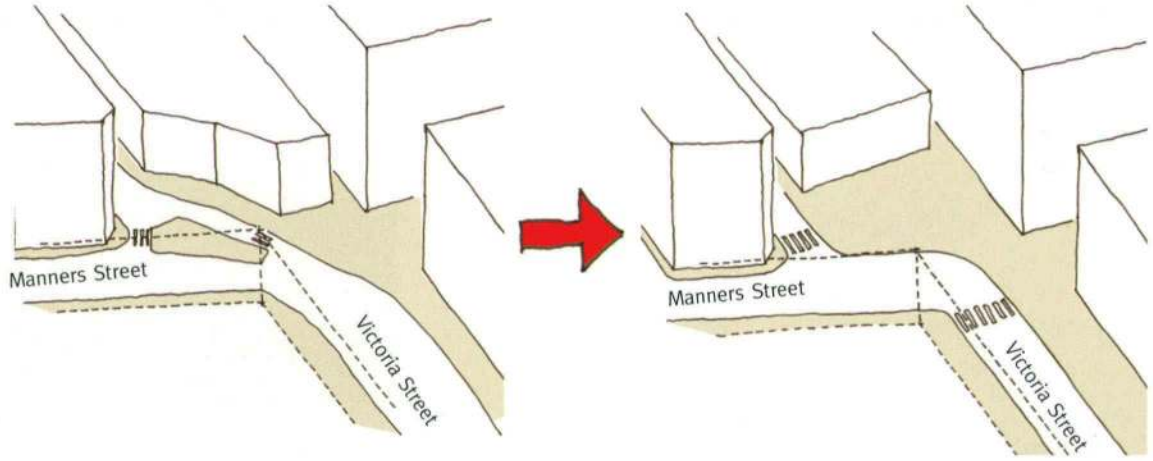
Missing links along the Golden Mile

The linkages between the individual streets making up the Golden Mile should be strengthened at pedestrian level to ensure a sense of coherence and to make it easy to follow the Golden Mile when walking in the city.



Courtenay Place // Taranaki Street

By reducing street parking in the western part of Taranaki Street a more simple street layout can be achieved offering more space for outdoor cafes etc.



Manners Street // Manners Mall

A more fluent walking route along the Golden Mile can be achieved and a small urban space created by a closer look into the Manners Street / Victoria Street crossing and the Post Office site at Manners Mall.

Recommendations

a. Improved street section

It is suggested that Lambton Quay be upgraded to reflect the top class retail street it is by expanding the western footpath and limiting car access to the evenings after closing hours. A combined bus /pedestrian street can provide space at street level for benches, outdoor cafes, street venders, buskers etc. and expand the options for public life.

A general upgrade of paving, lighting, street furniture and planting is also needed. High quality materials are preferable and a granite paving can prove durable as well as emphasizing Lambton Quay as THE main street.

b. Upgrading the Eastern footpath

It is suggested taking footpaths across all side streets on Lambton Quay to improve walking quality and create possibilities for utilising the Eastern footpath with places for resting.

Vehicular access from side streets can be limited by restricted turning options.

c. Upgrading side streets

A general upgrade of the side streets along Lambton Quay will add to the activity and attractiveness of the whole area. Upgraded streets can be developed following different themes and present themselves as gateways to various precincts along Lambton Quay.

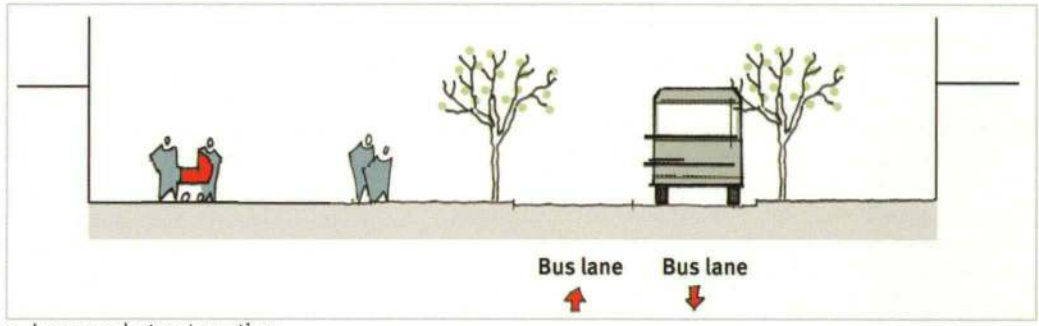
d. Utilising ground floors

Gradually outdoor serving areas have moved upstairs and inside arcades. This tendency needs to be turned around to maintain street life at street level and extend the opening hours into the evening along Lambton Quay. It is suggested that footpaths be widened to make room for outdoor serving and to avoid large scale units at ground floor.

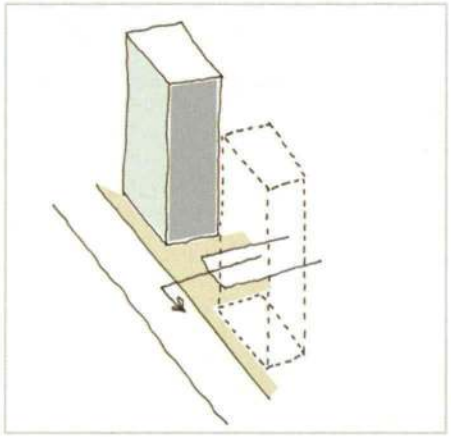
In other cities banks, insurance companys and real estate agents have moved upstairs leaving room for more active units at ground floor.

e. Clearly visible public connections to the Terrace

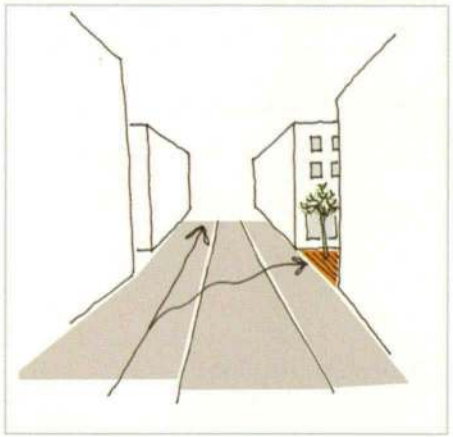
The public walkways between the Terrace and Lambton Quay need to be of better quality and more visible. Agreements need to be made with private developments in order to create more visible walkways. Existing small scale under-utilised buildings could be removed to make room for new walkways.



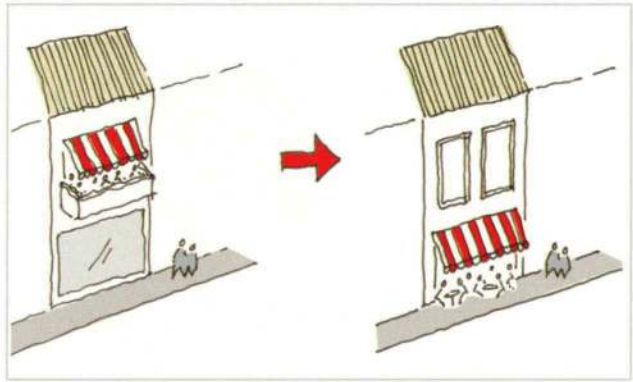
a. Improved street section



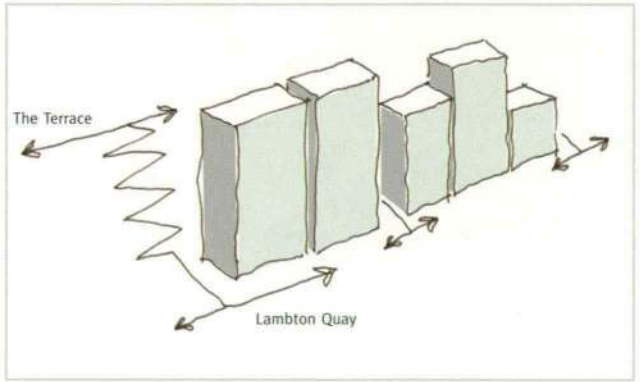
b. Upgrading the Eastern footpath



c. Upgrading side streets



d. Utilising ground floors



e. Clearly visible public connections to the Terrace

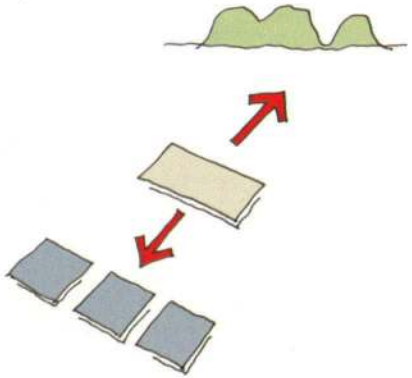
Recommendations

a) Make the squares integrated parts of a general pedestrian network.
b) Upgrade the squares to create a sense of ownership and pride and give people a feeling that the city is being carefully looked after.
c) Create possibilities for a multitude of uses, sports, recreation, music, resting, talking, meeting etc.
d) Strengthen the squares as lunch time plazas with different food outlets, outdoor cafes and public benches.
e) Utilise the street frontages surrounding the squares to create an active and soft edge.
f) Provide more dwellings surrounding the squares to improve night time safety.
g) Provide good quality lighting.
h) Integrate functional and recreational pedestrian activities by offering good conditions to stay where people pass on their way to do necessary activities. This can tempt people to engage in social activities and use more time than they originally planned.
j) In a good city children should feel welcome. Possibilities for play should be offered and in close connection to public spaces where the parents are most likely to stay. Children and teenagers use the public spaces very extensively and enrich the city environment with their joy and energy. Water, in any form, appears worldwide to be the number one attraction for the young city visitors as well as public art to be played with, climbed upon etc.

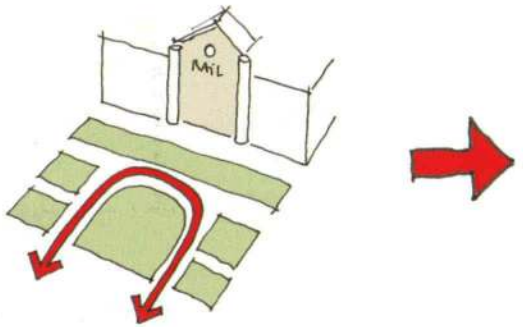


Skt. Hans Torv, Copenhagen.
A traffic roundabout has been turned into a successfull public space in close relation to the surrounding buildings and their functions.

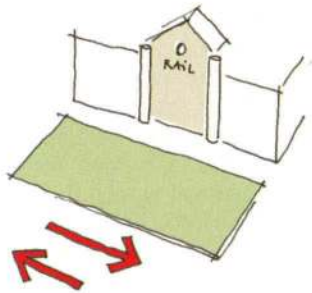
Railway Square



Potential : Major transport hub. Linkage between city and suburbs.

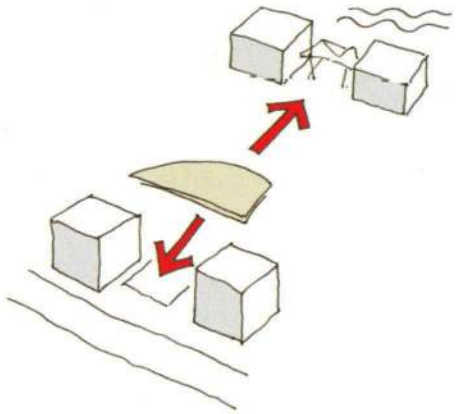


Problem : Divided into various bits by veicular access.

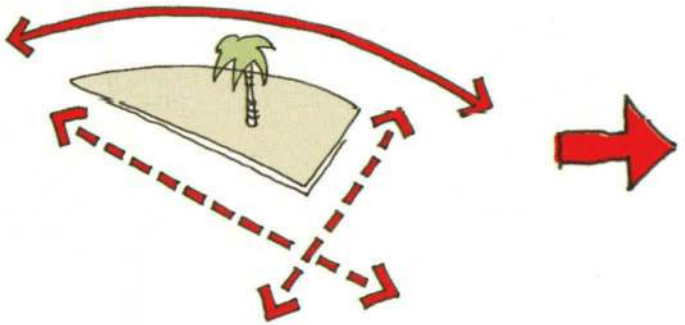


Suggestion : Unify the public space in front of the station and create an effective bus pick up and kiss & ride location in Bunny Street.

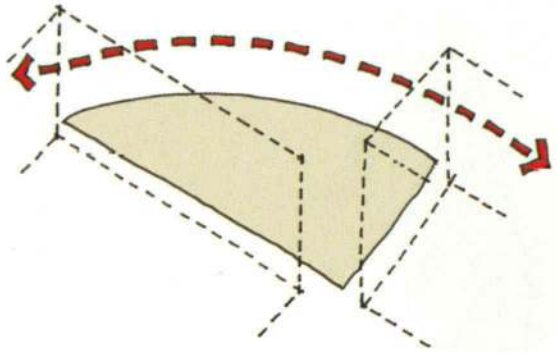
Post Office Square



Potential : Linkage between Lambton Quay and Queens Wharf

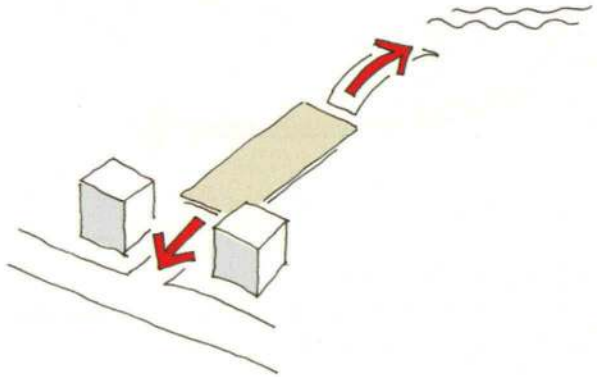


Problem : Isolated island surrounded by traffic

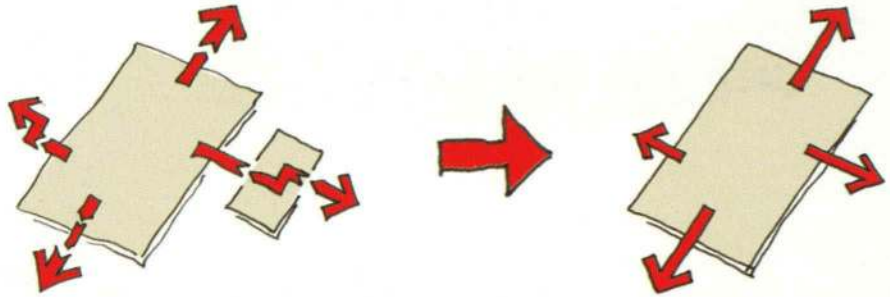


Suggestion : Develop Jervois Quay into a city boulevard and re-unite the square with the surrounding facades by redirecting the traffic passing through.

