

P(a)lace of Consumption



#### ABSTRACT

Architecture can be regarded as both a product for the retail environment and as a medium which can influence change in contemporary society. Within the context of the retail environment, architecture becomes intrinsically associated with the concepts of business sustainability because of the needs from investors challenging the needs of the public. Business sustainability within the retail environment is concerned with the success of the tenants occupying the investors' assets whilst the architectural sustainability focuses upon the public acceptance of the space that is transformed once being constructed and in the future.

Furthermore, the architecture within the retail environment encapsulates the utilisation of space, crime and neglect prevention, retail attractiveness and targeting users through urban design principles. The research identifies the gap between the urban design principles and the individual business success within the inner-city. This thesis explores the coordination of the urban design principles and shopping mall design principles upon the existing urban fabric which is set to revitalise and improve dilapidated areas within the Wellington inner-city. This is to not only improve the retail location, but also the residential environment which is ever increasing. The shopping mall design principles have been integrated into the retail urban fabric and as the research states, shopping mall design is more successful than the individual street retail by improving the productivity of the businesses as well as allowing a higher grade of space to be created with the additional income and mutual design motivation.

Although the shopping mall design principles are traditionally implemented upon a single ownership environment and as such allows a decision to be made through a single official, the inner-city is filled with multiple owners upon the one site which adds limitations to the design that can be manipulated. As such, this thesis designs as though the site is organised under a collective, allowing a common goal to be achieved.

The important successful shopping mall design principles have been segregated into four clusters; anchors, configuration, interior aesthetic and control. These clusters combined with the common urban design principles allow the individual small business owners to challenge the large-scale retail businesses putting them out of business. Also, national and international urban and shopping

mall precedents have been analysed as showing physical representations of the research studied in the literature review.

The design being placed upon a dilapidated area within the Wellington inner-city the success of the design case study will determine the future success of the idea migrating into other areas of Wellington's inner-city. The idea that beginning the concept in the worst case scenario would allow the design to act as a catalyst for growth into already established market areas such as Cuba Street and Courtenay Place.

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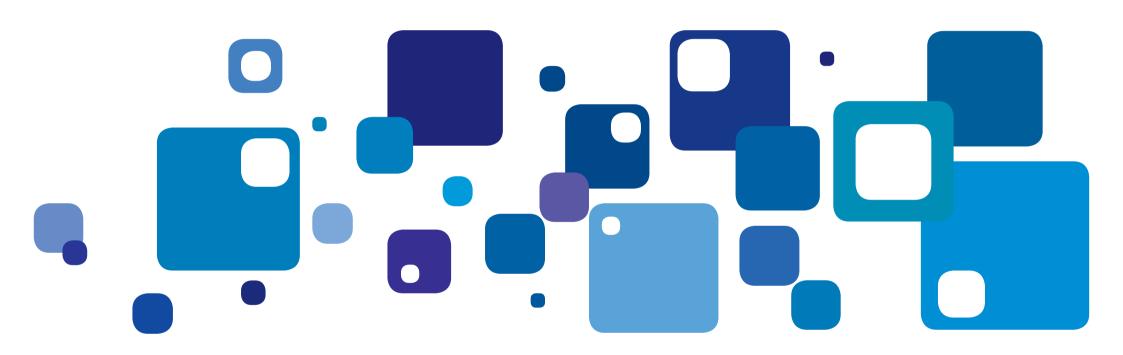
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# PART ONE

Introduction to Research

#### INTRODUCTION TO RESEARCH

It is important to understand the origin of this thesis' concept as this researcher has witnessed and lived in the dilapidated inner-city of Wellington for the past four years. Two years ago I moved from a rundown old office building on lower Cuba Street to an inner-city apartment on Left Bank. When finding out I was moving into an upmarket inner-city apartment I was ecstatic, showing off where I was living to friends and family, but after only living there a short time I found that the apartment was falling apart structurally and aesthetically with leaks, broken appliances, cheap fixtures, blocked drains, poor design finishes, and many more imperfections I wasn't expecting. This apartment appeared to have been done without the triple bottom line thinking, where the social and environmental had been placed secondary to the economic, creating large on-going costs for the developer, and discomfort for me and the other residents.

The problem I noticed didn't stop within the boundaries of the apartment, but continued to the public pedestrian street below; in my mind, my back yard. There was a distinct lack of care and respect to the area with graffiti, dilapidated flooring, empty business space, poor finishes, and a dangerous environment after hours. The connection was apparent at this stage, that this thesis should focus upon the improvement of the street environment, which in turn would have an everincreasing effect upon not only the public or the businesses that inhabit these spaces, but the residents enjoyment of living within the city.

In the urban retail environment, architecture can play an important role in the quality improvement of the public's shopping experience and the residents surround space and atmosphere. Looking at the street retail outlets around Wellington, it was apparent to me that something was wrong. Just looking at the environment at face value, the streetscape had so many problems with retail mix and configuration, businesses failing, utilisation of space, crime, vandalism, and the neglect in and around many areas.

Dave J Barlow, a commercial and retail architect for the last ten years has worked on many projects in the United Kingdom and presently works at Mountford Pigott - a prestigious architecture firm.

He believes, in any high-end construction projects, the role of an architect is utterly essential. The foremost reason is that the architect is the professional who transforms the client's ideas and requirements into reality by generating a design that is visually stunning, functional and within the budget (Barlow, 2011).

There are several things that a retail architect considers carefully. They understand the efficient technique of space utilization, the target group and the significance of the display area of the products. Making the optimum use of the space is essential to the design of any retail store. A knowledgeable architect makes sure that different aspects of the store such as services, presentation, storage and movement of customers are well integrated. They also take into account the targeted customer segment before designing the user interface. The clutter-free and sparkling atmosphere creates a positive impact on the minds of the customers and fulfils the desired business purpose (Barlow, 2011).

In this researches opinion, street retail is still full of character, especially when looking at locations such as Cuba Street, but the once beautiful location has begun to transform from a once rich innercity shopping experience to a run-down neglected streetscape that has changed from character to chaos.

The problem I faced was whether there was anywhere within the retail sector that had successfully overcome the apparent problems that existed among the street environment or was it the current economy causing these issues. To my surprise, there was, and is, a situation where these problems didn't exist; the shopping mall. Though Wellington's inner city residential population growing rapidly (Wellington City Council, 2009) and larger supermarkets are expanding into the city areas (Burgess, 2009), emerging retail forms make central places more suitable for retailers and customers. Retailers have taken advantage of the behaviour in land on the edges of cities where rents are cheaper. As fuel costs rise in the future and greenhouse gas reduction policies discourage the use of private vehicles, there will be a corresponding shift in retail focus back to central places. Accessibility will be paramount to the future success of retail areas (Harding & Powell, 2010).

Developers are employing prominent architects for the primary purpose of improving the design of the stores in response to market forces (Allan, 2009). Improved design elements relate to the architectural character of the building, colour and material of the primary structure, pedestrian flows, parking, and the relationship to the surrounding community (Beaumont & Tucker, L., 2002). However, the shopping malls that I have experienced are an unnecessary mix of oversized space, horrendous design, uncomfortable settings, frustrating paths, and awkward experiences, but everything within a mall is purposely created for the customer and consumption to be at its maximum, and as such, allows the void space of the shopping mall to remain at a very high standard of quality.

The design of the shopping mall is a private investment seemingly operated as a public space. Developers understand the problems that are within the street retail sector, and have eradicated them through a series of specific design principles.

The shopping centre appears to be everything that it is not. It contrives to be a public, civic place even though it is private and run for profit; it offers a place to commune and recreate, while it seeks retail dollars; and it borrows signs of other places and times to obscure its rootedness in contemporary capitalism. The shopping centre sells paradoxical experiences to its customers, who can safely experience danger, confront the Other as a familiar, be tourists without going on vacation, go to the beach in the depths of winter, and be outside when in. (Goss, 1993, p. 40).

The economic differences between the shopping mall and the urban retail sector are apparent statistically. In spite of better quality finishes and maintenance, a study done between 1994 and 2002 by Vox and Cos showed that an individual business in an urban environment is more likely to undergo foreclosure due to financial hardship than one under a single management system, i.e. Shopping malls. This also proves that small businesses are not just struggling because of the recent economic slump, but that this difference in business success and failure has been apparent for at least a decade.

One noticeable difference between the shopping mall and the urban retail sector is the difference in materiality, especially within the street or corridor. The shopping mall has far superior materiality than upon the street, with high grade finishes that are constantly being cleaned and shined for the satisfactory of the consumer, yet upon the street, the asphalt and other materials are irregular, dirty, smell and dull.

The question now arises why the shopping mall can have all these superior qualities over the street retail sector and still manage to have a better turn-over and business success rate. In comparison between the streetscape's public access, and the internal privatised void space of a shopping mall, the difference is among opposites. Shopping, being the most important contemporary social activity, and for the most part, takes place in shopping centres which are clean, safe, everything you need in one place with additional facilities such as car parks, restrooms and child care.

The aim of this research is therefore to investigate how to design a retail neighborhood that could benefit the community and residents combining the successful design principles of a shopping mall with architectural design in a post-capitalist environment—all within the central Wellington urban environment. It further explores the potential for design to act as a catalyst for improving external street retail and interspatial relationships with surrounding occupants. It proposes that a new form of commercial retail needs to be introduced to improve inner-city residential life and prevent the struggle of community groups against large-scale retail development in their neighbourhoods.

As the desirable architectural solution to the problem of urban decay was unlikely to be simple and likely to involve more than just the architect, the research negotiates inter-disciplinary boundaries, as a clear understanding of business knowledge would be necessary to allow a deeper understanding of the dynamics within the shopping mall design principles. For this, I joined with an MBA student who was conducting his own independent research with respect to post capitalist business strategies based on shopping mall strategies. This allowed the project to remain grounded and become a more viable research investigation. The business thesis research was governed by its own methodology independent of, yet related to, the methodologies applied to this architectural thesis. Although that Master thesis had its own literature review, its own interviews, and its own body of applicable professional knowledge and practice, much could be, and was, shared between us. Quite early we

discovered the depth and extent of relevance between the frameworks and ideas we each brought to the project. The contribution of the business information towards answering this thesis research question will be apparent in the final design.

The research will focus upon a New Zealand context, addressing building typologies which are specific to New Zealand cities, to determine similar environments of consumption. Overseas case studies and information will be included where appropriate as an indication of potential design strategies for the integration of shopping mall principles into the street retail sector.

Following the introduction, the thesis is divided into three parts: the first is an analysis of the background research, the second is a review of designed structures that implement the research, and the third is a review of the design case study. The background research involves three key chapters, each contributing to an interdisciplinary review of literature. The second part is a review upon the implementation of successful and unsuccessful design principles nationally and internationally. The third is a review of the design case study, which explores how the concepts outlined in the literature review can be appropriated into a piece of architecture within the New Zealand context. These parts are then concluded and the design discussed with reflection on the future role of the architect and potential for emerging practice.

Chapter 2.1 introduces the problems within the urban shopping situation. As discussed in the chapter, the critical elements of design failure are linked to business failure, insufficient retail mix and configuration, poor utilisation of space, crime, vandalism and neglect, lack of retail attractiveness, and neglect in targeting users. The chapter focuses upon the problems faced by the individuality within street retail to determine which urban design principles can resolve the problem which follows in the following chapter.

Chapter 2.2 investigates the strategies that would be employed by the urban planning and design environment through an investigation of current urban design principles. As discussed in the chapter, the four characteristics that were focused upon are the need for urban design, theories of urban design, urban design guidelines and the urban revitalisation strategies. The chapter discusses how urban design principles that would typically be used within the inner-city of Wellington are insufficient in revitalising some of the dead spaces that inhabit Wellington.

Chapter 2.3 discusses the implementation of specific shopping mall design principles that either supersede or complete the urban design principles to revitalise the forgotten spaces within Wellington. The chapter explores missing foundations for revitalising urban space through the use of shopping mall design principles, such as anchors, configuration, interior aesthetic and control. The chapter focuses upon the importance of these characteristics to revitalisation and how they benefit the retail community.

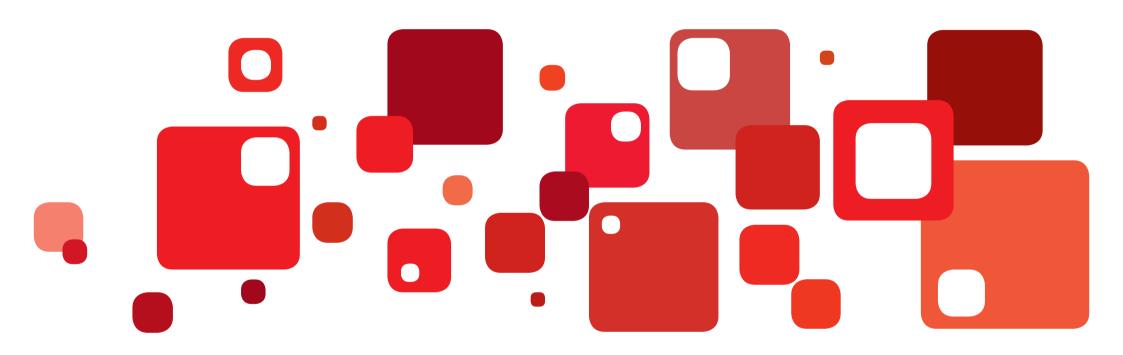
Chapter 3.1 reviews national precedents that have either successful or unsuccessful elements of community, business or design. These precedents have been chosen for their specific nature towards supporting aspects of the researched literature and allow an analysis of built designs that are currently operating within the New Zealand environment.

Chapter 3.2 reviews international precedents that have either successful or unsuccessful elements of community, business or design. These precedents have been chosen for their specific nature towards supporting aspects of the researched literature and allow an analysis of designs that are being either created or are currently being used by the public.

The fourth chapter investigates the implementation of the urban design and shopping mall principles in a specific inner-city site. It begins by introducing the design outcomes and an analysis of the site context. This is followed by an outline of design development preliminaries that would be done as though constructing a shopping mall. An analysis of the existing build structure is determined to define the boundaries of the design is done before the panning of the development can begin. Finally the design concept and process of the development is examined in relation to the literature studied. Following this chapter is a comprehensive discussion of the final design outcome.

The organizational characteristics are the difference between a shopping mall and the street retail sector. The shopping mall overlooks, communicates, organizes, maintains, and decides the entire entity that makes up the shopping mall, including the businesses and the space between them, whilst the street retail sector only looks after number one, themselves, which to them, ends at the front door. This is proposed as the major difference between the success and failure of the two sectors. With the shopping mall overlooking what happens even outside the boundary of each individual business, as the quality of the environment within the void space of the mall being

important to the business' success, the corridors or 'street space' of the mall remains to a very high stand and comfort for the public who utilizes the facility.



# PARTTWO

Literature Review

There is an apparent problem within street retail. The most noticeable is the current dilapidated areas of the inner-city being unmaintained and unorganised with business failure, poor retail mix and configuration, misguided retail attractiveness, undesired consumers, unutilised space and a visually apparent sense of crime, vandalism and neglect. Current urban design appears insufficient to rectify these disturbing problems and the only successful public retail space that has found a solution to the failing of public space seems to be within the private retail models. The literature review has been broken into four sections: The failings of street retail; the urban environment that has contributed to the problem (by neglect); the mall principles that might improve the situation and a conclusion which will clearly set out the design ideas that are intended to be incorporated into the design case study.



# Chapter 2.1

Introducing the Problem with Street Retail

The problem within the street retail has been organised into six categories. To revitalise a proposed site in the inner-city of Wellington it is important to introduce the problem within the street retail to determine an appropriate design solution.

ANZSIC industry classifications are:

A - Agriculture, forestry and fishing,

B - Mining,

C - Manufacturing,

D - Electricity, gas and water supply,

E - Construction,

F - Wholesale trade,

G - Retail trade,

H - Accommodation, cafes and restaurants,

I - Transport and storage,

J - Communication services,

K - Finance and insurance,

L - Property and business services,

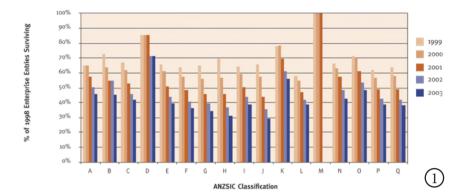
M - Government administration and defence,

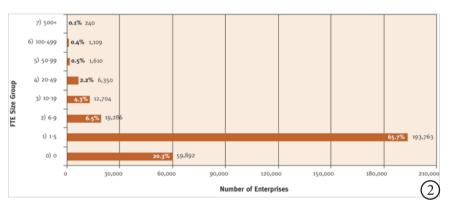
N - Education,

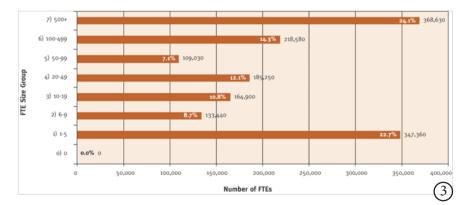
O - Health and community services,

P - Cultural and recreational services,

Q - Personal and other services.







### i | PROBLEMS WITH STREET RETAIL

#### Business Failure

This thesis must introduce business complications within the urban retail to determine a design solution and understand the causes of small business failure when given the social and community significance of the small business sector (Watson & Everett, 1993; Berryman, 1983; Cochran, 1981; Weir, 2011).¹ In New Zealand the contribution that is made by the small business sector is relatively significant to the overall economic situation (Lindsay, Wilson, Simpson, & Lamm, 2001). Within New Zealand, the lowest survival rates since 1998 were in the sectors of retail trades, accommodation, cafes, restaurants, and communication services (Ministry of Economic Development, 2004). These small businesses account for 38% of the New Zealand economy and employ 42.2% of New Zealand's full-time workers. Evidently small businesses act as a large resource towards the economic growth of Wellington's inner-city and smaller communities.

Within architecture's role towards business success upon the current urban street, particular attributes assist the individual businesses in creating additional consumers. These small but significant management techniques, (often enforced through Government policies) include creating tenant association through signage and sensory enticements and slowing customer movement by closing the street to vehicular traffic, making space for street entertainment and outdoor seating. These techniques are seen upon Cuba Mall, a unique atmosphere and character is created that diversifies the space from surrounding areas and in turn helps small business problems seen in other areas. Cox and Vos found that constant advice to businesses aided in the business' success, and when done in a confined environment can support the surrounding street retail businesses instead of destroying them, commonly seen done by large shopping environments (Cox & Vos, 2005; Cox & Vos, 2003).

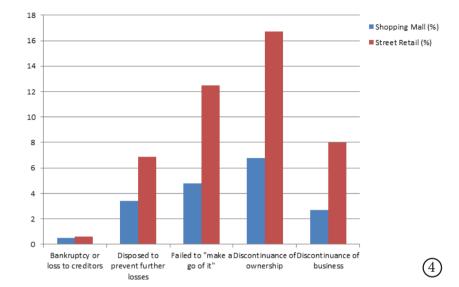
The urban environment needs to hold onto shoppers longer, whilst they are utilising sitting areas and outdoor seating to encourage slow movement through an area, Reynolds believes that this is

Figure 1: Survival Rates for 1998 - 2004 Enterprise Births by ANZSIC (Ministry of Economic Development, 2004).

The economy grew by the barest of margins in the December quarter, up just 0.2 % on the back of a recovery in manufacturing and a lift in the export log trade, but other sectors, such as the retail sector going backwards, falling 2.1 %.

Figure 2: Number of Enterprises by Size, as at February 2003 (Ministry of Economic Development, 2004).