Civic Square

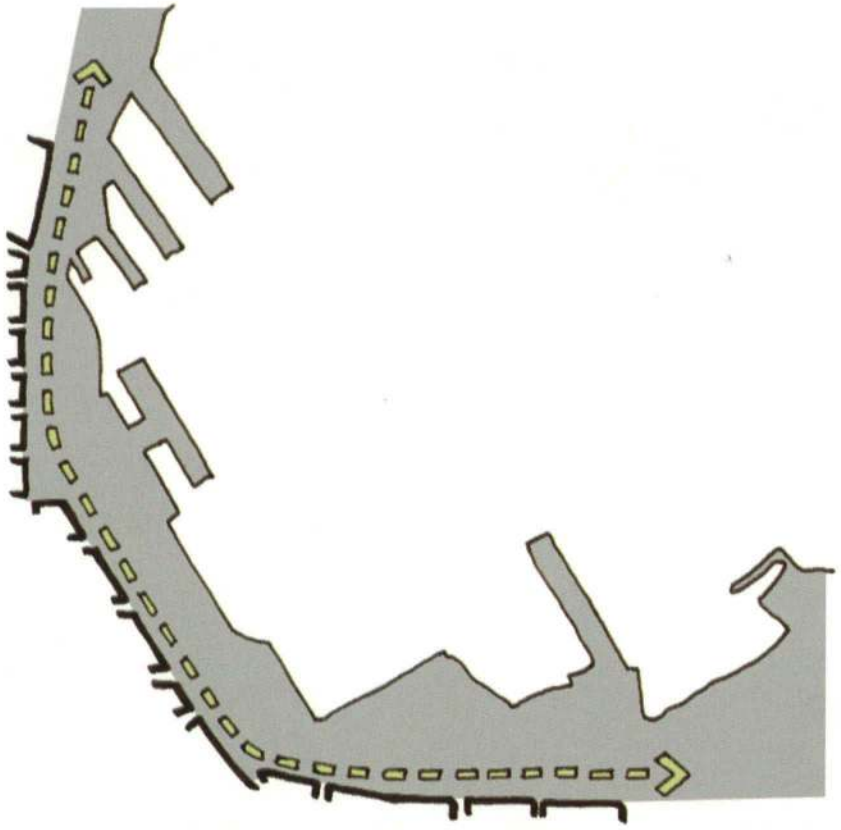


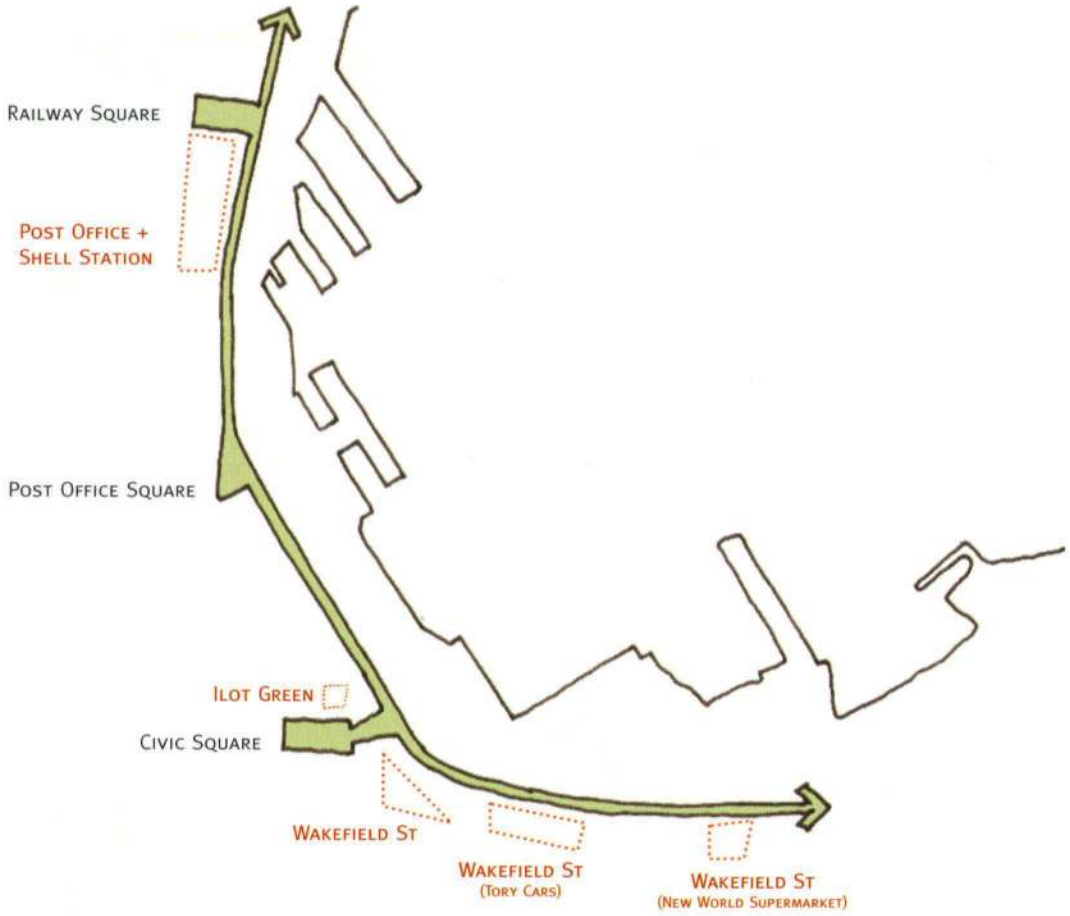
Potential : Square in the heart of the city. Close distances to the water and the Golden Mile.



Problem : Multiple changes of levels, lacking contact with surrounding buildings, poor connections to the city.

Suggestion : Create strong connections to and from Civic Square. Unify the square by removing changes of level. Create lively and open facades towards the square where possible.

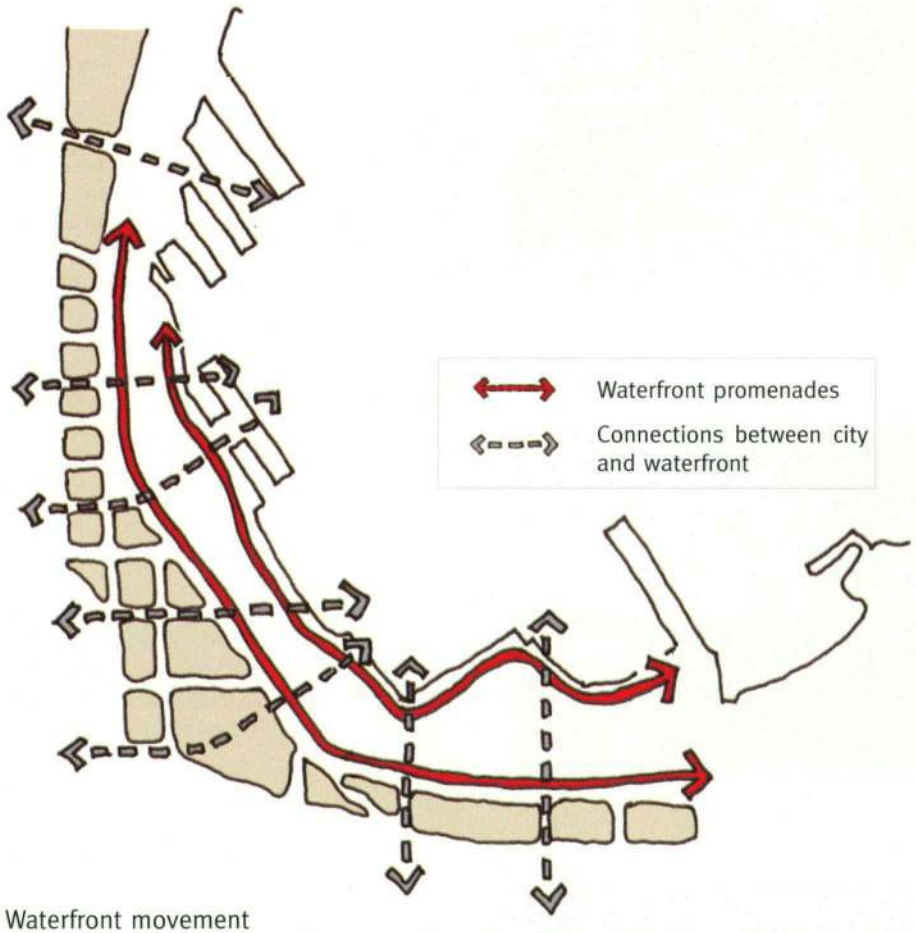




The waterfront area
The waterfront covers a large area stretching from the harbour to the building front along Jervois Quay.
When planning the waterfront the space needs to be comprehended and planned as a spatial and an architectural holistic space stretching from the surface of the water across Jervois Quay to the building facades facing the water/ the edge of the city.

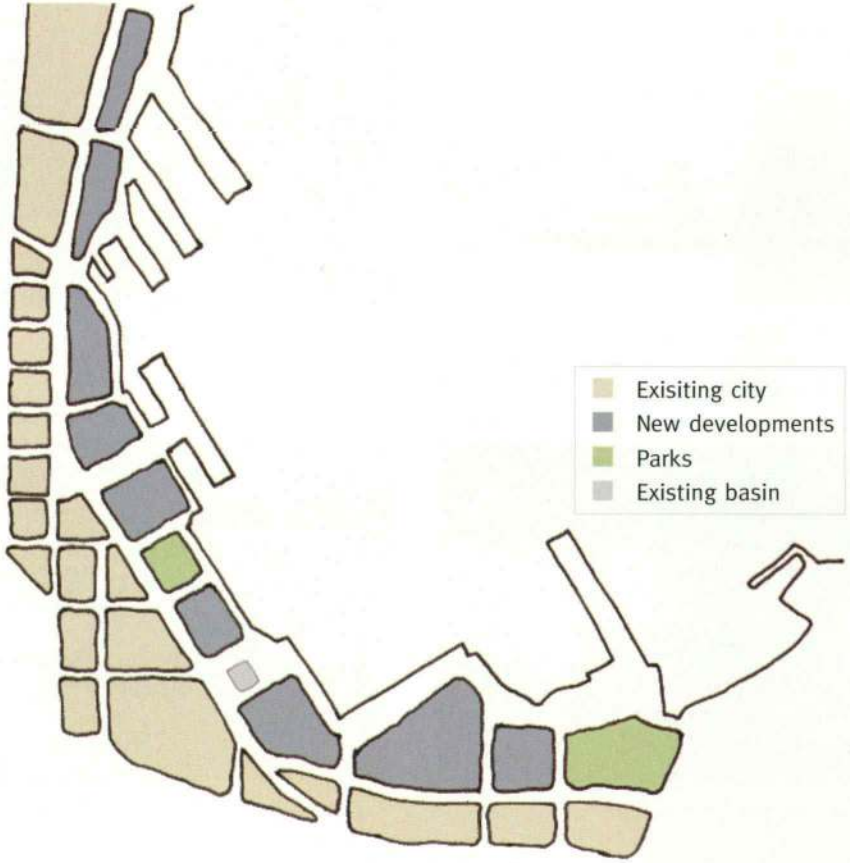
Existing open spaces along the water
The Railway Square, Post Office Square and Civic Square are key urban spaces adjacent to the more open waterfront.

Jervois Quay is an important edge between city and waterfront and the building frontage along this edge needs to be continuous. The red development areas along Jervois Quay (marked on the map) are all suggested to be future building sites for high quality buildings forming a continuous building frontage towards the harbour.



Waterfront movement

Two parallel walking routes are running along the waterfront. While one is a board walk / a waterfront promenade, the other is a city boulevard with the intensity and functions a city has to offer. An upgrade of Jervois Quay is therefore essential in order to make the waterfront work. The waterfront promenade changes character along the route taking colour from the various kinds of activities and functions located by the water.
Perpendicular to the water are the connection routes /the side streets running between city and water.



Developments at the waterfront

New developments along the waterfront should follow the existing structure of city blocks and streets. Given the large spaces along the water's edge there are plenty of opportunities to introduce dwellings, retail outlets and cultural institutions along the water. The blue squares indicate possible future building sites for building or structures recognizing the unique location and the special scale and detailing required when building by the water.
Different themes can be developed for the various parts of the harbour introducing a cultural precinct, a residential precinct, workshops, water activities etc.

Islands Brygge, Copenhagen. Harbourfront park.



Bathing and swimming in the harbour is a reality in Copenhagen where the water is clean and bathing facilities have been offered.



Quiet recreation

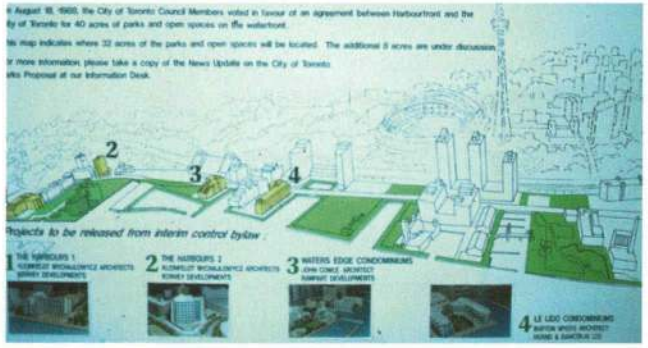


Meeting friends for petanque



Active urban recreation / Beach volley

Toronto - a changing scenery



Sequences of parks, recreational opportunities, harbour related activities, residences, restaurants and cultural activities are alternately placed along the very successful harbourfront in Toronto.

Residential harbours



Auckland

A level of intimacy has been achieved at Aucklands new harbourfront where the presence of residents and a multitude of people orientated activities (on and by the water) create a lively and safe environment.



Malmoe, Sweden

A new residential area by the waterfront built on principles of human scale, a variety of types of public space and direct contact with the water, has created a popular residential precinct.



Perth

Town houses built by the water edge are extremely popular in Perth and offer a wonderful setting for restaurants etc.

A people harbour, Granville Island, Vancouver



Granville Island hosts a multitude of activities including educational institutions, work places, residences and cultural institutions.



An active harbour is one of the qualities, interesting to look at and adding extra visitors.



The old harbour sheds have been re-used for new purposes.

Activities by and on the water



Malmoe, Sweden. Direct access to the water by ramps or steps give people opportunity to touch the water and perform a multitude of activities on the water.



Donau, Austria
A floating theatre for performances adds extra life to the harbour.



Copenhagen, Denmark. Sand and deck chairs on the harbourfront is all it takes to create an urban beach in the centre of a dense city.

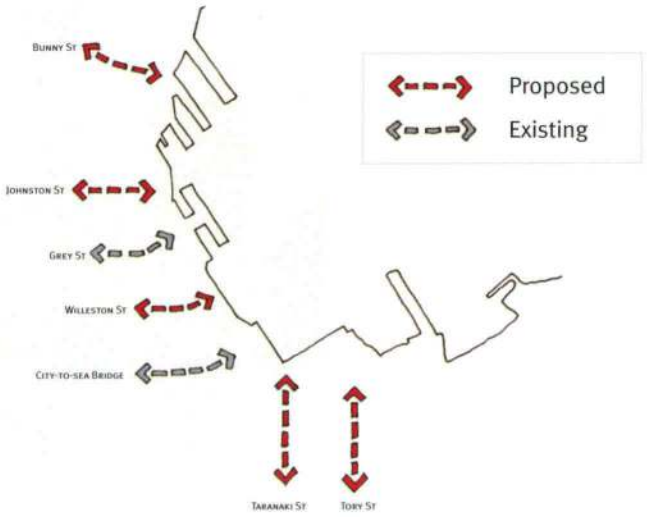
Historical harbour



Buenos Aires, Argentina
Old cranes and industrial harbour structures maintain a strong character and links with history.



Copenhagen, Denmark
Historical ships in the harbour maintain links with earlier days. Harbours around the world depict maritime history along Waterfront routes.



Existing and proposed connections to the waterfront

Efforts need to be concentrated on developing key streets as pedestrian links to the waterfront.

The side streets between the Golden Mile and the waterfront are essential in knitting the city and the water closer together. To obtain a lively waterfront high quality connections must serve as invitations.

Some of the side streets can be identified as high priorities to be upgraded. Thus a hierarchy can be created where some side streets are considered to have a higher pedestrian priority than others, and usage can be differentiated.