Figure 3: Total Employment by Enterprise Size, as at February 2003 (Ministry of Economic Development, 2004).



achieved in large shopping environments through operating to maximise "foot traffic" by attracting the target consumers and keeping them on the premises for as long as possible - the more you give shoppers to do, the longer they stay and the more they spend (Reynolds, 1990). Large shopping environment design is essentially inward facing and detached from the external environment. In comparison, the urban landscape has free movement and only offers a small number of desirable retail outlets to each individual, often within different neighbourhoods, forcing consumer to haste between each location without the connection to the spaces and suggestions between. This is through desired shops not even being in the neighbourhood, so consumers have to cross busy streets at design intersections that may or may not be at convenient locations and at a pacey haste as opposed to the leisurely haphazard path encouraged by the mall.

The urban or street, as a management independent system takes on a great deal of undesired tenants, in New Zealand, usually consisting of thrift stores, risky new businesses or businesses with no credit rating. This, when not managed properly, reduces an areas attractiveness and higher end business are deterred from establishing their business near these types of businesses because of the high risk of the public's opinion. Therefore, it is essential to contest against the large scale franchises and enable the weaker 'start up' business' to be able to be placed in a similar environment, with a management dependent system in place to gain a hold in the market; a well-designed, uniform, attractive, high grade management based environment will ensure this.

Figure 4: Failure rates of New Zealand Small Business Retail 1994 - 2002

- Mall A and B are Shopping Malls
- Mall C and D are Steet Malls

(Cox, C., & Vos, E., 2003)

#### II | PROBLEMS WITH STREET RETAIL

### Retail Mix & Configuration

Retail Mix and Configuration, Retail Attractiveness and Targeting Users are closely related and much of the information can be translated between each section.

Retail mix is important as to investigate the coordination of anchor and smaller retail outlets. As this thesis aims to incorporate weaker start-up businesses, the importance of retail mix is essential in the design to allow maximum benefits for the small business sector. Urban design within the inner-city's urban fabric tends to focus upon the tourist market by saving the history of the city. This can be seen on Cuba Street which is maintained to include art galleries, restaurants and night clubs. However, despite the many attractions, what is missing downtown is a retail core. There have been many instances of this occurring not only in New Zealand (Bender, 2003, p. 33). Urban design in Wellington seems to be focused on functions or uses for space rather than users and entertainment. This encourages an assortment of individuals, old and young, together in the same space but does not consider how their needs may conflict. For example, in Courtenay Place, an area of theatres, cinemas, restaurants and entertainment, there are movie theatres that attract young children located across the road from adult entertainment (strip clubs and bars). The target of the users of different areas within the urban fabric has become chaotic, allowing businesses that should not be anywhere near each other to coincide, and the fear is that this has become the norm and acceptable within the inner-city. On the other hand, family orientated retail environments are managed so that a particular user is targeted to occupy the space, the consumers, in a manner that no one can be offended.

The configuration of the retail street is based upon the historic layout created and with all fairness cannot be manipulated to the extremities of a blank canvas site; however, the configuration of retail outlets does appear to be a problem. The retail mix isn't just a problem between different minorities, but because of the chaotic nature upon the retail streets, similar businesses open up in extreme proximity to each other. Most notably this is seen in Wellington upon Cuba Street and Left Bank with identical businesses next door to each other; with the two dairies opposite each other at the intersection of Ghuznee Street and the two Malaysian food outlets, one called Satay Kingdom and the other Satay House.

Colour	Emotional Response
Blue	A cool colour (makes room seem cooler). Calms and relaxes excited people. Makes time seem to pass quickly. Tends to stimulate thought processes and encourage conversation.
Green	Easy on the eyes. A cool colour. Restful and tranquil. Stimulates conversations. Makes time seem to pass quickly.
Red	Excites and stimulates. Induces aggression. Makes time seem to pass more slowly.
Yellow	A cheerful colour. Creates a feeling of warmth and happiness. Draws attention. Boosts morale.
Orange	Friendly, warm and vibrant. Exhilarating.
Violet and Purple	A cool colour. Tends to lend elegance and sophistication. Royal.
Brown	Relaxing and warm.
Grey	Depressing. Cool.







## iii | PROBLEMS WITH STREET RETAIL

#### Retail Attractiveness

Retail attractiveness is essential in creating an environment that enables maximum successful consumption by attracting maximum foot traffic. There are different aspects of addressing consumer preference, in respect to retail attractiveness, in that researchers either look at the mental theories behind shopping motivation<sup>2</sup> or the physical aspects of the shopping environment that attracts consumers. Urban consumers make holistic evaluations in view of the quality of ambiance and extent of arousal for shopping (Rajagopal, 2011). Rajagopal, 2011 segregates the types of analysis of retail attractiveness to reference the three broad segments of shoppers that include stress-free shoppers, demanding shoppers, and pragmatic shoppers. This enables managers or potential planners to develop appropriate retailing strategies and design to satisfy each segment (El-Adly, 2007).

Rajagopal found that the major attributes of retail attractiveness include comfort, entertainment, diversity, essence, convenience, and luxury from the perspective of shoppers (Wang & Lo, 2007). Retailers need to pay attention not only to the pleasantness of the store environment, but also to arousal level expectations of young consumers (Wirtz, Elsenbruch, Emini, Rudisuli, Groessbauer, & Ehlert, 2007). The lack of appropriate external and internal ambiance of retail stores is a major source of dissatisfaction among young consumers whilst making their pre-purchase decisions. Thus the higher the attraction in and around the retail store, the higher the satisfaction of urban shoppers and lower the perceived conflicts in decision process (Rajagopal, 2011).

The study by Rajagopal, 2011 reveals that the behaviour of urban shopper is guided by the logistics, accessibility, and location of the shopping area, demographic surroundings and agglomeration of shops in the commercial area. The discussions in the study also divulge that shopping arousal is largely driven by other attractions, interpersonal influences<sup>3</sup>, sales promotions and comparative

Figure 5: Users emotional response to certain colours (Quinn, T. R., 1981).

<sup>2</sup> Shopping motivation is one of the key constructs of research on shopping behaviour (Rajagopal, 2011).

Interpersonal influences are the personal connection to a location, for example the connection someone may have to believing in sustainability and supporting only companies that are very sustainable.

Figure 6: Which colours affects shopping habits (Seosmarty., 2009).

gains<sup>4</sup> among urban shoppers. Major factors that affect shopping arousal among urban shoppers are recreational facilities, location, ambiance and store attractiveness (Rajagopal, 2011) see also (McCloud, 1989).

As a marketing scheme that will allow a visual recognition of retail outlets, colour coordination between the different categories of outlets was researched in an effort to reduce the stress and rushed effect of shopping through colour. The theory is that the more the consumer is within a shopping environment, the more they spend within that location. Changing the colour scheme can change people's attitudes and perceptions of a store and can increase business. Colour can change the shape and add interest to a dull room, and can direct attention toward a specific object or away from problem areas. People tend to respond a certain way to different colours. (Bastow-Shoop, Zetocha, & Passewitz, 1991, p. 23) Warm colours such as red, yellow, orange and colours with red or yellow hues are stimulating and cheery making a room feel warm and intimate. Warm colours make a room seem smaller while making objects in the room appear larger for example a warm colour on the end walls of a long narrow room will appear to shorten the room. Blue, green, violet and colours containing blue are cool colours which help create a relaxing atmosphere. Rooms decorated primarily in cool colours tend to appear larger and more spacious (Bastow-Shoop, Zetocha, & Passewitz, 1991).

There are no absolute rules for choosing and combining colours, only flexible guidelines. Imagination and experimentation will find colour schemes that lend to the atmosphere and attract customers. The type of merchandise featured, such as hardware, jewellery, clothing, and other merchandising categories, will have an effect on the type of colour schemes that can be used and the extent to which they can be used. (Bastow-Shoop, Zetocha, & Passewitz, 1991)

There are many types of schemes for the combination of colours, including monochromatic, analogous, complementary, split complementary, double complementary and tone on tone scheme<sup>5</sup>; however, I believe that the triadic scheme is the most applicable to the revitalisation of space as well as segregating the categories of the merchandise down to three colours. The triadic scheme is

<sup>4</sup> Comparative gains are the advantages of a good or service being provided at a lower margin, i.e. a bargain.

<sup>5</sup> See Bastow-Shoop, Zetocha, & Passewitz, 1991, p. 25 for an overview of the different colour schemes

a collection of every fourth colour on the colour wheel for a total of three colours. This is a good combination of colours that can create the muted, traditional look as well as more vibrant colour characteristics of modern colour schemes. An example could be red, blue and yellow. (Bastow-Shoop, Zetocha, & Passewitz, 1991).

#### iv | PROBLEMS WITH STREET RETAIL

Targeting Users

There are many techniques for targeting desired consumers, including attracting the right consumers, shopping localities and having a new social agenda. Shopping malls are tending to strive for a new social agenda with Rajagopal, 2011 believing that within the emerging markets, shopping malls with multiplexes such as cinema theatres, food courts, and amusement corners for children are becoming the centre for a family's day out (Rajagopal, 2011). Goss, 1993 aims to explain that developers have wanted to moderate the collective guilt over obvious consumption by designing a fantasized dissociation from the act of shopping into the retail built environment. In other words, shopping makes consumers feel guilty, or insecure, but if we don't believe like we're shopping, then it's acceptable. This has helped the consumer pretend that the experience within the mall is segregated from the external 'real' world through a selection of successful design principles that aim towards the ultimate goal of developer profits. I think Goss's failure to consider the time-geography does undermine his argument slightly, however, the modern strip mall, which may be more closely related to my thesis topic, has a less constructed atmosphere than the indoor mall that is the focus of Goss's work, and in-turn, human behaviour would be experienced differently within these different atmospheres (Goss, 1993).

Ricks, 1991, discusses the importance of tenant choice saying that it is important that leasing agents plan the mix of tenants and their locations within the centre, inevitably excluding thrift stores that might remind the consumer of the materiality of the commodity and attract those whose presence might challenge the normality of consumption and conventionally indicate difficulty in attracting more desirable tenants. Vacant stores are hidden behind gaily painted hoardings, and we are assured that a store will be "opening soon" (Ricks, 1991). Hazel goes on further to mention that public services not consistent with the context of consumption are omitted or only reluctantly provided.

Shopping localities is important for the consumers that may not have access to distanced transportation or do not wish to travel long distances for the products they seek. Rajagopal observed that within the community's shifts in the shoppers' mobility options, many planning efforts aim to

develop neighbourhoods with higher levels of accessibility that will allow residents to shop closer to home and drive a lesser distance (Krizek, 2003). The proximity to shopping environments largely influences the choice of residence of urban dwellers and essentially depends on income and housing budget (Chiang & Hsu, 2005).

# v | PROBLEMS WITH STREET RETAIL

Utilising Space

There is a large unutilised opportunity by property developers within the inner-city of Wellington by not utilising the second floor level for public use. Rathbun, 1990 observed the idea that within the streetscape, retail tends to segregate demographic trends across a horizontal axis, whilst other shopping environments take advantage of the vertical structuring of space according to the social status of the targeted consumers (high/low level and upper/lower class.) This can be achieved through marking environmental clues such as ceramic tiles, types of finishing's, type of window displays and colour coordination. This lack of vertical structure within the urban landscape has architecturally segregated the first floor from the corresponding floors above as well as missing a prime occasion to gain a second level retail outlet (Rathbun R. D., 1990). This is discussed by Maitland stating that in multi-storey shopping environments, the design encourages vertical movement so that pedestrian traffic is exposed to shop displays on all floors. This is achieved through a specific design integration of movement patterns and other devises to persuade and invite people to move upward (Maitland, 1990). Brown, 1999 continues by stating how spatial and related visual patterns have deep behavioural and cultural constraints which are often overlooked, and when these patterns combine with non-rational human behaviours, serious decision and judgment errors are more likely. Brown claims that "the real intelligence, the central nervous system of a building, is its spatial configuration. The special central nervous system choreographs interface patterns: person to person, goods to person. If not adequately interconnected, parts of the building served by its spatial interconnection, or even all of it, will cause atrophy" (Brown, 1999).

In the article 'Design and Value', Brown focuses upon a very important part of the successful shopping design; spatial syntax, when properly structured, this link, within the shopping environment works top-down from the macro level of the street to the micro level of the merchandise, global to local, not bottom-up. Brown believes that spatial syntax is so important as to claim that in some cases a well-designed and otherwise attractive retail space can countervail a poor location. Whilst in-turn a poorly designed retail space can be redeemed by a good location, it is not inevitable, especially when a shopper has a choice on where to shop (Brown, 1999).

## vi | PROBLEMS WITH STREET RETAIL

Crime, Vandalism & Neglect

In the 1999 Wellington City Council Residents' Satisfaction Survey, only 30% of the residents felt safe in the central city at night. This followed the murder of a teenage boy in the city, sexual assaults and much negative media reporting (Coggan & Gabites, 2007). During a two-year period 2000–2001, 108 people from Wellington City died as a result of an injury, and nine of these were young people (aged 0–19 years). During the four-year period 2000–2003, 4,960 people from Wellington City were hospitalised overnight for treatment of an injury, and 1,375 of these were young people (aged 0–19 years). Wellington's backstreets in the inner-city can be a dangerous place at all hours with the lack of surveillance provided which has forced certain locations to be subject to criminal activity. This means that the increased surveillance through the design is essential (Coggan & Gabites, 2007).

The implementations of security options between shopping malls and the urban street are very different. Shopping malls employ personnel, technological, and recently design security measures and within the context of traditional shopping mall security, Kajalo and Lindblom state that security guard patrols were clearly perceived to be the most effective formal surveillance method (Kajalo & Lindblom, 2010). However the urban street utilises design to inform security. Examples of successful crime prevention through environmental design (CPTED) principles in Wellington are fencing and landscaping to enhance natural surveillance and controlling access to the perimeter of the space whilst directing the flow of people. CPTED also reduces or prevents crime through strategies for enhancing natural surveillance, vegetation and avoiding small alcoves, crawl spaces, dark corners, or areas that might provide hiding spots for dangerous patrons (CPTED, 2005).

There are many types of formal and informal security with the most known form of informal security being the theory of (CPTED) (Cozens et al, 2001; 2005). CPTED believes that every part of the site should be designed for maximum comfort, ease, and above all, safety of the customers. When done properly, such security designs can go hand-in-hand with aesthetic elegance (CPTED, 2005). This is an important design feature of CPTED shopping malls, as it enhances natural surveillance through activity support. CPTED asserts that "the proper design and effective use of the built environment can lead to a reduction in the fear and incidence of crime, and an improvement in the quality of

life" (Crowe, 2000). CPTED, being a multi-disciplinary approach to crime prevention, offers a wide range of strategies to prevent crimes. Moffat, 1983 divides CPTED into seven areas: territoriality, surveillance (informal and formal), access control, image/maintenance, activity programme support, target hardening, and defensible space (Moffat, 1983). CPTED design guidelines are essential tools when designing elements of security within a confined space without the presence of security, or at the very least minimising formal security.

Although there are many precautions to withstand crimes such as vandalism without there being a full presence of law enforcement schemes, such as natural surveillance and design devices, maintenance will be needed to repair and discourage criminal activities by designing in accordance to prepare for these disturbances. Maintenance is not only used to discourage criminal activities but to increase consumer spending through services such as cleaning, toilets and ambience all which make a town centre attractive (Whyatt, 2004). McCloud agrees with Goss adding that everything is to be kept at a very high quality to maintain the family appeal. The design has to create a safe, secure feeling and make sure it's not intimidating to anyone. Warnaby and Davies, 1997 describe how the customer is also buying their own individual "bundle of benefits" from the service provider when at a shopping mall or town centre (Warnaby & Davies, 1997).

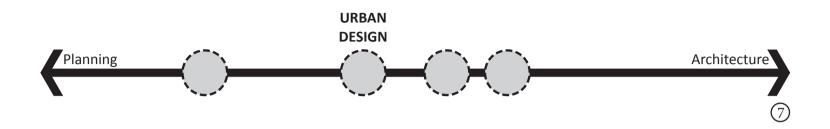
The apparent security in the urban street does not appear to be decreasing due to the urban design principles. The maintenance needed for the repairs and upkeep due to crime is expensive and by designing a safe environment, the costs typically used to repair the site can be utilised initially by creating an attractive atmosphere for the public. CPTED is a very well known, proven successful method of minimising crime within the urban fabric and will be utilised in the design where appropriate.



# Chapter 2.2

Defining the Urban Design Principles

Urban design as an activity has a very loose definition. While some consider it as a discipline in its own right, others consider it merely an 'interface' between other disciplines (Arida, 2002, p. 105). The role of urban design perceived by most actors and players in the development process of a built structure is that it is a limited and limiting definition of its true role within 'big architecture' (Rowley, Gibson, & Ward, 1996). The research into the urban design principles is essential in finding the current solutions for the street retail problems that have been investigated. This discovers the gap between urban revitalisation and the urban retail sector which will be completed by incorporating the shopping mall design principles.



# i | URBAN DESIGN PRINCIPLES

# The Need for Urban Design

Urban design theorists believe that urban design accommodates the psychological need for safety and demand for stimulation; the emotional need for identity, the creation of a feeling at home; the maintenance of architectural continuity; the design for perceptual need, environmental legibility for way finding/orientation; the promotion of interaction and communication among the residents; the increase of the attractiveness of the built-environment, and possibility for aesthetical experiences in the sense of "beauty" and physical comfort (Schroeder-Lanz, 1986, p. 538; Lee S.-J., 1995, p. 69). Urban designers believe that these ideas are a quality required for the benefits of human health, mental health being one of the rationales of designing urban environments (Creese, 1994, p. xiii).

The result of the modern movement in architecture since 1920s is cities with an almost identical look everywhere in the world (Poerbo, 2001, p. 8). The modern cities have lost their identity, a quality that was possessed by the cities of the past (Poerbo, 2001, p. 8). People can lose their attachment to a place, when they cannot see and feel the identity of their space. The feel of belonging to a home depends on this identity of the space and therefore, the identity of the region must be recreated. Urban design can accomplish this task by designing and creating the urban environment that embodies local values, culture, tradition, way of life, climate and its natural surroundings (Poerbo, 2001, p. 25; Rowland, 1995).

In contrast to Poerbos view, Lee determines that urban design acts as a design theory looking towards the future rather than Poerbos and Rowlands views of the past by stating that urban design shows the important development goals of the city (Lee S.-J., 1995, p. 204). Prinz supports Lee's opinion by stating that:

The nature of designing the city concerns above all to integrate the new into the existing, or to change the existing in a way that it suits for new functions, without removing it from its evolving context (Prinz, 1995, p. 22).

Urban design helps the functionality of a city as it extends beyond accommodating activities;

Figure 7: Placement of urban design principles within architecture (Arida, A., 2002).

it ultimately ensures the physical comfort of its inhabitants. The people need not only physical comfort, but they have an aesthetical need for beauty as well. The need for beauty is not a luxury, but it is a need of every psychologically healthy human being (Poerbo, 2001). Whether it is the composition of colour, the material or the form of the buildings, people love to be in a beautiful environment - both natural and man-made environments and can be manifested in every aspect of the existing. (Poerbo, 2001, p. 28). The built environment provides cues for behaviour, and it can be seen as a form of nonverbal communication (Altman, 1980, p. 20). The variety of environment and the importance of meanings, and their use to establish group identity suggest that designed environments are much more than physical objects (Poerbo, 2001, p. 25).

#### ii | URBAN DESIGN PRINCIPLES

### Theories of Urban Design

The theories of urban design that emerged in the 1960's addressed the relation of the human perception and the behaviour of the city, and after 1960, scientifically designed urban design theories have come forth that try to address the contemporary urban development practice (Cowan, 1996, p. 153). Within the context of this thesis, four theories of urban design and one theory of spatial design has been researched. These urban design theories include picturesque studies, image studies, environment-behaviour studies and typology-morphology studies, with spatial syntax as a spatial theory.