Quality Criteria for waterfront connections



a) Views, visual connetion
- limited obstacles



b) Traffic regulations
- speed limits
- limited vehicular traffic
- limited turning options
- limited on street parking



c) Walking quality
- room to walk comfortably
- level surfaces
- no obstacles
- access for all



d) Prioritised crossings
- short waiting periods
- clearly marked crossings
- short distances to cross
- footpaths taken across minor side streets



e) Activities at street level
- prioritse shops at ground level
- avoid first floor shops
- encourage outdoor cafes
- restrict service areas



f) Ground floor frontages
- small units at ground floor
- a diversity of functions
- no closed or passive units
- transparent frontages
- high quality of materials and detailed design



g) Design quality
- design the street as a whole
- provide good quality lighting
- use consistent street furniture
- provide good quality paving

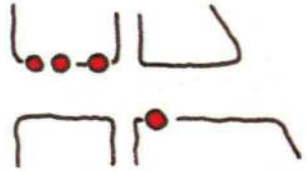


h) Resting options
- opportunities for public seating
- encourage outdoor cafes

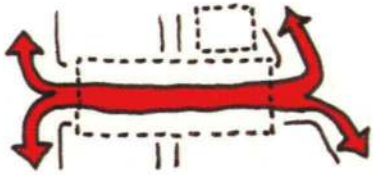
Potential for development - Willeston Street



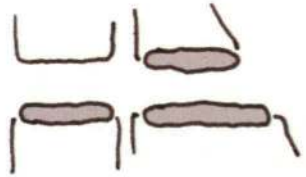
a) Views along Willeston Street to the waterfront and the hills.



e) Activities are few and scattered.



b) Minimal vehicle flow
(2408 vehicles per 24 hrs)
Large parking structure at the water.



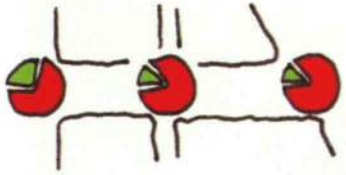
f) Ground floor frontages are dominated by large units presenting closed facades towards the street.



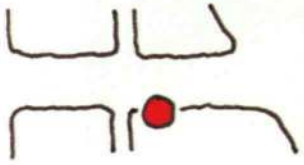
c) Walking quality is low due to lack of interesting facades and the presence of a tall building causing wind problems at street level.



g) Design quality is low. Paving is a mix with limited high quality street furniture.



d) Low pedestrian priority at eastern crossings where lights are green app. 10% of a red /green period.

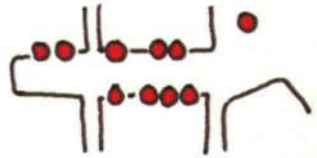


h) Resting options are only offered on a private raised level away from the street.

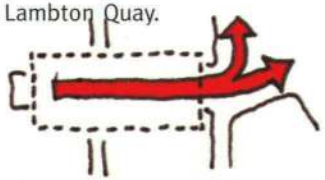
High quality link - Grey Street



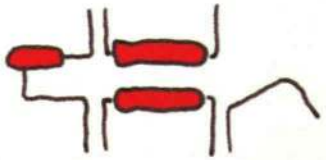
a) Views are crooked along Grey Street because of the curved street layout. A new sculpture in Post Office Square will be visible from Lambton Quay.



e) Functions are plenty in Grey Street where outdoor cafes have settled down beside kiosks and a high quality hotel.



b) Moderate vehicle flow
(8770 vehicles per 24 hrs)
Dominating on-street parking at Lambton Quay end.



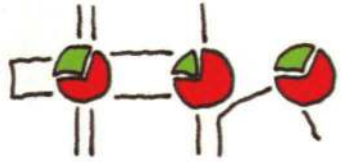
f) Ground floor frontages are generally transparent and interesting to walk by in the eastern part of Grey Street.



c) Walking quality is much improved due to expanded footpaths and an even surfaced paving.



g) Design quality has been raised through the development of a consistent design profile for all of Grey Street.



d) Medium pedestrian priority at crossings where lights are green app. 30% of a red /green period.



h) Resting options are offered on public benches at the begining and end of Grey Street while outdoor cafes have opened in the middle part of the

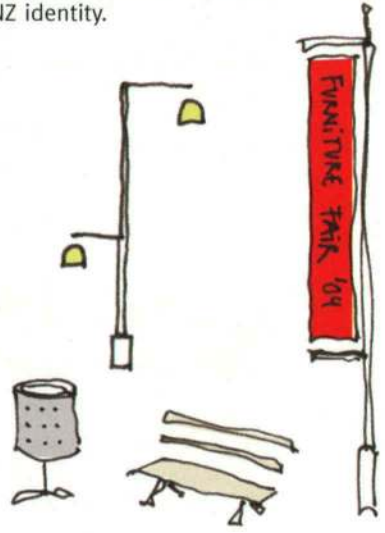
Details in the public spaces

A good city has fine details. When people move around by foot there is time to see, to touch and to enjoy all the various elements in the streetscape.

Unappealing litter bins, poorly designed signs and items placed randomly on footpaths are all signals to people visiting the city about lack of care and concern for city quality. Poor and carelessly placed pieces of street furniture destroy the visual urban quality of cities at eye level.

Recommendations

a) Introduce a local design profile which can create a strong city image and a sense of ownership of the public spaces.
b) Choose a city colour for the street furniture and create a design series of benches, lamp posts, bins etc.
c) Create a policy for the design of streetscapes
d) Improve the quality of street signs and street furniture around the city.
e) Encourage better standards in shop signs and lettering.
f) Create a policy for the use of paving materials and look after these. Use paving of high, durable quality reflecting NZ identity.



City furnishings ; Melbourne

Melbourne has been renovated to create a city of fine streets. The linear character of the spaces is underlined by rows of trees and street lamps, and the regular wide footway paved with Bluestone slabs communicates the message that this is a city street welcoming pedestrians.

The Urban Design Office drew up a palette of street furniture for new public spaces with bluestone pavements. The programme includes a wide assortment of public space furnishings with perforated steel plates as the unifying material. A dark green colour that harmonizes well with the colour of the pavement was chosen for the new benches, tables, screens, planters and rubbish bins.

The new city furnishings have been introduced throughout the city wherever new pavements have been laid. At the same time, older public furnishings as well as the jumble of private furnishings have been removed. Private café chairs in plastic are not accepted on the stylish new pavements. Instead, outdoor serving establishments are required to use a limited range of selected cafe funiture or the city´s official furnishings - green tables, chairs and planters - that can either be leased or purchased from the municipality.







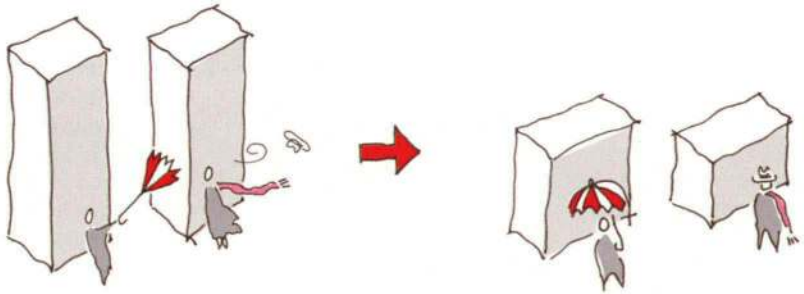






Improving climate at ground floor

a) Plan public spaces carefully to make the most of the natural conditions.
b) Supply protection against wind and draughts.
c) Avoid footbridges.
d) Avoid long stretches of blank facades and tall buildings.



Strengthen the history and the architectural heritage

a) Require that new buildings fit in with their neighbours, by considering scale, building heights and the relationship to the surrounding public spaces.
b) Replace heavy canopies along building fronts with light elegant canopies.
c) Remove inappropriate vertical signs on the older buildings and signs which obscure the details of the architecture of the buildings.
d) Develop regulations for signage, canopies etc. in order to prevent inappropriate elements reducing the quality of the architecture and the street environment.
e) Encourage awareness and promote sensitive re-use of heritage buildings. Re-use old buildings for new purposes if possible.

Improve ground floor frontages

Ground level frontages can provide colour and vitality, make walking more interesting and pleasant,inviting people to stop, but too often pedestrians are met by dull blank walls. These types of frontages create deserted areas in the city.

A city-wide policy for the treatment of footpath frontages is required. The policy should be applied to all new and renovated buildings and should be linked to the street hierarchy. Guidelines for frontages should reflect the significance of the street for pedestrians and improve the experience of the city at "eye level".

Possible guidelines for the most important category of street frontage include:

a) A uniform building line, as buildings built up to the edge of the street or public space create a more clearly defined space.
b) All shops or offices must have visual contact with the footpath.
At least 60% of the total length of the facade along the footpath should be transparent, with displays and /or visual contact with the work being done on the ground floor.
c) No parking garages or other passive uses of the ground floor of buildings facing the footpaths.
d) Shop and office windows lit up until midnight.
e) Good details and fine materials at eye level.
f) Relief and fine details in the facades at ground level - making them more interesting to move along and more conducive to stop and stand by.
g) Ledges and shelves at sitting heights could be included in the designs.



New Oxford Street in London enjoys a good mix of transparent and smaller units.



Activities in the city

To further improve the liveliness and vitality of the city centre activities in public spaces need to be promoted.

A variety of organised and spontaneous events should be encouraged. These two types of activities inspire each other and people love both types. When the city is striving to encourage people to use the city centre more the number of organised events should be planned so that more people visit the city and return with good memories.
A city where people have good memories becomes a loved city; and a loved city is also a much safer city.



Safety

The centre of Wellington is a safe place compared to many cities. There are several areas that are busy at night and which can be reached directly by car, without having to walk through much of the city. The public transport situation is not so good however, and anybody leaving one of the busy night areas or a night venue may feel insecure walking to reach another busy area or a bus stop.

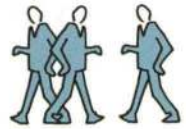
Walking in the city by night should be an enjoyable experience as the central city becomes more popular and there are more people around. At present, safe routes should be developed between different parts of the city, public spaces, night venues and transport stations, car-parks and other public destinations. In time these routes will become the lively night time promenades for a cosmopolitan city.

The presence of people in an area where there is a strong feeling of ownership makes for a much safer and more secure place.



Encourage more people to live in the city centre.

By establishing new housing of a high quality in attractive locations.
Redevelopment of old office buildings to serve as apartment blocks or student accomodation.
Start a process of redevelopment and renovation of buldings in the city centre to update existing flats.
Invite more students to live in the city centre.
A general improvement of the public spaces will make it more attractive to live in the city centre.



Create a lively city

Stimulate the activity level which can happen through a general strenghtening of the pedestrian network.
Ensure more attractive and lively street frontages
Make better provision for pedestrians, cyclists and other forms of transport that add life to the city



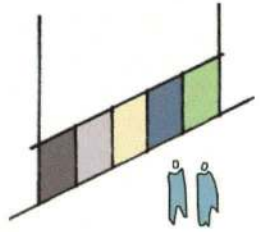
Create a lively and safe city at night time

Increase the number of dwellings in the city centre and invite more life in the city streets.
Ensure the city is free of dark areas, heavy shrubbery and earth mounds which makes concealment possible and raise fear.
Close off hidden, lost or forgotten spaces, especially at night.
Ensure that new developments are designed to overlook public spaces and thus provide "eyes on the street".
Ensure that there are continuous, safe walking routes through the city, especially at night.



Strengthen the educational institutions

Maintain a high level of students in the city centre. Students use the squares and parks extensively and contribute valuably to a diverse public life.



Create a good mix of different uses

Ensure integration of shops, offices and dwellings in each city area and preferably in the individual buildings. Shops can be located on the ground floor, offices on the first floor and dwellings on the upper floors. A mix of uses can secure life in the city streets and squares at all times of the day.



Make good city events

By encouraging spontaneous, popular street entertainment,
By staging a number of important annual festivals in the public spaces around the city.
By making street markets with different themes - antiques, books, arts and crafts etc.



Special illumination of city bridges and important sights along the river



Along Rue de la Republique the idea is to highlight the streetscape with overall facade lighting.



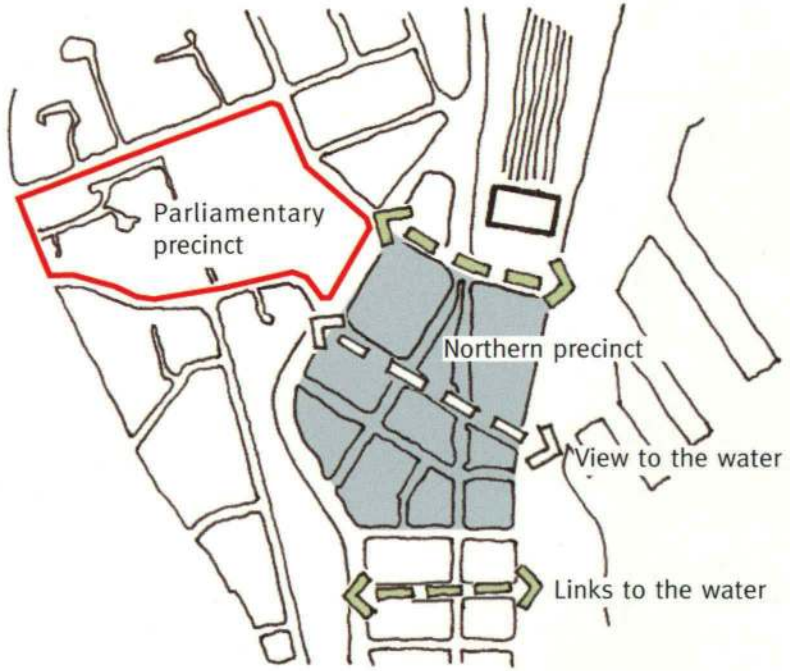
Place des Terreaux is distinctive for its surprising use of water and lighting.

Lighting Policy : Lyon

Lyon has developed a lighting plan which sets out guidelines for overall artistic and functional lighting of streets, squares, buildings and special urban elements such as the bridges and banks of the rivers, as well as selected historical monuments.
Work is ongoing to light the main street of the city, Rue de la Republique, with a system of facade lighting that emphasises the central importance of public space while giving pedestrians soft, functional lighting reflected by the facades. The plan is being carried out gradually as building owners pay to have the lighting fixtures installed, after which they are run and maintained by the municipality.



Night time ambience in the lanes created largely by facade lighting.



In order to utilise the northern part of the city a precinct plan should be developed to upgrade streets and building blocks in the northern precinct.