Until the late 1960s, picturesque studies of the urban landscape were the foundations and the base of urban design. These studies still play an important role in both the academic and practice of urban design. (Poerbo, 2001, p. 31). Moudon believed that the picturesque studies are not practiced as fully as they should have been, despite their popularity and believes that there has been no new publication for several years following this research and thinking mode because of the studies taking on the attitude of a naive "good-professional-knows-all" that has been criticized since the early 1970s (Moudon, 1992, p. 338).

The visual appearance of the physically built environment is important in creating cities with personality, which in turn, may increase the happiness or wellbeing of the residents. Urbanity will be fostered through public life in public space and must have a fine spatial quality (high degree of enclosure, and other aesthetical criteria). Each theoretician tried to achieve this goal in different ways (Poerbo, 2001, p. 37).

Cullen's suggestion for Serial Vision, which is the image of the previous environment that is still in our memory as we move into the next environment, is important in terms of place and content as the dilapidated areas need an edge different than the existing and surrounding areas. The significance of this is that although the pedestrian walks through the city at a constant speed, the scenery of cities is often revealed in a series of jerks and revelation (Cullen, 1976, p. 9). This can be achieved through an artistic improvement of the city as art has a social and economic value, as artistic town

structure transforms into the feeling of home and possibly also evolves into a point of interest for tourism (Sitte, 1983 reprint of 4th ed. 1909, p. 149). As art and place can be, and are intertwined with art representing an array of images alluding to memory and to their own perceptions and observations (McDonnell & Brown, 2004) and with place is about the human reaction to the position of his body in the environment. Cullen, 1976, put emphasis on the difference of being 'here and being there'. This difference emerges when a perceiving person is inside or outside a place, entering or leaving it. At this level of consciousness, there is a range of experience stemming from the major impacts of exposure and enclosure (Cullen, 1976, p. 10). In relation to the fabric of cities; colour, texture, scale, style, character, personality, and uniqueness, the city shows evidence of differing periods in its architectural styles and also in the various accidents of layout (Cullen, 1976, p. 11) that we can manipulate the nuances of scale and style, of texture and colour and of character and individuality, juxtaposing them in order to create collective benefits. This in fact causes the environment to resolve itself from Here and There into the interplay of 'this' and 'that' (Cullen, 1976, p. 12); meaning it is the objects and substance within the space that creates the relationship between a place and people rather than the place itself.

Edmund Bacon, 1974, just like Cullen, sees the importance of the awareness of space for urban designers and architects. According to his view, architecture consists of mass and space, but many architects tend to neglect the space and are more preoccupied to articulate the mass.

"The articulation of space so as to produce in the participator a definite space experience in relation to previous and anticipated space experience" (Bacon, 1974, p. 21).

Image studies in urban design are better than the picturesque studies in the sense that image studies try to find the residents' image of their city, instead of imposing the urban designer's image/ideals as in the picturesque studies. The image has great practical and emotional value for the residents: a clear image of the city not only helps people orient themselves, but it is also the basis of individual development that supports a social life in the society (Lynch K., 1960, p. 4). The most influential work in this category is Kevin Lynch's *The Image of the City* (1960). Image studies focus on the physiological, psychological, and social dimensions of environments as they are used and experienced by the people, and on how those aspects do or should shape design and design

solutions. The importance given in these studies to the untrained person's view of the surrounding environment has transformed urban design activity: nowadays, most of the complex urban processes use Lynch's five elements; paths, edges, districts, nodes and landmarks, as well as questionnaires, surveys and group meetings (Poerbo, 2001, p. 38) to ensure that the users perceive and organize spatial information as they navigate through the space.

Lynch suggested two stages of planning for the image of the city; the first is an analysis of the existing image through "mental mapping" of the residents and the second is designing a visual plan of the five elements based on the result of the analysis. Nevertheless, this concept remains abstract; there is no explanation about the relationship and the frequency of the image elements (Poerbo, 2001, p. 39). Michael Trieb of the University of Stuttgart proposed a planning process for urban design that consists of four phases, although this thesis only focuses on three, beginning with a research of the history of the image of the city; the second phase is defining the goals of urban design for the city in the form of a mission statement, similar to that of urban design guidelines and the third phase is an analysis of the existing image of the city (Trieb, 1988, p. 65). These concepts are found within the distract plans of the city, enforced by the Wellington City Council to assure that the existing image of the city is maintained. This allows the original character of Cuba Street to exist through historic uniform design principles and maintain a unique feature that segregates it to surrounding shopping facilities.

The study of environmental behaviour that has its root in psychology and sociology has contributed much to the field of urban design<sup>6</sup>. The process of perception, or cognition, until the conception of the built environment, and its consequence in terms of personal space distances, have helped urban designers in understanding the relation of people and their surrounding environment (Poerbo, 2001, p. 57). The relation of person-environment has become a genuine part of the architectural profession, which covers research on how people use, like, or simply behave in given environments (Moudon, 1992, p. 339). The environmental behaviour is important in creating an environment that

Principal authors directly related to the issues of the environment contained through behavioural studies within urban design include C. Alexander (Alexander C. S., 1977; Alexander C., 1979; Alexander, Neis, Anninous, & King, 1987) on a pattern language, A. Rapoport (Rapoport, 1977; Rapoport, 1990; Rapoport, Laconte, Gibson, & Organization, 1982) on residential environments, city, and settlement and Donald Appleyard (Appleyard, 1976; Appleyard, 1981) on city and streets.

the public uses appropriately without allowing any individual to feel uncomfortable about being within the site; this is seen in libraries as a known sense of behaviour is created when entering.

Humans perceive the world through many "channels" on their body; through vision, smell, sound, touch (the feeling underfoot as one is walking), kinesthetic (the sensation that is felt when one is turning or going up or down), and the movement and temperature of the air around the body (Rapoport, 1977, p. 184). Christopher Alexander, who is one of the more influential and recognised theorist attempted to find a timeless way of building human-friendly architecture and cities. The main task of urban design is to build places where people feel at home, which Alexander believes is alive and vibrant, peaceful and relaxed and a beautiful space (Alexander C., 1979, p. 8). Alexander's pattern language and the generative planning process are attempts to replicate the natural growth of the city in a synthetic way. The pattern language may be applicable, but an identification of the Wellington pattern should precede its application, as not all of them can be directly used or relevant to a New Zealand context (e.g. the pattern "South Facing Outdoors"). Alexander acknowledges that each town or neighbourhood has its particular set of these patterns, according to its prevailing culture, because the standard pattern varies from person to person and from culture to culture (Alexander C., 1979, p. 68). In practice, each development or each individual building project is to be conceived in such a way that the wholeness of a city on all levels, from building of public spaces to constructing of individual building until the detail design is preserved and grows as a whole (Alexander, Neis, Anninous, & King, 1987, p. 29).

Typology-Morphology research, known as typomorphological study, encompasses a long tradition of studying cities, their form, and particularly the socioeconomic processes that influence their production (Broadbent, 1990, p. 196). Typomorphological studies use building types to describe and explain urban form and the process of shaping the fabric of cities. Many, including architects, are convinced that buildings and their relation to open spaces are the essential elements of city form which have focused on classifying them by type to explain the physical characteristics of cities. Aldo Rossi suggested that the fabric of the city consists of two things; the general urban texture and the monuments (Rossi, 1973). It is important to hold onto the distinctive elements within a city that have held significance to individuals and have a strong importance to the community. If a design is to be accepted by the community, their unique treasures must be not only protected, but

emphasised.

Spatial syntax studies are an important technique when designing space. It can be applied as an attempt to understand the spatial relationships that motivate our everyday experience of the designed environment and the way it functions culturally and socially (Peponis, 2005, p. 1)<sup>7</sup>. It is about identifying, representing, and measuring the spatial relationships that help us get on with our lives and the creation of these relationships is among the main purposes served by our built environment. (Peponis, 2005, p. 1) This is achieved through an expanding set of analytical techniques and measures that are used to test a growing number of specialized hypotheses about the functions and effects of designs (Peponis, 2005, p. 2).

Winston Churchill states that "We shape our buildings, and afterwards our buildings shape us" (Brand, 1994; Ratti, 2003, p. 1).

The theories of urban design, although extremely vast, have been narrowed down in accordance with the inner-city environment and in terms of the integration of a shopping facility. These important guiding aspects of urban design can easily be translated into the design to allow the development, to not only be a contributing part of the Wellington region, but a part of the inner-city. The urban design theories also allow the design to function on a micro level, coordinating the spatial qualities within the site to allow maximum comfort, accessibility and connection to the public.

The major references in the field of spatial syntax are the books by (Hillier & Hanson, 1984; Hillier, 1996; Hanson, 1998), as well as the proceedings from the first, second, and third International Space Syntax Symposia held in London, Brasilia, and Atlanta, respectively.

<sup>8</sup> Churchill is reported to have used this statement twice: first in 1924 at the Architectural Association in London, then in 1943 when requesting that the bombed-out British Parliament be rebuilt exactly as before.

## iii | URBAN DESIGN PRINCIPLES

#### Urban Design Guidelines

The urban design guidelines are directions about the implementation of urban design principles. This thesis investigated the control and restraint of urban design principles into the physical environment.

In the United States of America over 54 million people now live in neighbourhoods where open space is supplied and governed privately through incorporated Home Owners Associations and the number is rising rapidly (McKenzie, 2005). Between 1991 and 2000, 83 per cent of residential communities built in Shanghai were gated (Su, 2000; Qu, 2005) and virtually all new private housing in China is managed by private management companies that are employed by the residents (Webster, 2005; Webster, 2006). This is a direction of public space becoming privatised, clarifying the allocation of property rights among co-consumers gives incentives to preserve and invest in open space. With co-ownership comes a greater degree of control and a higher probability that investments will yield increased utility or revenue in the case of commercial interests (Webster, Property rights, public space and urban design, 2007, p. 97).