This area is under-utilised but a diverse attractive area in a close proximity to vital city functions could be developed by intensifying functions and the building mass in the area. Through a general redevelopment of this area important results can be obtained such as creating strong links from the city to the Parliamentary Precinct and to the Railway

Appendix 1 + 2 + 3

Appendix 1

References
Copenhagen, Lyon, Barcelona

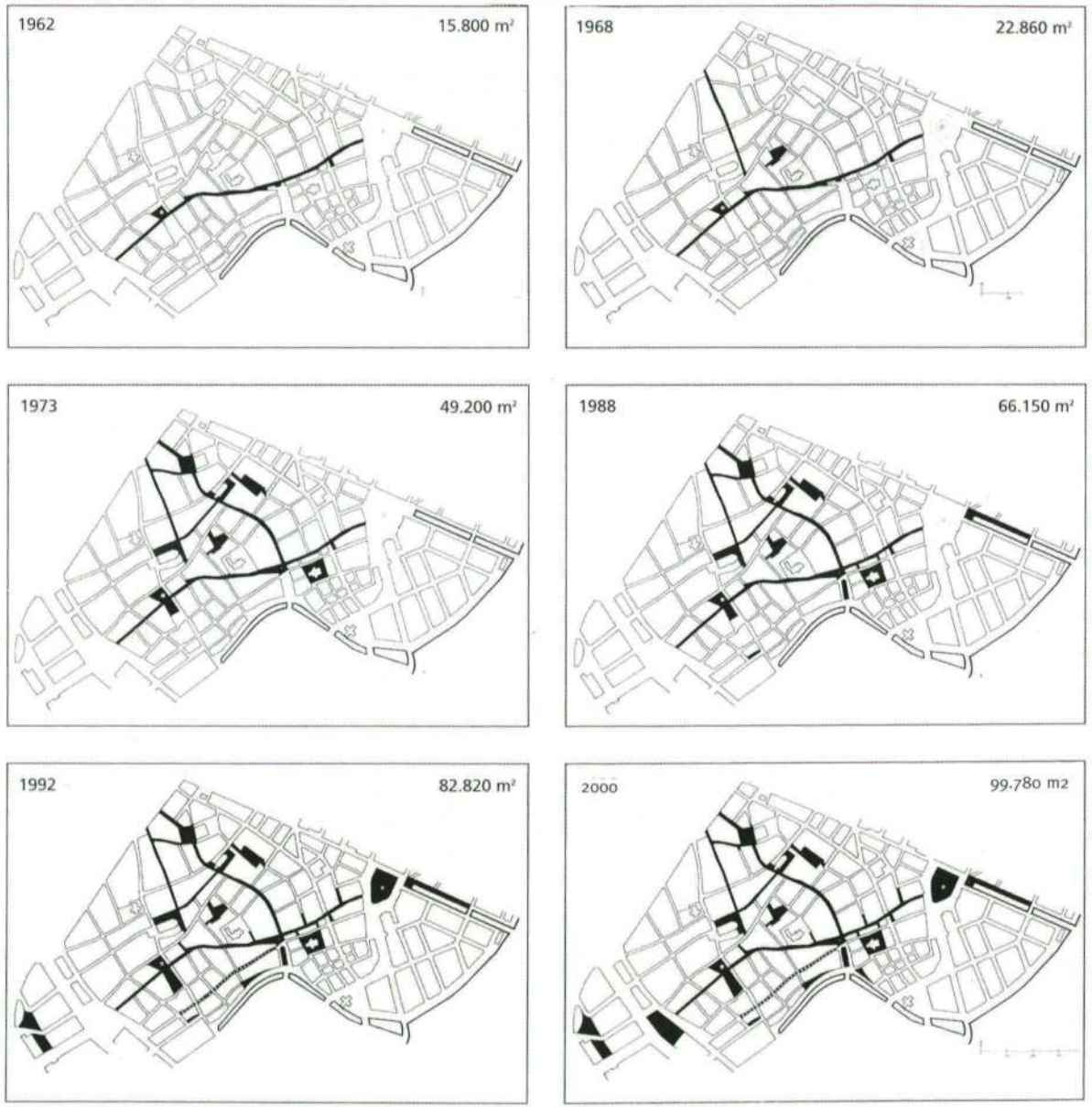
The story of Copenhagen:

On these pages a general presentation of Copenhagen will be made in order to illustrate the developments in Copenhagen city centre where for 40 years a step by step policy has been followed for turning a car oriented city into a people oriented city.

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 physical changes have been the background for a dramatic increase in the number of people using and enjoying the city. In the case of Copenhagen these changes are well documented through surveys on the relationship between public life and public space quality carried out over three decades.

The general development of the main street in Copenhagen (Strøget) is quite similar to developments in many other cities. The development can be described in four phases:

1) The car-oriented phase; the street is filled with cars and pedestrian areas are limited to narrow footpaths. Business tend to suffer.
2) The "shopping only" phase; the street is pedestrianized (or conditions for pedestrian otherwise greatly improved) and people visit merely to shop and look at the window
3) displays. The economy is improved. The cultural phase; new activities begin to appear, people settle down and recreate, the effect spreads to adjoining streets and areas. The economy is diversified
4) and further improved. The "pride in our fine city" phase; the street and the squares connected are regarded significant on the same terms as important public buildings. The space between the buildings is given a new meaning. People become justifiably proud of their city. Tourists love the city for similar reasons.



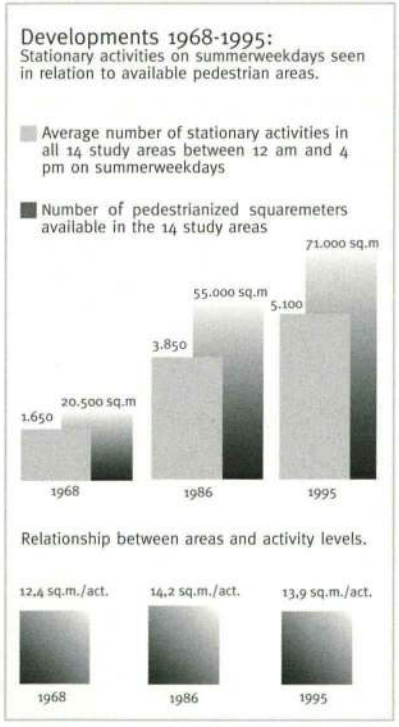
The gradual development of pedestrian areas in the city centre of Copenhagen 1962 - 2000.
The total pedestrian area is 100,000 m2. Of this area 1/3 is streets and 2/3 are squares. This illustrates a policy where conditions are not only improved for walking but also for stationary activities which depend on sufficient space.



Above: The Town Hall Square in 1995 before renovation when traffic divided the square in two separate parts.
The Town Hall Square was renovated when Copenhagen was the European Cultural Capital in 1996.

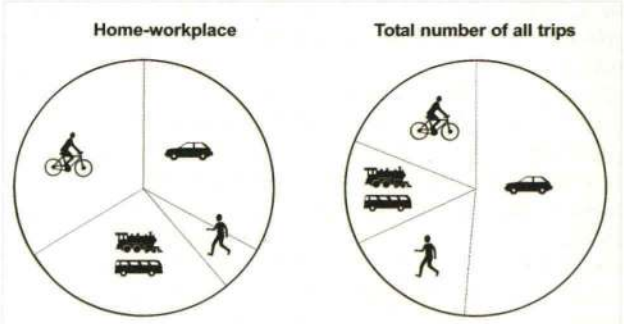


Renovation turned the Town Hall Square into a large unified bowl-shaped space defined by a pavillion building in dark glass.



Bicycle traffic in Copenhagen has doubled since 1980. Bicycles are an important link in the transport system and handle 33% of commuter traffic.





Modal split to workplaces in the City of Copenhagen in 1999 (*Bicycle Account for 2000*) and general modal split in the City of Copenhagen (Statistics Denmark). The share of cycle transport is most substantial in commuting.

Poetic, Coordinated and Social Public Space Policy - Lyon, France - 1.3 million inhabitants (Greater Lyon)



Place des Terreaux

Policy Profile

- The public space planning is coordinated with social policy with the aim of creating "a city with a human face" and a city for all its inhabitants. Equality and balance between projects in the Inner City and in suburban districts are emphasized, for instance by giving the same architect the commission to design public spaces in both the centre and the suburbs.
- Three different types of plans have been developed: A green plan, which focuses on the city's public spaces, a blue plan that deals with the way the city meets the rivers, and a "yellow" plan, a lighting plan. The latter addresses the character and quality of lighting of monuments and other buildings as well as the streets, squares and parks. It is also a tool for collaboration between the public and the private sector in relation to the quality of lighting in different locations.
- Lyon is actively supporting smaller shops in the inner city by stopping all further development of out-of-town shopping centres.

Distribution of Public Spaces

- Projects are spread over the city, with a balance between

The Inner City and suburban districts.

Public Spaces and Traffic

- In order to create a human face to the city, the traffic policy is aiming at putting car parking underground. Many of the renovated spaces in the centre of the city have 4 to 6 stories of parking garages under the car-free surface of the public space. A partly public and private firm has been established to build and run the new parking structures which are uniquely elegant. "The moment you leave your car you are a pedestrian and should be met by spaces of quality."
- New tram lines and a metro are giving alternative forms of transportation.

Types of Public Spaces

- Most of the renovated public spaces in the Inner City were existing "classical rooms" in the historic city fabric, whereas the spaces in the suburban districts were "free floating" spaces between high-rise housing blocks. These suburban spaces had to be redefined and redesigned for new uses, thus creating new types of public spaces.

A fixed set of materials and furniture

- A "Lyon vocabulary" of materials to be used in the spaces has been developed, particularly to underline the identity of the city but also to limit the number of materials, lamps, benches and so on to be maintained. To underline the equality between different districts, the same street furniture can be found in suburban housing projects as well as in central city spaces.

Organising the task

- The city created two new organisations to cope with the coordination of public space policy. On the political level an organisation called "Groupe de Pilotage des Espaces Publics" was formed, headed by the mayor. This group, with representatives from all departments involved in the process, meets once or twice a month. A parallel interdisciplinary organisation called "Group Technique de Suivi", with experts from all departments, is meeting every week to prepare and coordinate the technical and practical sides of the implementation of the plans.

Process

- As a response to the deteriorating quality of the public realm under the pressure of a growing number of cars entering the city centre, combined with social tension between suburbia and down town, one of the mayors, Henry Chabert, formulated the policy to create a city with "a human face" in 1989.
- Poets and other artists have been asked to generate the spirit of the place, the genius loci, before the brief is given to the architects or landscape architects who were designing the spaces.
- A large number of public meetings and interaction with the local people are other characteristic elements of the process, which has also aimed to create a good interaction between the private and public sectors.

Results

- Lyon suffered an industrial decline in the 1970's, but has reformulated its role and become a very dynamic city. The policy has changed the appearance and image of the city, with a large number of high quality public spaces.

Democratic and Pioneering Public Space Policy - Barcelona, Spain - 3,5 million inhabitants



Place de la Palmera

Two different occasions and policies

1. The new democratic society and public spaces

o The policy to create new public spaces for free meeting and talking was formulated in Barcelona after the fall of the dictatorship of general Franco. The new democratic government that came to power in the first free elections in 1979 promoted new public spaces to give inhabitants immediate improvements in living conditions and open up democratic discussion.

2. The Olympic Games and the city plan

o The Olympic Games in 1992 was used as a great opportunity to make large-scale improvements to the city. Investment was used to drive development of the city plan, where unfinished parts were completed and derelict industrial sites were transformed into new city districts. In this way, Barcelona got new sports arenas but also a new district of housing with a leisure harbour connecting new city districts to the beach along the coast.

Public Space Policy Profile

o Barcelona has been pioneering public space policies, where a great number of imaginative new designs have been applied across the city.

o New public spaces in each neighbourhood for people meeting, talking, discussing, playing and unwinding.

o The public space policy has been called "projects versus planning" as it turned the traditional planning methods upside down by focusing on what independent small projects can do for a city district - and for a whole city. Instead of waiting for the grand coordinated master plan to be developed, the city has been implementing public spaces - even where no spaces existed - by tearing down derelict buildings, using old railroad yards, or renovating existing spaces. Without any great need of coordination, these projects improved the city for inhabitants.

o No standard designs but "tailor-made" solutions place-by-place, involving a great number of local architects.

o With the slogan "the gallery in the street", contemporary sculptures have been an integrated part of the public space programme with the dual intention of giving each place its unique character and to create discussions between local people.

Distribution of Public Spaces

o Hundreds of projects in many different scales, from major parks to local piazzas, or just a little corner with a couple of trees and a bench standing on a fine new urban floor, are spread over the whole surface of the city.

It functions like a kind of urban acupuncture, where the whole body of the city becomes better without a great need for coordination of projects.

Public Spaces and Traffic

o Initially the public space policy was not an integrated part of any major traffic plan and in most cases projects were made without taking space from driving and only a few of the many spaces have underground parking garages as part of the new designs. Later projects with more traffic and parking emphasis have been emerging, such as parks on top of freeways.

The partly covered freeway along the waterfront has fully maintained the connection between city and harbourfront; it is the most famous example of his policy.

Types of Public Spaces

o Barcelona has developed a wide range of public space types from small hard scapes in the form of piazzas, to large parks that function like "green oases", often established on derelict land or former industrial sites. Promenades and other types of new interpretation of the rambla motif are frequent as well as a series of spaces dominated by gravel and soft shapes, mostly for playing. In this city with high density in both building mass and in traffic volumes, all the different types of open spaces are highly appreciated.

Organising the task

o The city created a new office called Servei de Projectes Urbans to work with new projects in the 10 city districts. Meetings are held with local people in each district as part of the process, and architects at the office coordinate the technical and administrative aspects of the project. There are a large number of local architects from private practice working in collaboration with - and doing projects for - the office.

Process

o The new democratic city council selected Oriol Bohigas as a city councillor for urban design. Bohigas was both the director of the School of Architecture and partner of a major private practice, and he formulated the general approach. The results show an interesting relation between the public and private sectors, as the public investments in new city spaces were followed up by property owners renewing surrounding buildings.

The early projects were designed after architects' competitions and later the office for public space design was put into place to work continuously with the projects.

Results

o The idea of reconquering public spaces was formulated in Barcelona as a political idea of providing democratic space as well as a vision for re-creating the art of making public spaces.

Nowhere in the world can the viewer see so many different examples of new and experimental designs of parks, squares and promenades in a single city as in Barcelona.

Appendix 2

»Traffic on the waterfront route in Wellington«

by Rambøl Nyvig, Traffic engineers, Copenhagen, Denmark

1. Purpose

The purpose of the paper is to assess possible ways of both integrating the city centre and the waterfront across the Waterfront Route and managing the traffic to the city centre.

In this paper proposals for both reducing traffic and capacity on the Waterfront Route are described. This is based on the existing traffic conditions and future plans for development of the city and the road network.

2. Existing situation

Currently the Waterfront Route is a six-lane major arterial road feeding the city centre and through traffic in Wellington.

The traffic totals approximately 50,000 cars per day in both directions. The peak-hour traffic is about 5,000 cars per hour.

There are a number of crossings along the central part of the Waterfront Route, giving access to the city centre as well as the harbour. Furthermore, there are many car parks on the Waterfront.

In the study "Wellington Waterfront Lane Removal, Assessments of Effects" of 2003 it is stated, that "the majority of trips on the waterfront route, especially in the peak periods, are longer distance movements without an origin and destination in the CBD area". The conclusion of this is that the majority of the traffic in the peak periods on the waterfront route does not need to be there. It could be somewhere else, if alternative roads exist.

To handle the existing traffic on the Waterfront Route, six lanes are needed. According to a rule of thumb six lanes will have a capacity of about 45,000 cars per day in both directions, when there are a lot of crossings and access roads. The capacity is especially determined by the number of crossings and by the design of these crossings. Because of differences between capacity and traffic, there will be queues and waiting times in the peak hours.

3. Means to reduce the Waterfront Route as a barrier

These are suggestions for reducing the Waterfront Route as a barrier:

- Burying the road
- Reducing the number of lanes
- Reducing the traffic

Burying the road

Burying the road in a tunnel along the Waterfront combined with a reduction of crossings, and designing the major crossings with ramps. The consequences are that pedestrians and cyclists would have direct access to the waterfront from the city centre.
This solution would be expensive and space demanding and there would be problems giving access to all of the parking lots along the route. Furthermore, there would be great problems building the tunnel, while maintaining traffic flows. Barcelona has used this kind of solution, improving access to the waterfront, building a buried motorway with tunnels, giving direct access to parking lots.

Reducing the number of lanes

Reducing the number of lanes from six to four could be done. The consequences will naturally be reduced traffic capacity in the peak periods, and normally a decrease of the total number of cars per day combined with enlarged peak hour periods. In the worst case this could mean more congestion on the road and increased traffic elsewhere in the two-hour periods of the peak periods.

In Wellington a new Inner City Bypass, intended to serve the CBD, which has been discussed for more than 20 years, is planned to start during the next 12 months. The Inner City Bypass consists of a continuation of the Wellington Motorway, running parallel to the Waterfront Route. There will be a new street linking the motorway and Buckle Street.