The predominant problem during most of the twentieth century has been market failure, the market is said to fail in the efficient establishment of public goods because of information problems and the problems of organising a collective action (Webster, 2007, p. 94).

It is very difficult, and indeed impossible, that a thousand people should agree in any such action because of it being difficult for them to show such a complicated design, and even more difficult for them to execute it because of each individual seeking a way to free himself of the trouble and expense by laying the whole burden on others. A political society remedies both these inconveniences (Hume, 1978, p. 538).

The undersupply of urban design as a professional service is a tragedy of the urban commons that unfolds as too little public space is created (Webster, 2007, p. 94). Everyone wants more or better open space and is willing to contribute, but in the absence of a price mechanism where the private

owners, not only the government, can make an income through open space all stand to benefit and can be achieved through the collective actions of owners and an understanding of the retail sector (Webster, 2007, p. 94).

### iv | URBAN DESIGN PRINCIPLES

#### Urban Revitalisation Strategies

Cities in the mature economies are actively pursuing urban regeneration strategies such as cultural, retail and entertainment-led redevelopments to make the cities successful places to work, live, shop and recreate (Balsas, 2004). The literature on urban regeneration indicates that the adoption and application of the nature of regeneration strategies is dynamic and varies with time as urban planners and developers adopt and evolve revitalisation techniques (McCarthy, 1998; Carmon, 1999; Hulsbergen & Stouten, 2001; Verhage, 2005; Singhal, Berry, & McGreal, 2009). This shows that the urban revitalisation strategies are working, but not necessarily relevant when focusing upon non-present literature. The revitalisation of cities suggests accumulating the private and public areas or coordinating the public and private sectors to work together.

The private sector can contribute substantially to the regeneration of inner cities by adopting various business strategies. Some of these strategies are business-led partnerships with the community and/or the local authority (Hart, 2003), strengthening links for retail-led development (Lowe, 2005), providing leadership for revitalisation (Austin, 1998), and facilitating the competitiveness of a city by enhancing its enterprising nature (Williams G., 2003; Singhal, Berry, & McGreal, 2009). A stated objective of renewal strategies developed by the local authorities in cooperation with private and civil actors is the attraction of private investment (Verhage, 2005). Businesses in inner cities play a significant role in creating a vibrant entrepreneurial economy and act as powerful engines for social change (Porter, 2005). The literature on urban regeneration strategies can be grouped under five key themes: local economic development, property-led, retail-led, culture-led, event based, and entertainment-led urban regeneration (Singhal, Berry, & McGreal, 2009). This can be manipulated into the design by allowing the government and community to support the development of improving the public atmosphere whether this is through the government financially supporting or endorsing certain aspects of the development that could be either utilised or spread to other areas within Wellington; the community's relationship to the development can be supported through either local businesses or the development acting as a community event coordinator.

Local economic development is a process by which its four key partners; local government, the private sector, the not-for-profit sectors and the local community, have the opportunity to work together to create improved conditions for economic growth and employment generation by supporting the local area in strengthening its economic capacity for a better quality of life of all (The World Bank Group, 2006). The importance of 'business culture' to local economic development is by identifying it as one of the key factors relating to the entrepreneurial levels and dynamics of local businesses (Singhal, Berry, & McGreal, 2009).

The urban revitalisation strategies in summary are looking at the coordination between the different sectors; local government, the private sector, the not-for-profit sectors and the local community. This is an important aspect within the design as the (financial or non-financial) assistance from local governments allows aspects of the development to be more thoroughly developed, such as car parking and community facilities that assist areas outside the site boundaries, allowing a more concentrated design to be applied to the void space, or the street, that has become dilapidated. The community is an important aspect in and development as the support from surrounding businesses and residents allows the development to obtain a positive reputation and will be successful through the encouraging affirmations from the public.

Other LED factors are locational accessibility, physical factors, infrastructure, human resource, finance and capital, knowledge and technology, industrial structure, quality of life, community identity, and institutional capacity (Wong, 2002).

The urban design principles have addressed some of the problems within the street environment in the inner-city. The urban design principles rarely focus upon the revitalisation of space through the retail sector. The business failure, attractiveness (although not specifically retail attractiveness), targeting users and criminal provisions were all well addressed within the urban context. However, when focusing upon the utilisation of space and retail mix and configuration, which are important aspects in the success and sustainability of an area, the literature was very vague and tended to suggest the idea that if every individual of the public was to adhere to the urban design principles, then the revitalisation would be successful. According to the research this is highly unlikely to occur, as to coordinate such an enormous undertaking between so many people, no result would ever be determined. Therefore, the focus towards the implementation of successful design principles from the large-scale private retail sector was needed in order to orchestrate such a large retail development.



# Chapter 2.3

Discussing the Shopping Mall Design Principles

The shopping mall is a private urban shopping environment, designed to success economically. The collaboration of shopping mall design principles with urban design principles will allow a new market area to occur within the backstreets of Wellington. Successful design ideas are the use of anchors, configuration, the interior aesthetic and the advantages of controlling the shopping environment. These principles can address the inner-city problems apparent in the urban street through the cooperation of the city council, non-profit and community group to provide a positive environment for not only retailers and consumers, but the residential community and public groups that inhabit the inner-city.

# i | SHOPPING MALL DESIGN PRINCIPLES

#### Anchors & Retailers

The shopping centre is a self-contained shopping hub where the co-location of both complementary and substitutable retailers occur (Vitorino, 2011, p. 1). A variety of tenants may be considered for their suitability to the character, quality, and drawing power of the location. Tenants may have strong and sometimes apparently arbitrary views about where they will or will not go within a centre. A location that is good for one type of business may be entirely wrong for another. Placement within the tenant composition is important and complex. Grouping of tenants in the centre may follow either the 'mix' or 'match' principle as long as customer interest is maintained throughout. Stores can be placed in affinity groupings, but mixing is desirable (ULI, 1978, p. 72). Another principle of store location is that convenience good stores should be placed for ready access from the parking area. In fact, developers of regional mall centres often find it preferable to locate supermarkets and certain pickup personal service stores, such as dry cleaners, laundries, and carry-outs, in a separate building at the edge of a parking area, allowing immediate access for quick, in-and-out parking. A long walk into a mall to reach a convenience store will be neither comfortable for the customer nor appropriate for such a tenant (ULI, 1978, p. 72). The suitability of the tenant for the location, the pulling power or customer acceptance by reason of local preference for the merchant, compatibility and complementary status with adjoining stores and parking needs generated by the tenant are all general considerations for tenant location (ULI, 1978, p. 72).

Retail demand, or customer traffic generators, are created when customers are drawn to a particular shopping centre by an external force, usually a high-order, anchor tenant retailer (Eppli & Benjamin, 1994, p. 7). The entry decisions of anchor stores (traffic-generating stores) typically commit to a mall before smaller retailers who usually have multiple anchor stores that are highly-substitutable competitors who typically compete against each other (Vitorino, 2011, p. 1). There are many different categories of shopping centres ranging from the smaller neighbourhood centres to the much larger regional centre. There are different anchor tenants that are most suited to the different categories, but within the site of the inner-city, a speciality centre has the most accurate portrayal, whether located in a new structure or in a landmark structure or other building newly converted for retail

use, it must have at least one prime anchor tenant. Such a key tenant could be either a speciality retail store or a restaurant. This anchor tenant would be further assisted by the grouping of tenants being determined by the special nature of the trade area or according to the tenants' suitability to a unique structure, such as a rehabilitated historic structure (ULI, 1978, p. 69).

Tenant placement follows a simple rule: locate major or anchor tenants so that as much of the pedestrian shopper traffic as possible flows past the store fronts of supplementary tenants. Place a key tenant at each end of the strip or mall, for example, rather than side by side near the centre of the building. Arrange the parking and the major entrances and exits of the building so that the movement of customers to and from key tenants is convenient but also exposes the customer to as many other tenants as possible (ULI, 1978, p. 72).

Three theories of anchors and retail tenants were researched: central place theory, homogenous retailer's agglomeration and retail demand externalities which influence the shopping mall design principles into the existing urban fabric. Central place theory is the most developed theory of retail location. Central place theory models the relationship of retail trade between towns. First proposed by Christaller in the mid-1930s, came to the conclusion that the central place exists primarily to provide goods and services to its surrounding population. The city is in essence, a distribution centre. Although, Losch, 1954, modified Christaller's central place theory slightly by believing it was too rigid, stating that Christaller's model led to patterns where the distribution of goods and the accumulation of profits were based entirely on location. He instead focused on maximizing consumer welfare and creating an ideal consumer landscape where the need to travel for any good was minimized and profits were held level, not maximized to accrue extra (Briney, 2011). The theory earns its strength through its general structure and its ability to analyse complex locational problems under highly simplified conditions (Baskin, 1966)<sup>10</sup>. This is important as the consumer wants everything they desire in the one place rather than going to different destinations, therefore inner-city development is a prime location as it minimised the travel for inner-city shoppers whilst interacting with its surrounding areas, which can provide a service for them and in turn influence the greater Wellington region.

The central place is located at the vertexes (points) of equilateral triangles. They then serve the evenly distributed consumers who are closest to the central place (Briney, 2011).

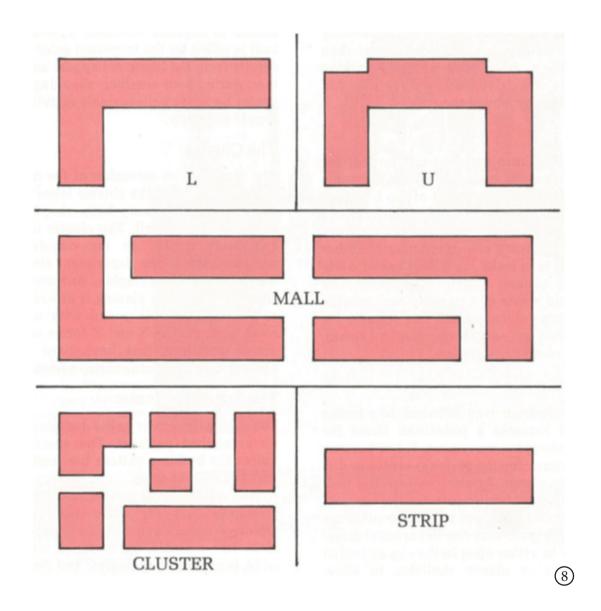
Retail agglomeration, which more generally includes the heterogeneous and homogeneous clustering of retailers, is based on both central place theory and the principle of minimum differentiation. The clustering of heterogeneous retailers can be explained in a central place framework through the reduced travel costs of multipurpose shopping, but the agglomeration of homogeneous retailers is not addressed in central place models. The principle of minimum differentiation explains the behaviour of clustered merchants who sell homogeneous products (i.e., women's apparel, shoes, jewellery, hardware, etc.) at a single location or shopping centre. The clustering of homogeneous retailers in a single location is also referred to as retail merchandise attraction (Eppli & Benjamin, 1994, p. 11). Although (Hotelling, 1929) first introduced the concept of clustered homogeneous firms, it is (Boulding, 1966) who first uses the term "principle of minimum differentiation." Homogeneous retailer agglomeration establishes the theoretical basis for comparison shopping at agglomerated sites. Homogeneous retailer agglomeration provides a simple and predictable model of the clustering of retail activities, one that minimizes the complexity of spatial purchasing patterns. Allowing for the combining of similar retailers in one location, homogeneous retailer agglomeration is a necessary condition for the existence of similar retailers at one location; maximizing consumer utility being at the heart of homogeneous retailer agglomeration.

Retail demand externalities refers to an external benefit not transmitted through price, for instance the benefit of people going to a certain retail environment because it supports a quality that the individual likes. McCloud, 1989 and Goss, 1993 state that the consumer is mostly always going to prefer to go to the shopping mall because it offers these needs that the individual retail market cannot obtain, they have created the 'one stop shop' through retail mix, good parking, good prices, good environment, clean, safe and close to home.

The main failure in much of the literature (Goss and others) is that it makes value judgements such that the success of mall design is a failure towards human society. For example, to consider that people go to malls because they've been deceived into feeling that they're not consuming; when it is more likely, whilst keeping faith in humanity, that consumers go to the mall because it offers something that is genuinely desirable, i.e. 'the one-stop shop' that it offers entertainment, a forum for social contact and a retreat from inclement weather (Samuelson, 1976, p. 449). The retail sales of smaller non-anchor tenants increase when an anchor tenant retailer is present in a shopping

centre<sup>11</sup> (Ghosh, 1986). According to (Ingene & Ghosh, 1990), the benefits flow only in one direction from anchor tenants to non-anchor tenants. Different from the homogeneous retailer agglomeration benefits discussed previously, where similar retailers benefit from the two-way flow of customers, retail demand externalities are where a customer draw is one-way from anchor tenants to nonanchor tenants (Ingene & Lusch, 1980). The customer draw of anchor tenants is primarily dependent on the retailer's image. Favourable retailer image, which results principally from factors under the chain's control, can draw customers from greater distances (Nelson, 1958; Marcus, 1972; Doyle & Fenwick, 1974-1975; Stanley & Sewall, 1976). The retailers 'image' can consist of something as simple as gaining a positive impression through community values.

<sup>11</sup> Ghosh (1986, p.91) defined the one-way customer draw of the anchor tenants to the non-anchor tenants as follows: "Realizing that the low-order store benefits substantially from associating with it [the highorder store], the high-order store may claim part of the excess revenue [to the low-order firms] as subsidies or side payments [to the high-order firms). In practice such side payments often take the form of rental subsidies. Developers of shopping centres offer land parcels to high-order stores-typically "anchor" department store-at rates substantially less than those available to lower-order stores."



#### ii | SHOPPING MALL DESIGN PRINCIPLES

#### Configuration

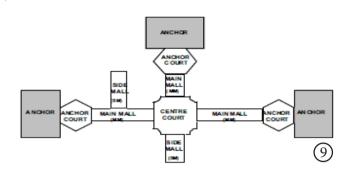
Configuration is a very important design principle of the success of shopping malls and has been perfected through the control over the configuration of a shopping hub. A shopping hub consists of a large cluster of retail stores in close geographic proximity to one-another (Vitorino, 2011, p. 1). The original shopping centre configuration concept pattern started as a strip with parking in the rear, at the sides, or in the front. The L, U, and T were variations designed to fit restricted sites and special locations with respect to adjacent streets. Then the stores courageously turned away from the public street with two facing strips separated by parking between the storefronts. Later this intervening parking space was contracted and transformed into an open, landscaped mall. The mall structure, with its shop frontages became an island surrounded by parking space (ULI, 1978). There are five traditional configurations commonly used in mall design. These consist of:

- The Strip: A line of stores tied together by a canopy over the sidewalk, which runs along the fronts of the stores. Economical for small centres, but must be kept with a reasonable length to avoid excessive walking distances and difficult merchandising.
- The L: Basically a strip, but with one end turned. Good for corner locations.
- The U: Basically a strip with both ends turned in the same direction.
- <u>The Mall:</u> Essentially a pedestrian way between two facing strips. The mall may also take other shapes, an L for example.
- <u>The Cluster:</u> A group of retail buildings separated by small pedestrian malls or courts.

(ULI, 1978, p. 87)

The movement throughout the shopping mall is an approach within architecture that misses the opportunity to raise interesting questions concerning the design in terms of how natural laws of movement are seemingly opposed inside a shopping mall (Fong, 2003). Fong perceives that the classic dumb-bell concept, large anchors at conflicting ends, is an important factor within mall dynamics in attracting consumers into and through space. The Urban Land Institute, 2002 provides a cluster design diagram of the spatial elements of a typical regional shopping centre. See the figure to the left.

**Figure 8:** Traditional configuration of shopping mall design (ULI., 1978).



Hillier (1993 and 1996) is in opposition with Fong in relation to anchor purpose and success, stating that "natural movement is the proportion of movement on each line that is determined by the structure of the urban grid itself rather than by the presence of specific attractors or magnets" (Hillier, 1996, p. 161) (see also (Coleman, Shopping Environments: Evolution, Planning and Design, 2006).

The schemes discussed by Fong, Hillier and others are relevant to create a stronger analysis of shopping mall design through retail configuration, whether there is a form of attraction or simply just the configuration of corresponding outlets. It would appear that although principles of attraction do have contributory effects on the distribution of movement through the arrangement, placement and allocation of space in the tenant mix process, configuration still provides a stronger predictive power, yet the addition of an attractor increases the foot traffic considerably. Kuribayashi and Kishimoto, 2009 discovers the successful point of configuration used by 'shopping malls', and compared them to the 'shopping district'. Through this analysis, the results showed that the sampled shopping malls were successful in attracting the pedestrians to the core compared to the sampled city centre shopping districts. Also, it was shown that the matching of customers' behavioural pattern and shop locations is significant in the creation of successful shopping environments (Kuribayashi & Kishimoto, 2009) (see also (Colwell & Munneke, 1998).

In contrary to the retail street, which tends to be chaotic, the retail mix within shopping mall design is heavily managed towards a selection of particular retail outlets that gives the consumer a broad

range of choices, clustered together within similar demographic classes so that there is no financial competition between similar outlets (Goss, 1993). The original shopping centre configuration has developed and transformed, with Crawford stating that Americans now shop in malls that look like cities and in cities that look like malls (Crawford M., 2002, p. 30; Fong, 2003) (see also (Beyard & O'Mara, 2006; Colwell & Munneke, 1998; Coleman, Shopping Environments: Evolution, Planning and Design, 2006; Hunter, 2006).

"Shopping malls are built to replicate the retail offer in established city centres, providing comparison shopping in a 'continuous' selling space on goods... all under one roof" (Fong, 2003, p. 10.1).

This is a result of suburbanizing downtowns and urbanizing malls. Today, mall design approaches tend to create more attractive spaces encompassing both interior and exterior shopping environments named hybrid centres (Crawford M., 2002, p. 30). The 'hybrid centre' provides largely the same collection of retail and leisure facilities as the standard mall, but has a different configuration as a reaction to the failure of standard mall formats (Coleman P., 2007, p. 113). Coleman continues by adding that the combined environments in a single centre give the customer the convenience of providing a wide-ranging retail offer under the protection of enclosure along with the natural ambience and visually richer environment of the external street. This new hybrid centre configuration has transformed the mall to become the centre of the city or the mall to develop into a city itself (Crawford M., 2002, p. 30; Lowe, 2005). Robertson explains that the inner-city shopping mall takes the suburban mall as model for the direct competition, but, the inner-city mall developed mostly vertically rather than copying the horizontal configuration of suburban mall, because of the higher land values of downtown (Robertson, 1997, p. 391).

Tenant selection and configuration is the most important aspect within the configuration of the mall design. A tenant appropriate for one centre could be a mistake in another. Selection of store types is currently left to the individual developer because of the greatly varying income ranges and other characteristics of the tributary population, inducements to impulse buying, local buying habits, store sizes, and merchandising practices in different site conditions and various geographic areas (ULI, 1978, p. 72). In an urban context, this is done on an ad-hoc basis by individual property

Figure 9: Example of anchor placement and configuration (Urban Land Institute, 2002).

owners seeking to rent their retail space. The urban planner has extremely limited involvement in the process. This gap provides opportunity for a change in the role of the architect is to propose particular tenants that support the design motivation.