This Inner City Bypass provides an opportunity to relieve the Waterfront Route of traffic. It is estimated in "Wellington Waterfront Lane Removal, Assessments of Effects", that the transfer of trips from the Waterfront Route to the Inner-City Bypass will be up to 7% southbound and 5% northbound. The difference between the two directions is due to restrictions in the Terrace Tunnel.

Often the reduction of the total capacity will result in car trips changing to public transport or cycle trips. Another consequence may be that the peak periods will be enlarged, as a result of commuters changing driving times.
Another option is to keep most of the traffic on only four lanes and increase the capacity by reducing the number of intersections and by creating intersections with only left turns.

The solution has often been used all over the world. A number of big traffic roads in Copenhagen have thus been designed to smaller capacity by reducing the number of lanes. For instance, as arterial motorways to Copenhagen have been built, the capacity has been reduced in a number of arterial roads leading to the city centre.



Strandvejen, Hellerup. Denmark.
The capacity has been reduced from 30.000 to 15.000 vehicles /day.



Strandvejen, Hellerup. Denmark.



Vesterbrogade, Copenhagen.
The capacity has been reduced from 30.000 to 15.000 vehicles /day.

Well-known examples of this are the three Danish "brogader", which originally were four-lane roads, with parking on both sides and narrow pedestrian paths, and no cycle paths. Today these streets have been changed to two-lane roads with broad pedestrian paths and cycle paths. The traffic has been heavily

reduced, and totals about 20,000 vehicles per day. However, there are about the same figure of cyclists on these roads.

The solution can be implemented quickly and it's a rather cheap solution. It is however recommended.

Reducing traffic

One of the more effective ways to reduce traffic is to introduce road pricing or other form of traffic tolls.

It is a practical long-term measure which will especially be effective, where there is a lot of through-traffic, which will not be affected by parking fees. In places where road pricing has been introduced, e.g. in London, there have been significant reductions in the amount of traffic.

As the traffic analyses have shown that a great part of the traffic on the Waterfront Route is traffic which does not have a purpose in the CBD, road pricing would be an effective means of reducing traffic on the waterfront.

4. Proposed Strategy

We suggest a strategy, in which the number of lanes on the Waterfront Route is reduced in the short term, and road pricing is introduced in the long term.

Short Term

Assuming that the Inner-City Bypass is established, and it will be possible to transfer traffic from the Waterfront Route to the new bypass as far as possible a reorganisation of the Waterfront Route is proposed consisting of the following stages:

- Reduction of the number of lanes from six to four.
- Establishment of a median of about three meters in the centre of the road.
- Reduction of the lanes to 3.00 meters, corresponding to a speed of 40 km per hour.
- Examination of all intersections with regards to importance and amount of traffic in order to close the access roads which are least important.
- Deciding the future number of intersections and the design of the intersections with regard to a hierarchy of types of intersections, for instance possible roundabouts, signalized intersections, ordinary intersections and intersections with only left-turns permitted.
- The creation of turning lanes, particularly for critical right turns where the median may be used.
- Improvement of public transport and facilities for cycling along the waterfront.

The Waterfront Route should be transformed into a beautiful street with attractive pavements, signboards and plantings indication a street, where cars do not drive fast and it is only chosen for CBD traffic.

The consequence of such a reorganisation of the Waterfront Route would be a reduction in traffic in the peak periods, a transfer of traffic to other streets, especially to the new Inner-City Bypass and possibly a reduction in the total traffic, because some car-drivers find it more convenient to go by public transport or to cycle in the future.

Long term

In the long term more drastic measures may be required to prevent further increases in road capacity. Our experience shows that economic means are the most effective.

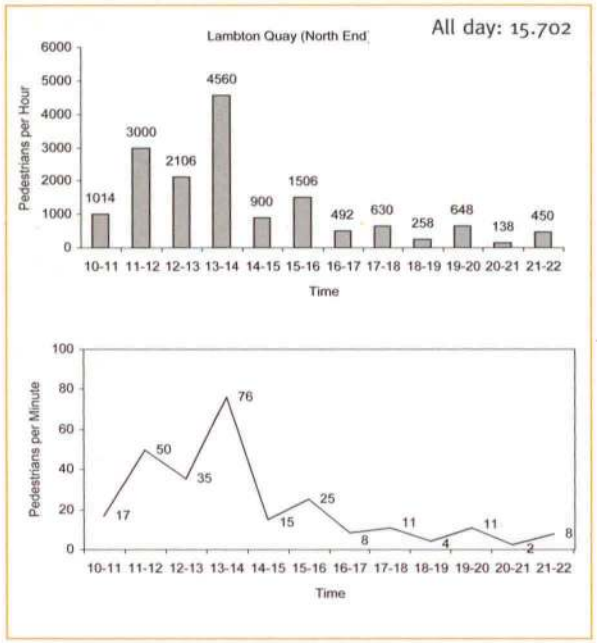
Appropriate parking fees will reduce traffic to the city centre, but traffic analyses have pointed out, that a great part of the traffic on the Waterfront Route is through traffic which does not stop in the CBD.

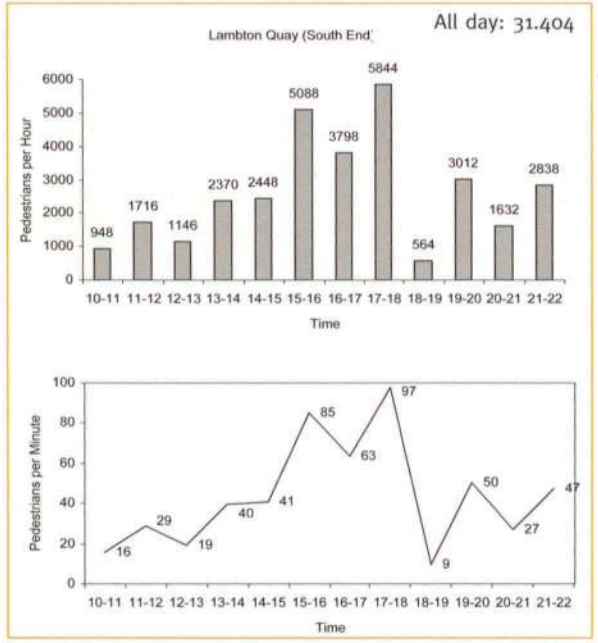
Three kinds of tolls on car traffic should be considered as possible means to reduce traffic in the CBD:

- Tolls for driving into a certain area, for instance the central part of Wellington, which should be greater than the CBD.
- Purchase of driving permits in certain areas.

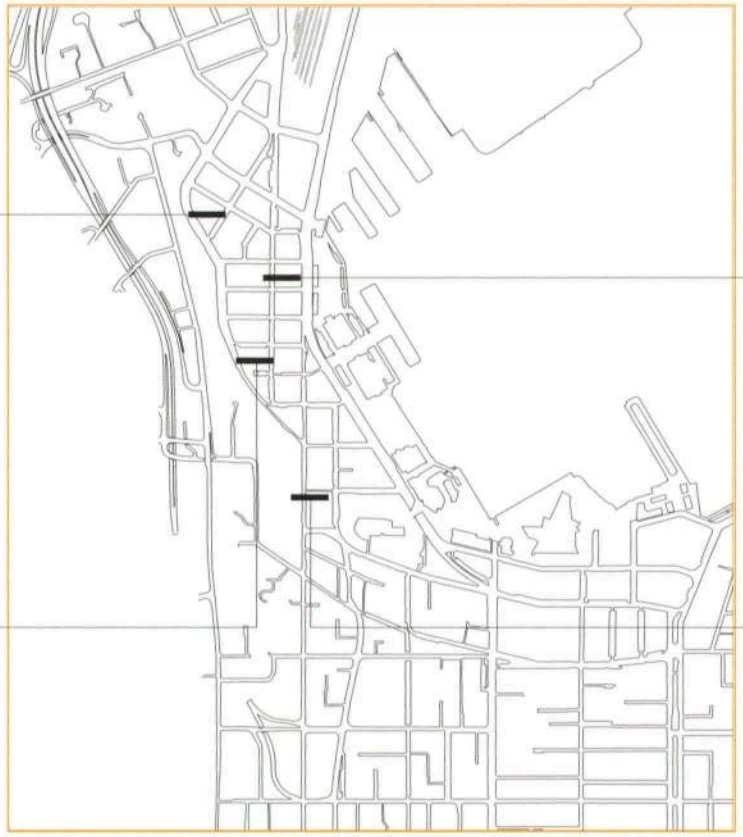
Appendix 3

Pedestrian traffic on a summer weekday
Pedestrian traffic on a summer Saturday
Age distribution
Stationary activities on a summer weekday



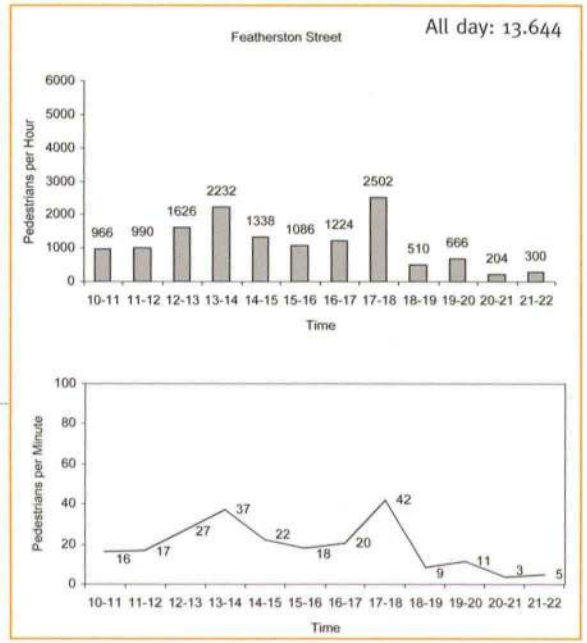


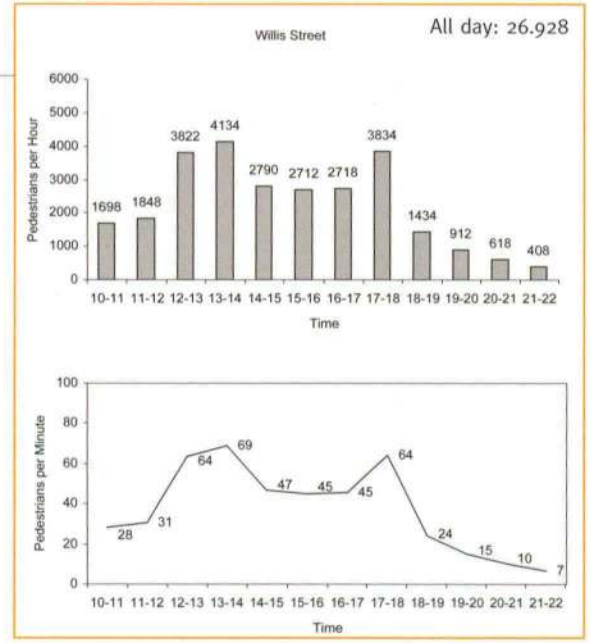
Recordings:
Thursday 12 February 2004
Weather: Sunny with light winds, 23°C



Lambton Quay: The southern end is the most used with approximately 31.000 pedestrians during the day. This is Wellington's highest pedestrian count. The northern end is quieter and activities die out after lunch time.

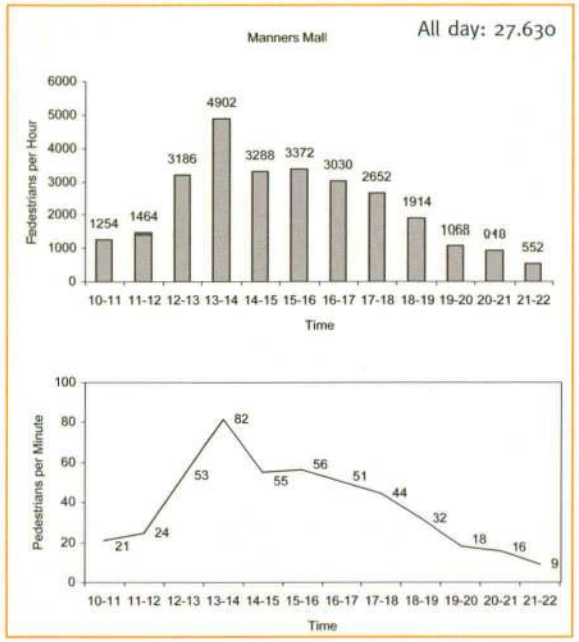
Featherston and Willis Streets: Lunch time and evening rush hour have clear impacts on pedestrian traffic.

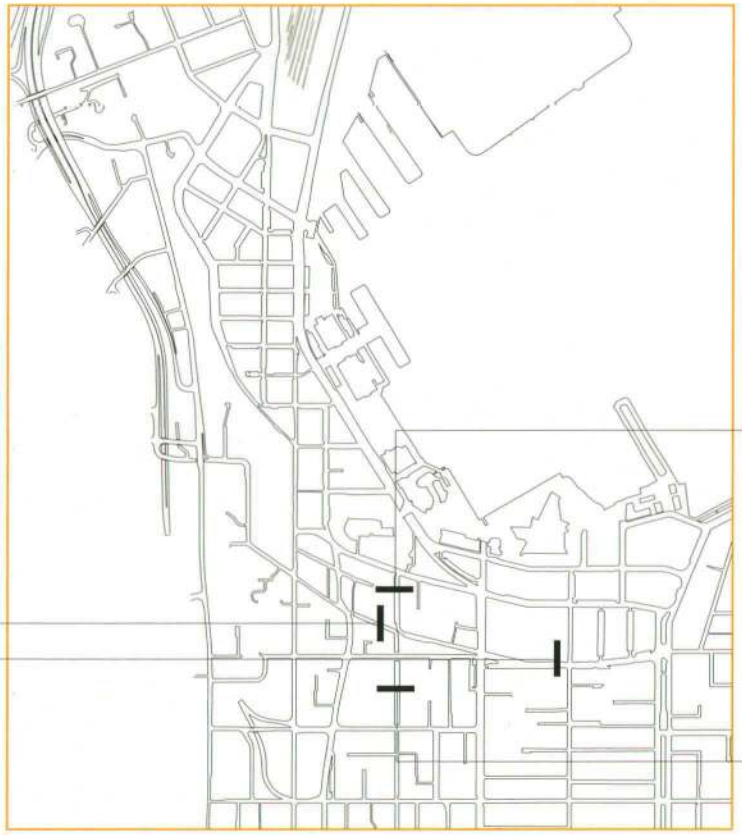


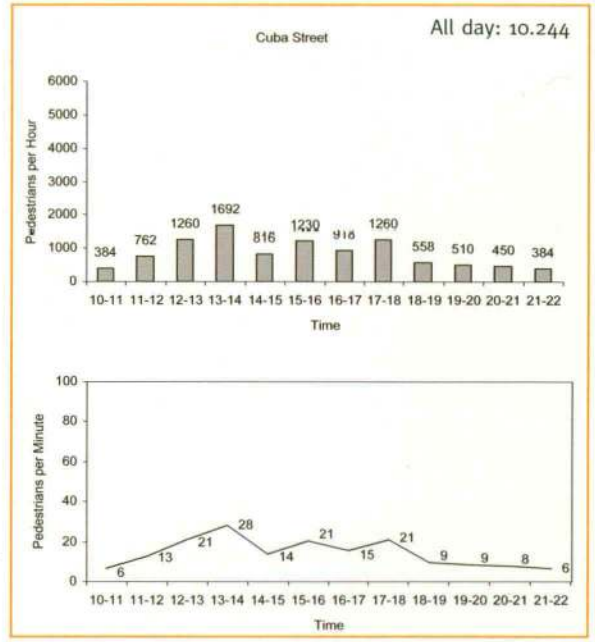


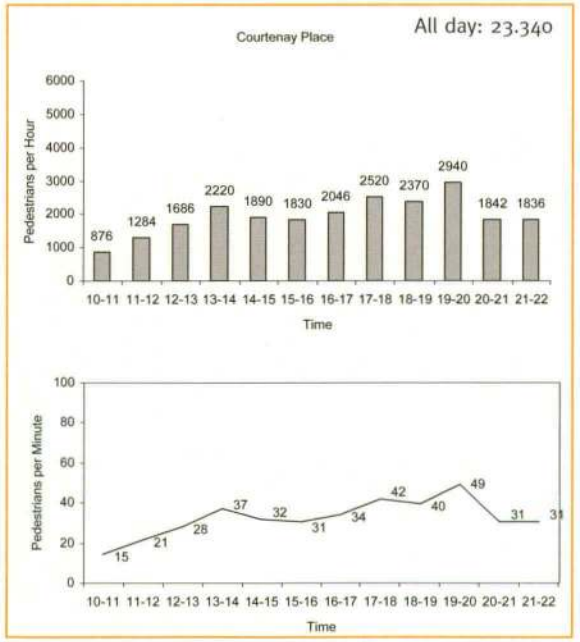
Pedestrian traffic on a summer weekday

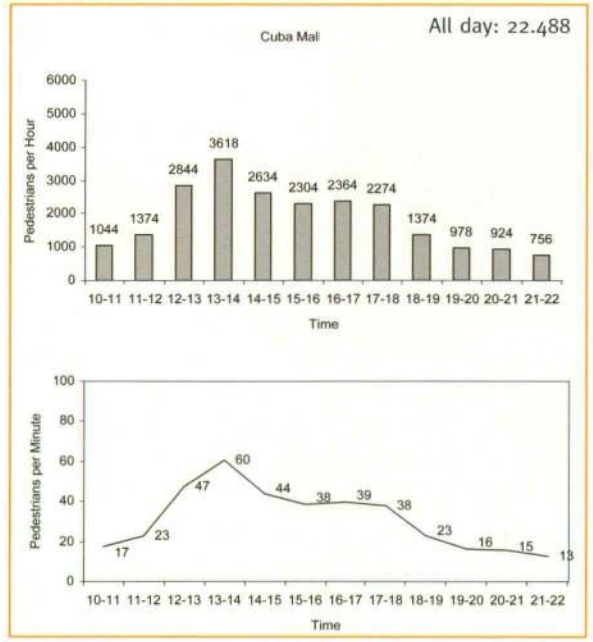
Recordings:
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Weather: Sunny with light winds, 23°C











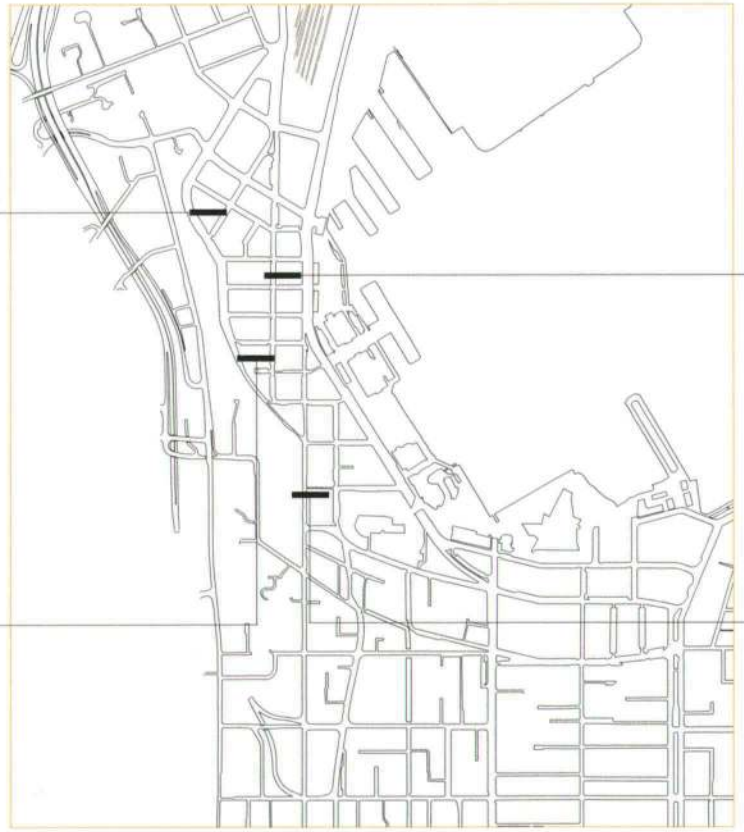
Manners Mall: Substantial number of pedestrians at lunch time.

Courtenay Place: Steady amount of pedestrian traffic with an evening peak at dinner time.

Cuba Street North: Under-utilised street.

Cuba Mall: Reasonable amount of pedestrian traffic but significantly lower than the Golden Mile.

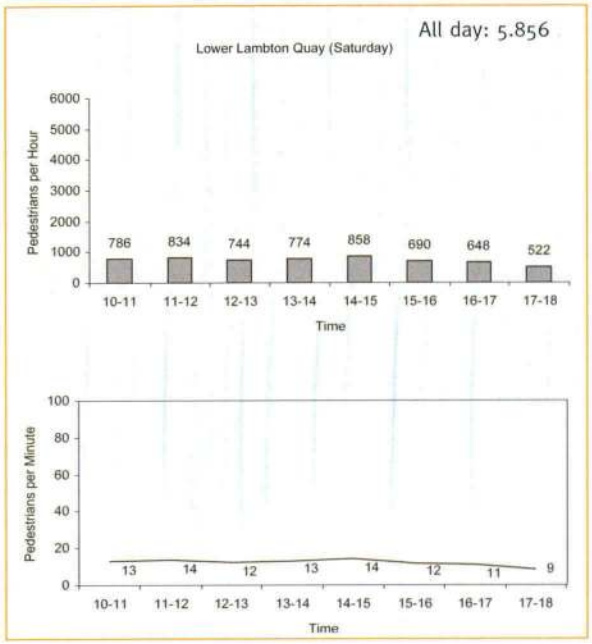
Recordings:
Saturday 6 March 2004
Weather: Sunny and no clouds, 22°C

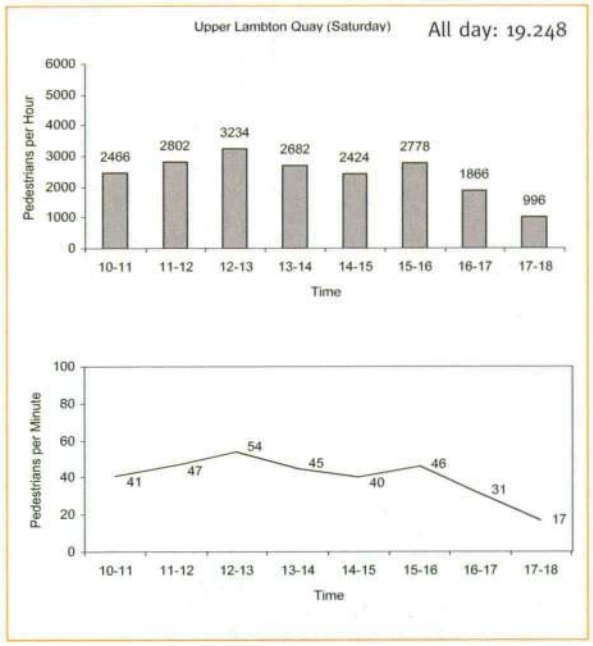


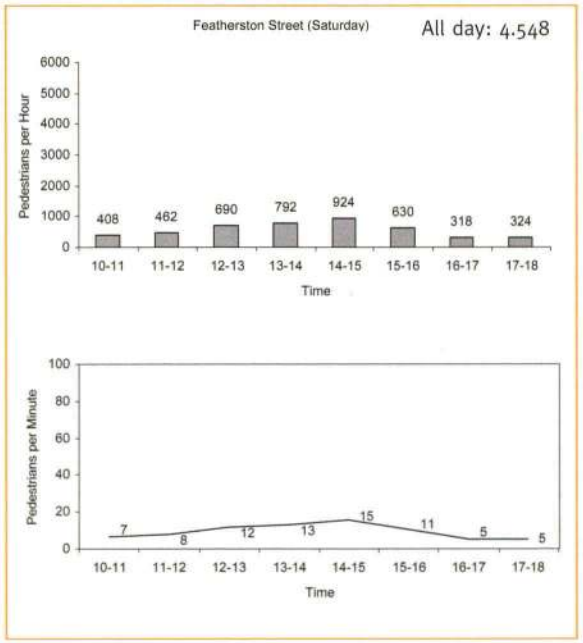
Lambton Quay: Steady pedestrian traffic throughout opening hours. Northern part is under-utilised.

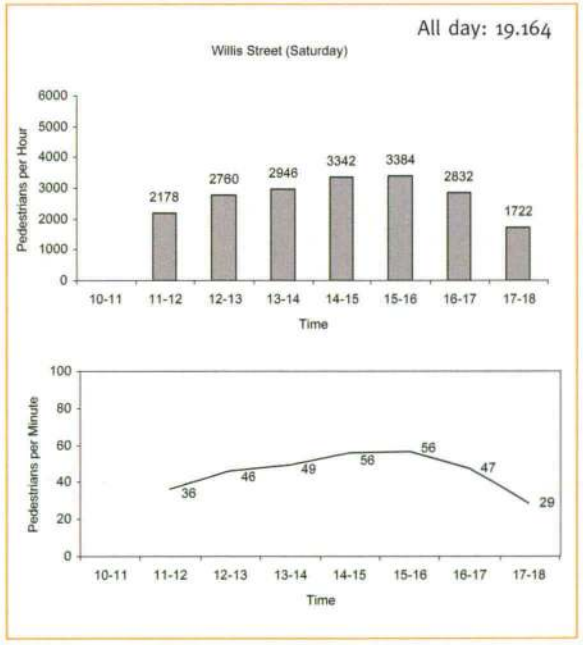
Featherston Street: Office street, with low numbers of leisure users.

Willis Street: Steady pedestrian traffic comparable to Lambton Quay numbers.

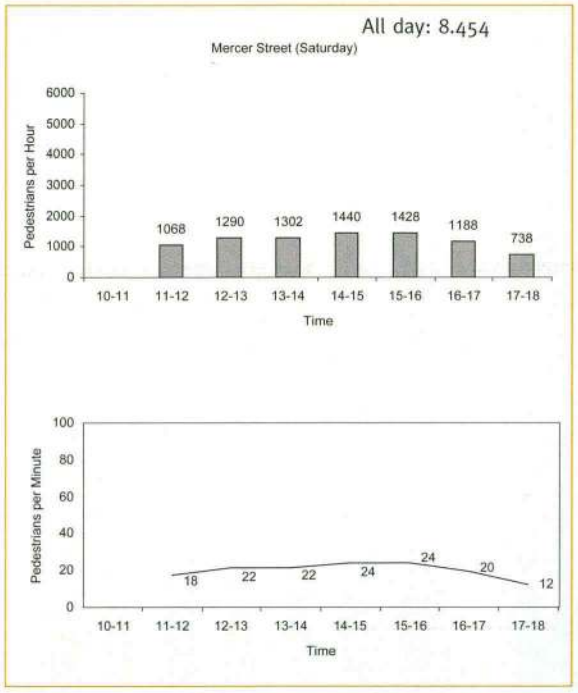


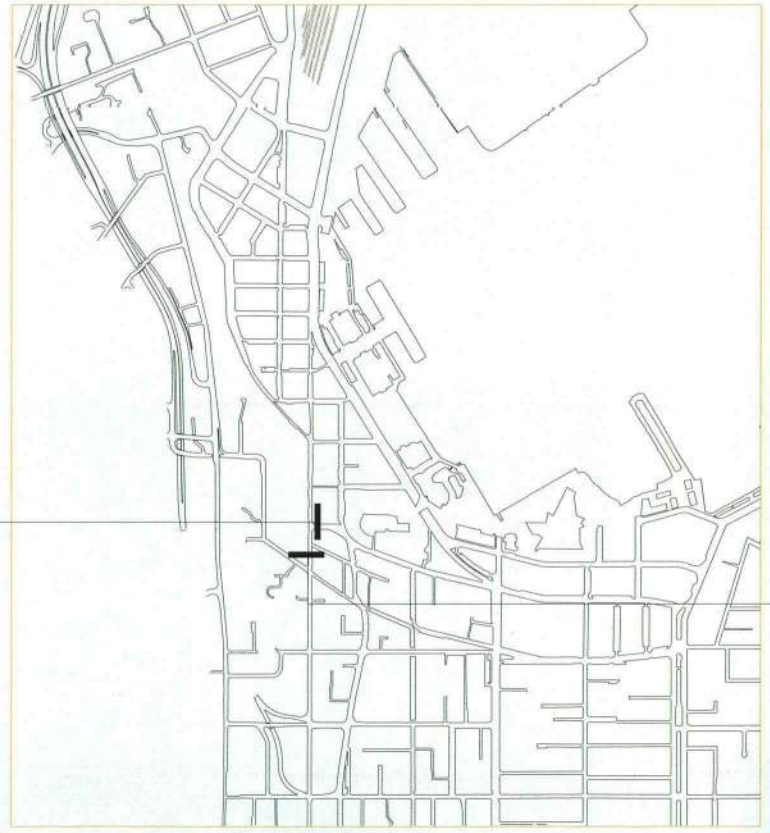


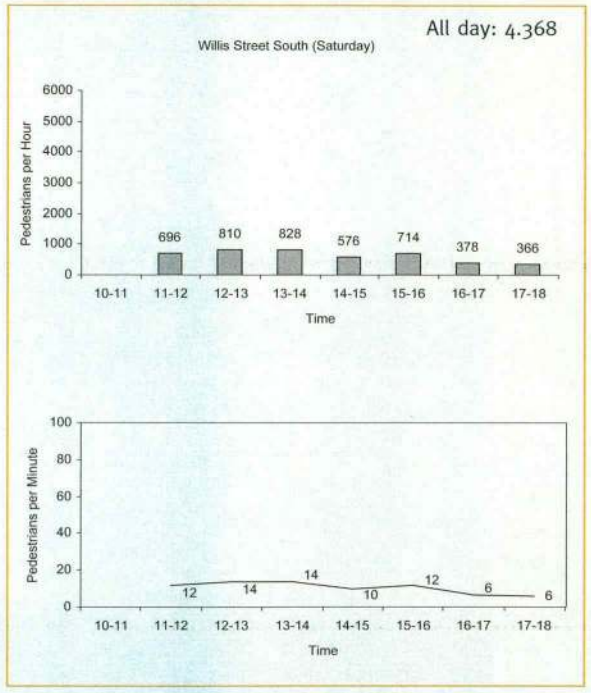




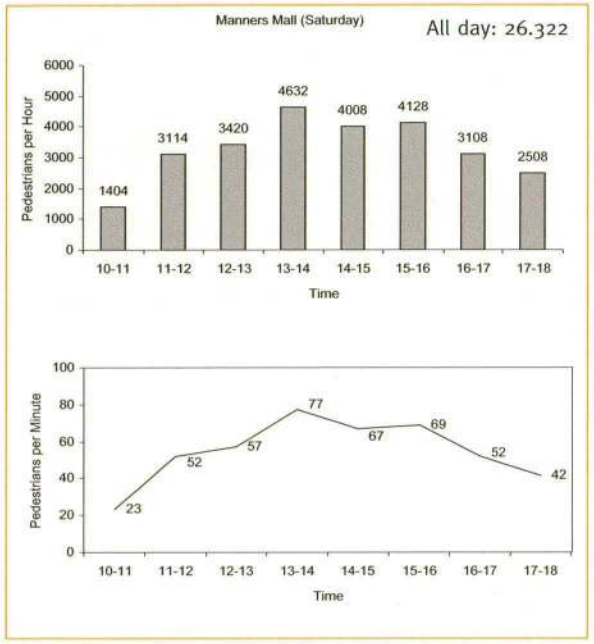
Pedestrian traffic on a summer Saturday



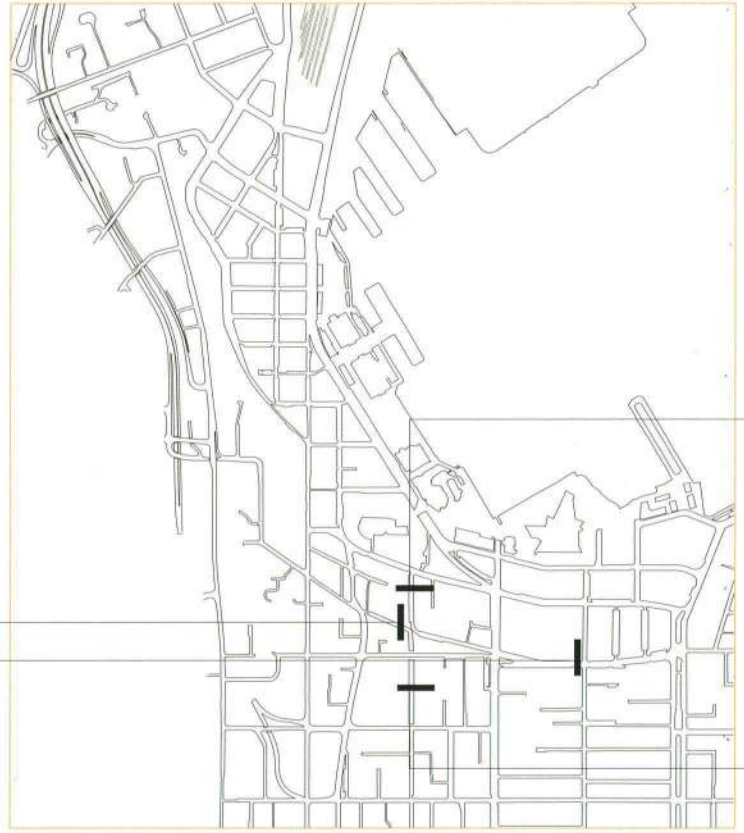


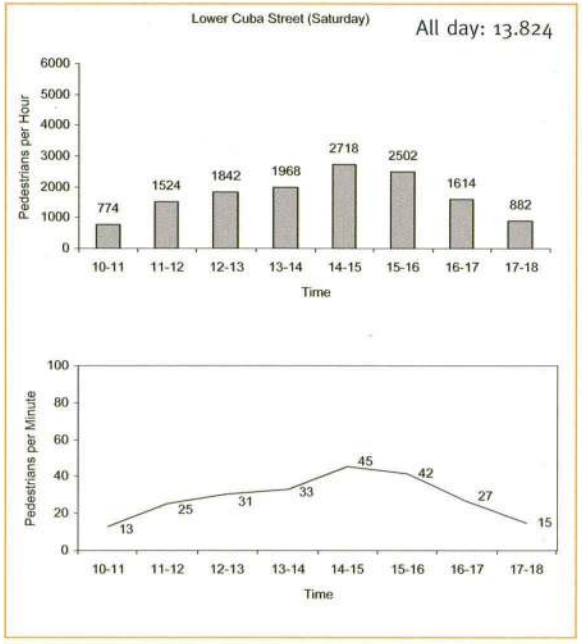


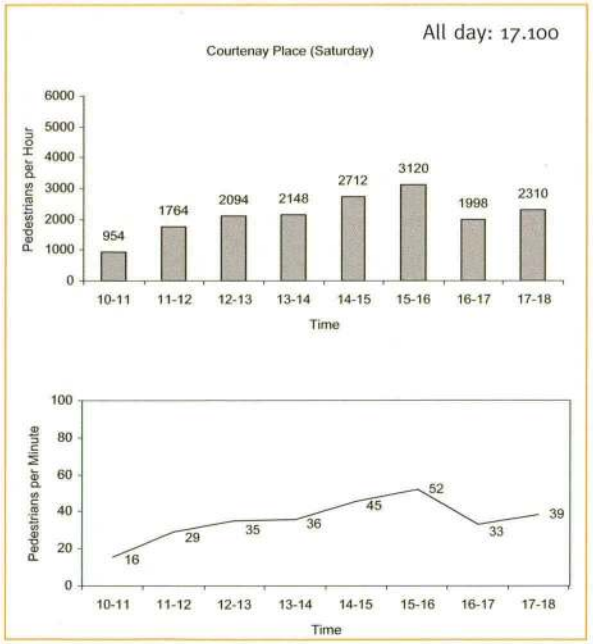
Mercer Street + Willis Street South: Under-used streets. Not many cafes or shops are located here. The Golden Mile is much preferred.



Recordings:
Saturday 6 March 2004
Weather: Sunny and no clouds, 22°C





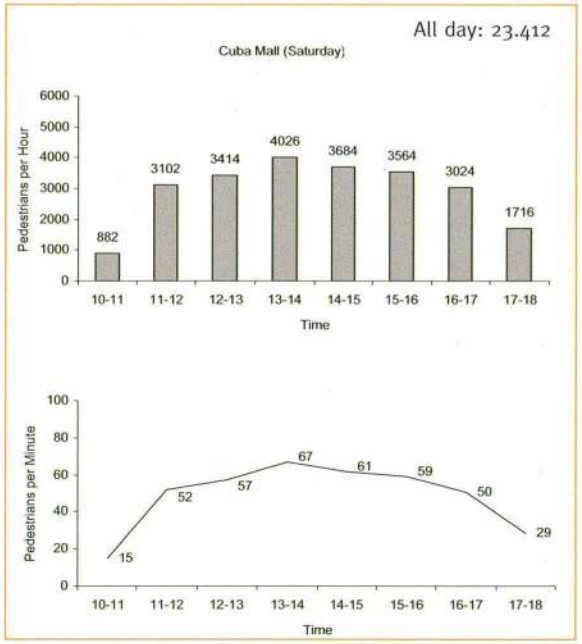


Manners Mall: Even busier on a Saturday than on weekdays. (+15%)

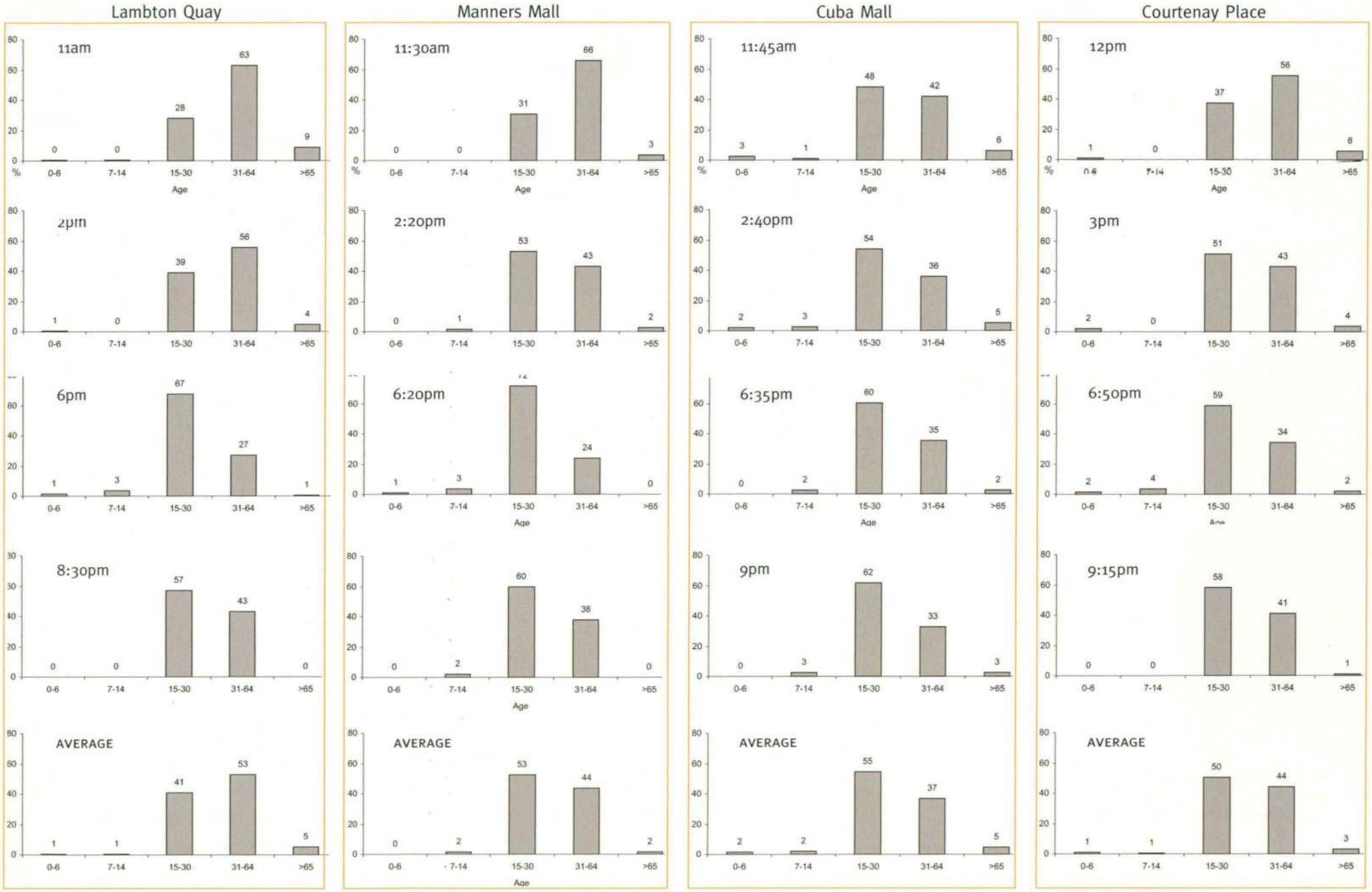
Courtenay Place: Pedestrian traffic is building up towards the late afternoon.

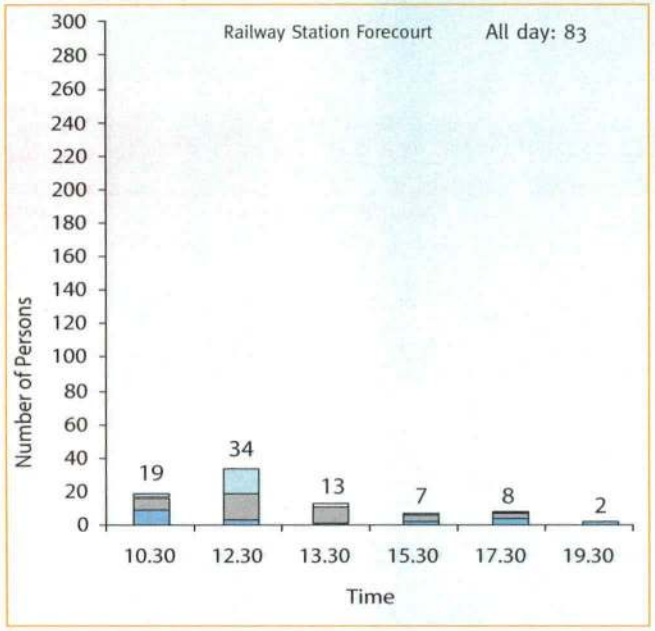
Cuba Street: Substantial increase in pedestrian traffic compared to weekdays.

Cuba Mall: Increased pedestrian traffic on Saturdays puts Cuba Mall at the top end of usage together with Manners Mall.

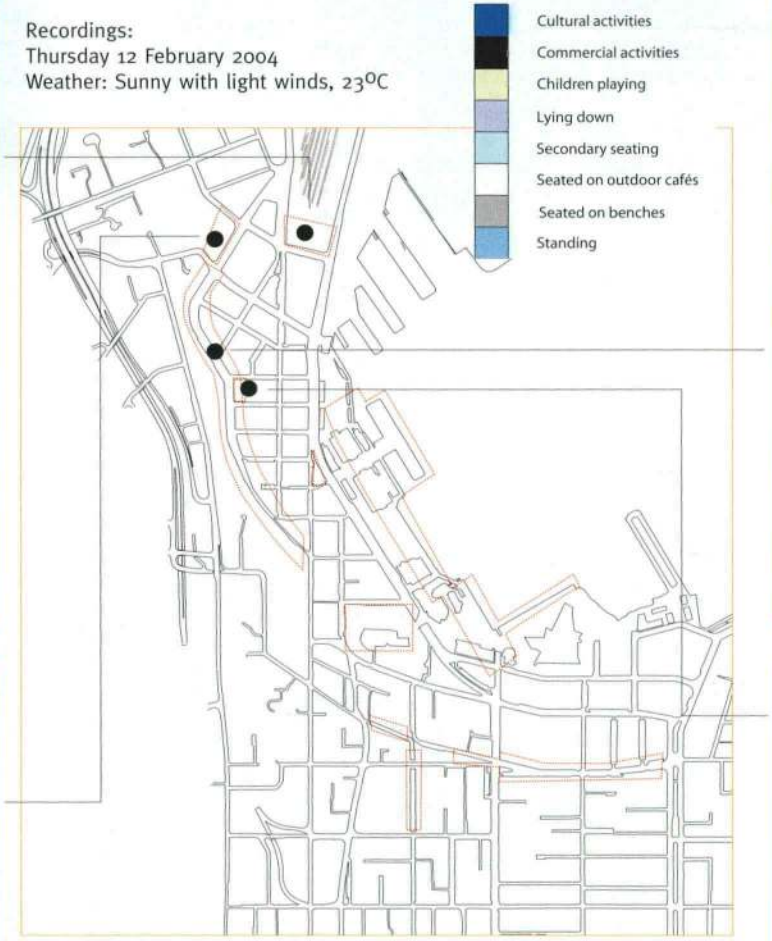


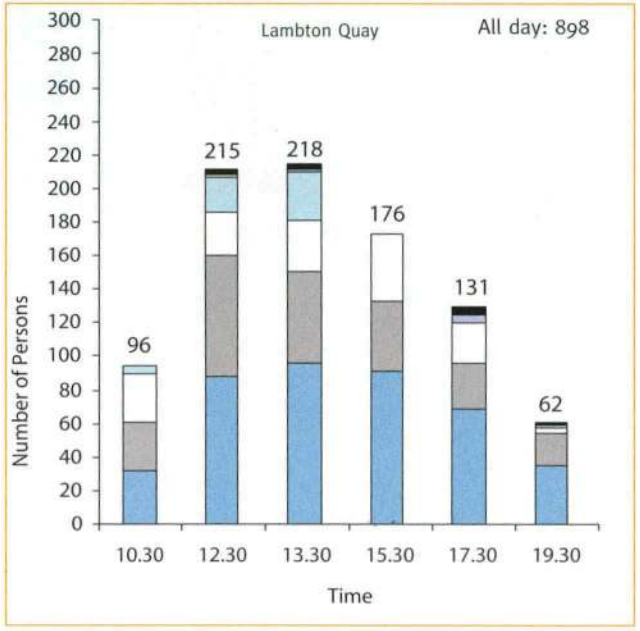
Age distribution on a summer weekday

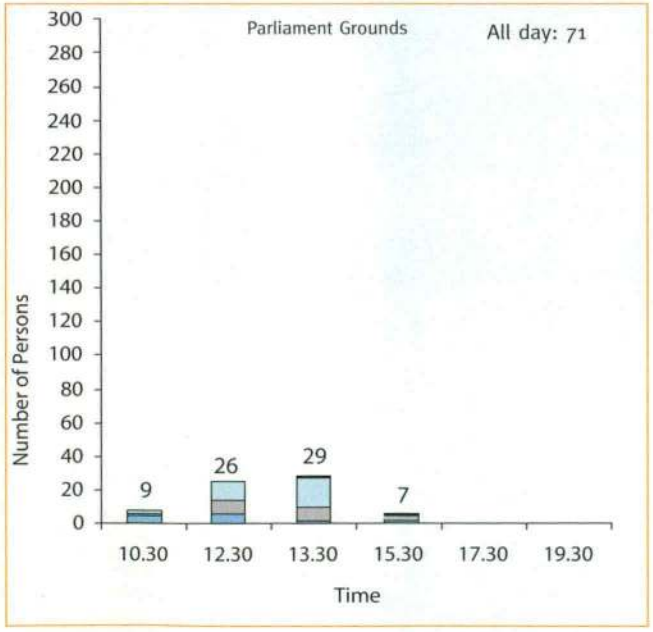




Recordings:
Thursday 12 February 2004
Weather: Sunny with light winds, 23°C

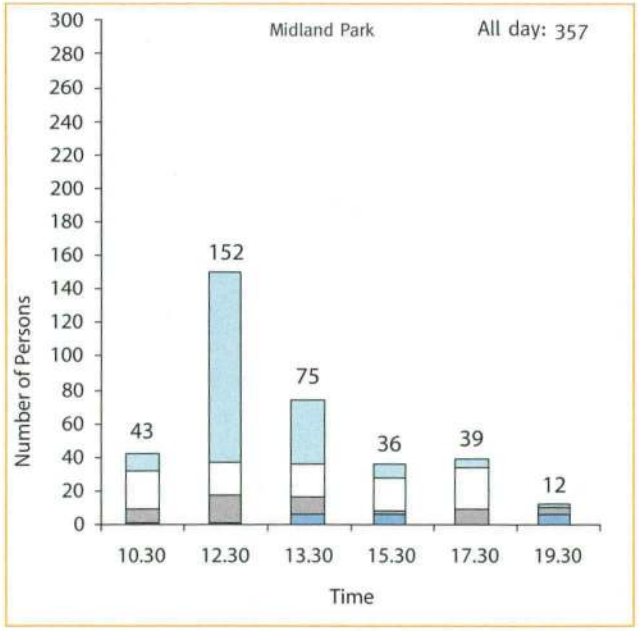


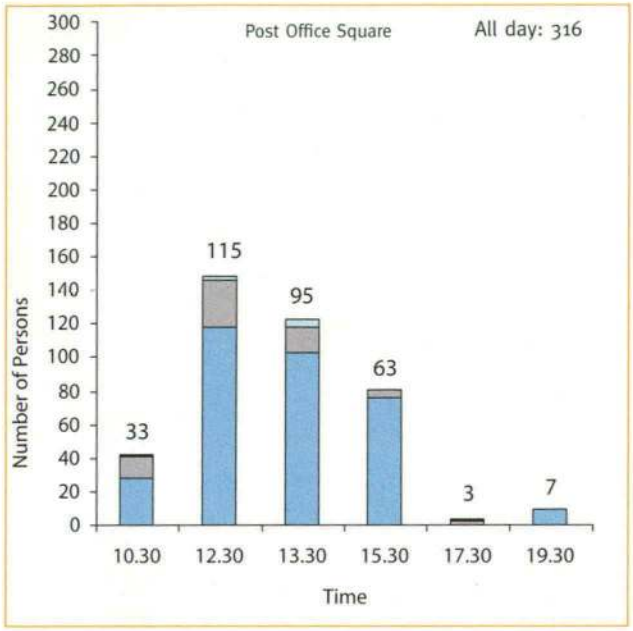




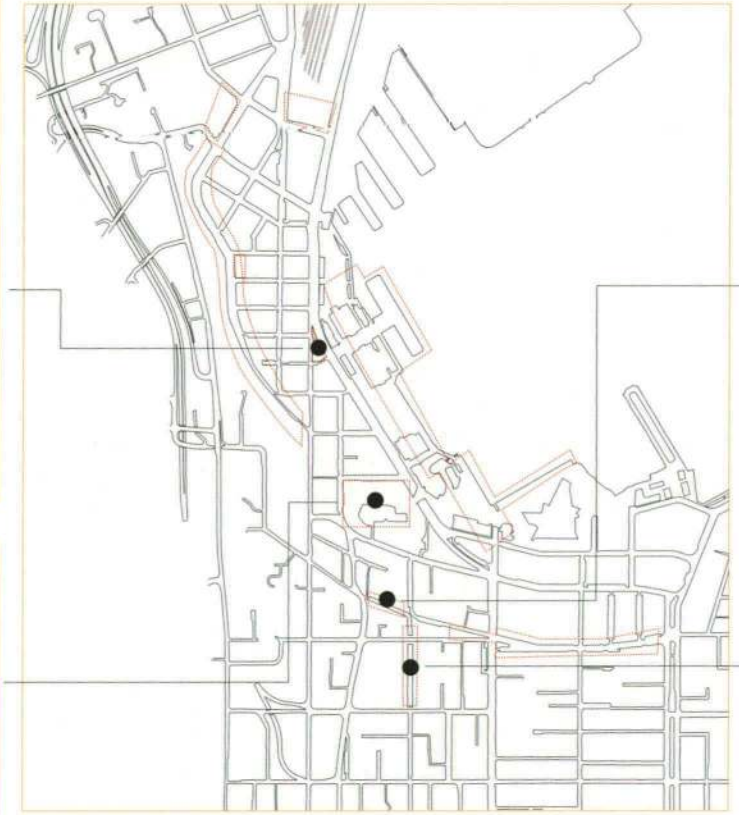
Railway Station Forecourt and Parliament Grounds: Under-utilised public spaces with almost no recreational activities.

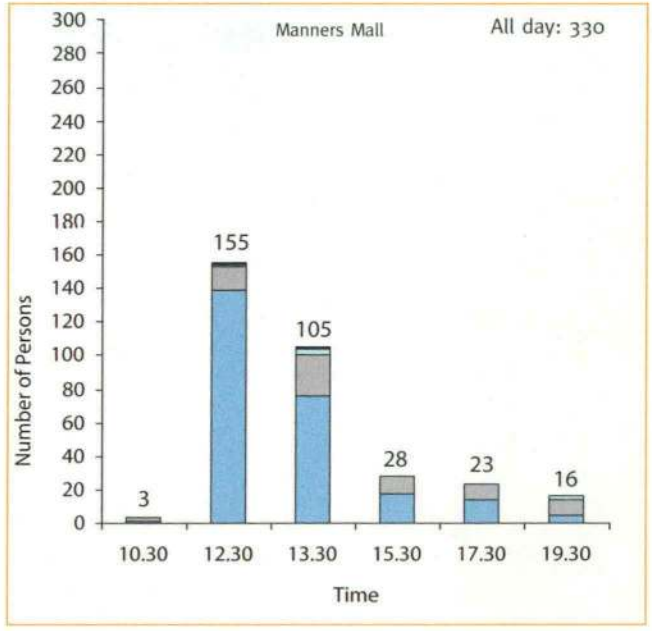
Lambton Quay: Top score in Wellington. Together with Midland Park, Lambton Quay attracts 1255 people to engage in stationary activities. Midland Park has the highest number of seated people at lunchtime.

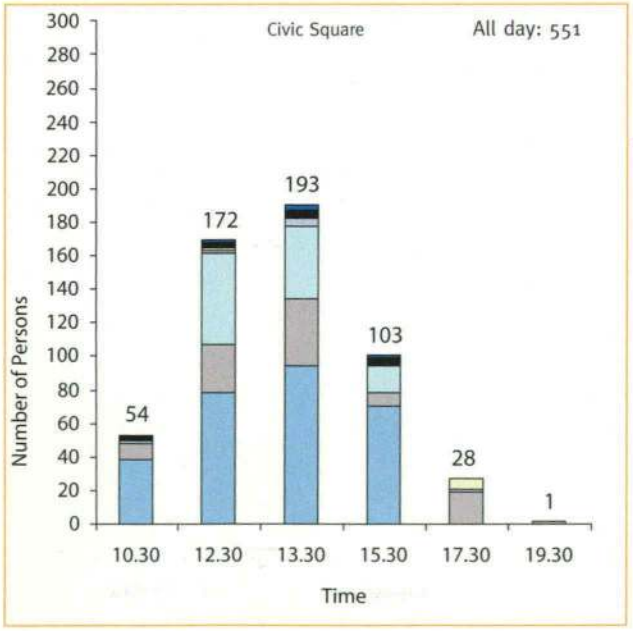




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Weather: Sunny with light winds, 23°C

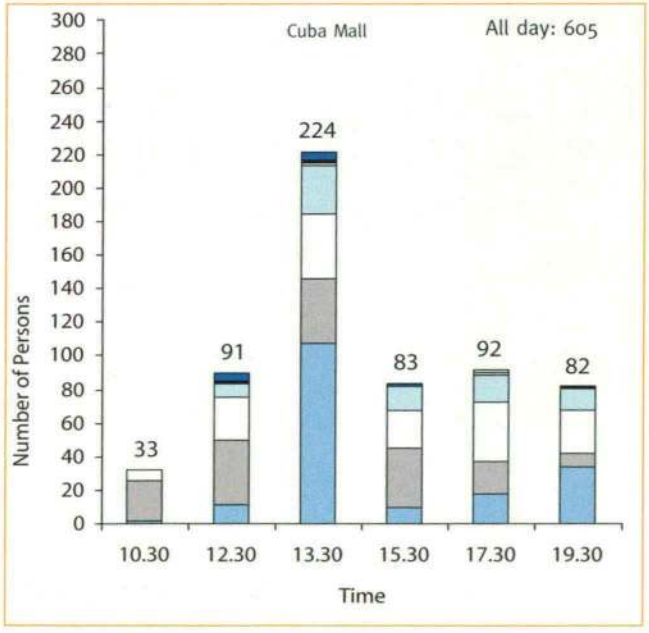


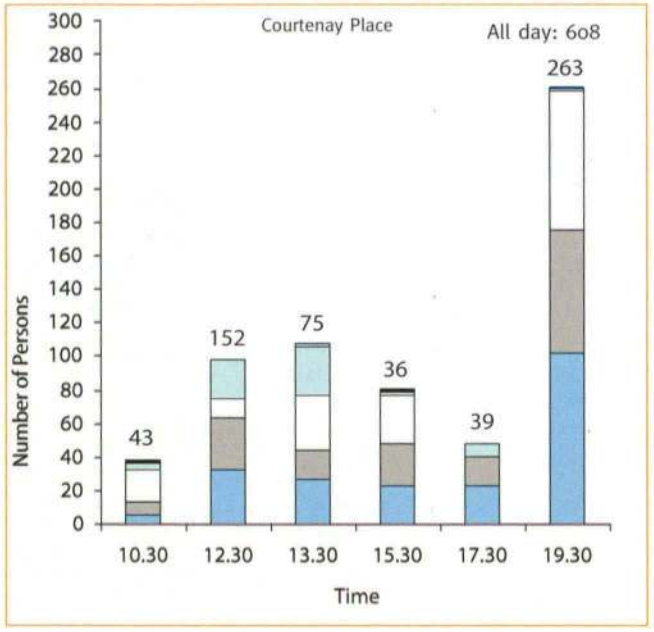




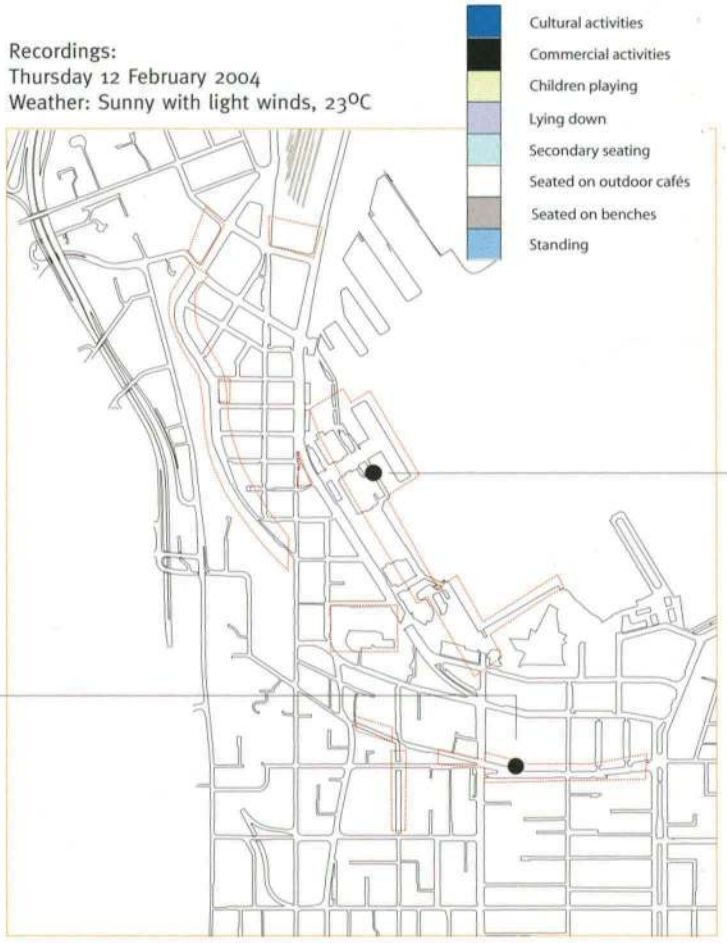
Manners Mall and Post Office Square: Equally used, with the same number and variety of activities. Mainly standing takes place here, while one would have expected a more diverse recreational life at Manners Mall.

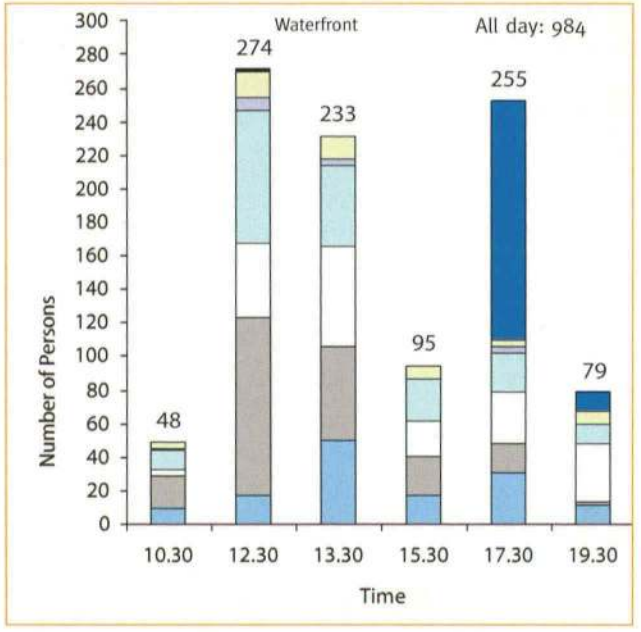
Civic Square has a variety of activities as does Cuba Mall.





Recordings:
Thursday 12 February 2004
Weather: Sunny with light winds, 23°C





Courtenay Place: More activities during the evening than other places in Wellington.

Waterfront: Broad variety of activities. Most significant observation is the number of children playing here.