FACTOR LABELS AND ITEMS	ROTATED FACTOR LOADINGS	RELIABILITY CO- EFFICIENT
Aesthetic Ambience		.75
- To look at the interior design of malls	.85	
- To enjoy the architecture of malls	.78	
- To find unique crafts	.66	
Economic Incentives		.75
- To find good prices	.84	
- To comparison-shop to find the best for my money	.81	
- To hunt for a real bargain	.79	
Diversion / Browsing		.73
- Just so that I can get out of the house	.80	
- When I am bored	.79	
- Just to browse	.76	
Social Experience		.71
- To talk with other shoppers	.77	
- To simply enjoy the crowds	.76	
- To watch people	.72	
Convenient Service Availability		.64
<ul> <li>To visit medical /dental / vision care office(s)</li> </ul>	.74	
- To use hair salon services	.73	
- To use banking services	.64	
Meal / Snack Consumption		.71
- To have a meal at a restaurant	.82	
- To have a meal at the food court	.80	
- When I want to get a snack	.60	

#### iii | SHOPPING MALL DESIGN PRINCIPLES

Interior

Research has found that a customer of a modern shopping centre is not only concerned about tenant mix and facilities provided in the shopping centre but also the building quality which provides comfortable environment for the inhabitant. The building quality includes the facilities as well as exterior and interior design of the building. Each element has a different importance level for the tenants and occupants (Susilawati, Rahardjo, & Yudiyanty, 2003, p. 2). Yudiyanti, 2002, identified important criteria in designing a shopping centre by stating that the main building, interior and exterior design, layout of shopping centre, access, signage, heating, ventilating and air conditioning system (HVAC) as well as electrical and lighting systems are considered by architects in the design process (Yudiyanty, 2002; Hall P., 1988; Arismunandar & Saito, 1995). Parking facilities, security system and other additional facilities are also vital factors in the shopping centre design (Scott N., 1989; Mc. Cluskey, 1978; Redstone, 1973).

Today, there is a tendency to move away from fully enclosed malls, with inner-city shopping malls being more integrated into urban fabric, combining open spaces with enclosed interior space (Kocaili, 2010). Furthermore, some shopping places are becoming open public spaces with untempered, open and covered streets, fully integrated with the existing urban fabric (Coleman P., 2007).

The shopping motivations results by Kang, Kim and Tuan who summarizes the results of the factor analysis which was run using the principal component approach with a varimax rotation<sup>12</sup> allows a scale of importance between design aspects within the shopping mall. Results indicated that the 35 items can be successfully captured by six factors; aesthetic ambience, economic incentives, diversion or browsing, social experience, convenient service availability and meal or snack consumption (Kang, Kim, & Tuan, 1996).

From their inception, enclosed malls have offered patrons the advantage of climatic comfort and freedom from the noise and traffic that characterize other shopping venues. Some shoppers may

Figure 10: Shopping mall motivation factor analysis (Kang, J., Kim, Y.-K., & Tuan, W.-J., 1996).

<sup>12</sup> See (Kang, Kim, & Tuan, 1996) for more information about the principal component approach with a varimax rotation.

be interested in seeing new items and learning about new trends whilst others may go shopping when they feel a need for exercise or leisure time (Hirschman & Holbrook, 1982; Tauber, 1994). Malls have become important places that provide opportunities for social experiences outside the home like meeting friends, and watching people, especially for young people and mature consumers (Richardson, 1993). More recently, mall interiors have evolved from comfortable yet mediocre spaces to architecturally rich spaces with lavish materials and sophisticated design elements (Gregorson, 1988). The results in the shopping motivation table confirm such trends. As captured in 'Aesthetic Ambience', consumers go to malls 'to look at the interior design of malls,' 'to enjoy the architecture of malls,' and 'to find unique crafts.' This suggests that consumers may choose the malls based on some decadent influences such as fitting their personal image and aesthetic preference, and may have a higher chance of visiting those malls or shopping centres which provide such a desirable aesthetic ambience (Kang, Kim, & Tuan, 1996, p. 19). Consumers find the shopping mall environment significantly positive and exhibit higher levels of approach and impulse buying behaviours, and experience enhanced satisfaction when retail ambiance is congruent with the arousing qualities (Mattila & Wirtz, 2004).

According to Jacobs, the main public spaces of a city are the streets and sidewalks; "Think of a city and what comes to mind, the city's streets. If a city's streets look interesting, the city looks interesting; if they look dull, the city looks dull". Streets give an identity to a city (Jacobs, 1961, p. 29) and in this manner, another important factor as an urban experience, in generating life and activity, is 'movement through public space and pedestrian flows' (Carmona, Marshall, & Stevens, 2006, p. 168). Thus, an active pedestrian or street life is important for the quality of public atmosphere of an urban space and it can only exist by worthwhile destinations that are easily accessible on foot (Duany, Plater-Zyberk, & Speck, 2000). An active movement through public space can be considered as both a catalyst and a result of vitality and diversity qualities of space. People socially tend to go to more crowded public places for more interaction and activities. As a result, the city elements convert into interior space elements to create 'an illusion of city space', consequently, shopping malls tend to be an alternative to the city centre (Birol G., 2003, p. 424). However, it is not enough to reinterpret the urban fabric inside the shopping mall to achieve the genuine urbanity. An enclosed shopping mall without any connection with urban fabric cannot be considered as urban public space as it is only a simulated urbanity that is stuck inside a box (Kocaili, 2010, p. 12). Birol

City Elements (Lynch)	City Space	Shopping Mall
Nodes are points, the strategic spots in a city.		
Edges are the linear elements not used or considered as paths by the observer.		
Paths are the channels along which the observer customarily, occasionally, or potentially moves.		
Districts are the medium-to-large sections of the city.		
Landmarks are another type of point-reference, which the observer does not enter within them.		

G., 2005, p. 424 has offered city elements in shopping mall, which are defined by Lynch K., 1960 and adapted to interiors by (Weisman, 1981) and (Passini, 1984).

Shopping centres are an attraction for consumers through a series of specific design installations that are replicated from the external market, and improved to create a more desired shopping experience (Fong, 2003) (see also (Beyard & O'Mara, 2006; Colwell & Munneke, 1998; Coleman, Shopping Environments: Evolution, Planning and Design, 2006; Hunter, 2006).

"Shopping malls are built to replicate the retail offer in established city centres, providing comparison shopping in a 'continuous' selling space on goods... all under one roof" (Fong, 2003, p. 10.1).

Figure 11: City elements in shopping mall (Compiled upon (Birol G., 2005, p. 424)) table of 'City elements in shopping mall' and photos of Wellington City and Wall Street Shopping Centre in Dunedin (Kocaili, B. E., 2010).

# IV | SHOPPING MALL DESIGN PRINCIPLES

#### Shopping Mall Control

The design of shopping malls, even from the first developed, tended to be physically and metaphorically inward-facing, with malls following theories of how customers could best be enticed in a controlled environment. The birth of the first fully enclosed, two-story shopping mall (Kowinski, 1985, pp. 115-119) sealed off the open spaces, and allowed the complete mechanical control of the natural climate, creating an artificial Eden that remains at a constant and perfect temperature. Although the first enclosed shopping mall was contained to maximum shopping through optimum weather conditions, the covered mall became the norm for even the best climates (Crawford M., 1992, p. 22). Presently a controlled environment is a term that is used when describing a standard shopping centre, yet aspects of crime and environmental control, which are very important, are a second form of control that the shopping mall implements.

The mall currently controls more than the indoor environment, investigations and research into the control of the inhabitance, whether conscious to the public or not, is a very importance factor of success within the mall. Scott, 1989 describes three examples that are achieved through the use of shopping mall control which are the drama of movement, keeping the shoppers' interested, and using planting, water and large scale elements. The control of external appearance can be important especially for instance in environmentally sensitive areas such as national parks, areas of outstanding natural beauty, conservation areas and areas where the quality of environment is of particularly high standard. Designers should control design details only if the sensitive character of the area or the particular building justifies it (Scott N., 1989, p. 107).

Foucault, an influential theorist on sociological control, associated modern society with Jeremy Bentham's "Panopticon" design for prisons. Foucault suggests that a "carceral continuum" runs through modern society, from the maximum security prison, through secure accommodation, probation, social workers, police, and teachers, to our everyday working and domestic lives. All are connected by the witting, or unwitting supervision of some humans by others (Foucault, 1977). Lianos states that after the Foucauldian model, often misunderstood and projected without distinction onto the present, the study of social control has not progressed much (Lianos, 2003). McPhail and

colleagues (McPhail, Powers, & Tucker, 1990; Tucker, Schweingruber, & McPhail, 1999) employed perception control theory to analyse how the movements of collections of actors, simulated as agents operating with individual control systems, have similar properties to those observed in non-simulated social environments. In other words, they show how apparently coordinated action arises without the need for shared reference signals (Robinson, 2007). Furthermore, in order to behave rationally a consumer would have to be aware of all the available consumption options, be capable of correctly rating each alternative and be available to select the optimum course of action (Schiffman & Kanuk, 2007; Simon, 1997). However, it is more probable that individuals are seeking satisfactory rather than optimum choices (Kahneman & Tversky, 1979; Simon, 1991, p. 4; Simon, 1997). In contradiction of Lianos's belief, shopping malls encompass increasingly extensive and sophisticated approaches to social control, such as increasing reliance on closed-circuit camera surveillance and other modern technologies (Newburn, 2001; Williams & Johnstone, 2000).

The most obvious among social control efforts is the existence, in virtually every mall, of a visible, apparently professional, uniformed, and even, in rare cases, an armed private security force. Manzo, 2010, believes that it is inaccurate and even irresponsible to reduce social control to police work, whether private or public (Manzo, 2010) as the result of these security investments might be that consumers may ultimately feel very uncomfortable at shopping centre which would be bad for business (Coleman, Shopping Environments: Evolution, Planning and Design, 2006). Clearly, formal surveillance must be promoted as a discreet element as much as possible (Coleman P. , 2006). Although these figures are based on survey from USA from mid 1990s they still give general picture of safety and security concerns of consumers which is why Coleman's perspective on security being discreet is extremely important. Hazel, 1992, agrees by stating that the key to successful security apparently lies more in an overt security presence that reassures preferred customers that the unseemly and seamy side of the real public world will be excluded from the mall (Hazel, 1992). Scott, 1989, who assumed this before the availability of heavy technological surveillance was obtainable, believed that the cheapest and most effective way to control vandalism is high quality lighting (Scott N. , 1989, p. 69).

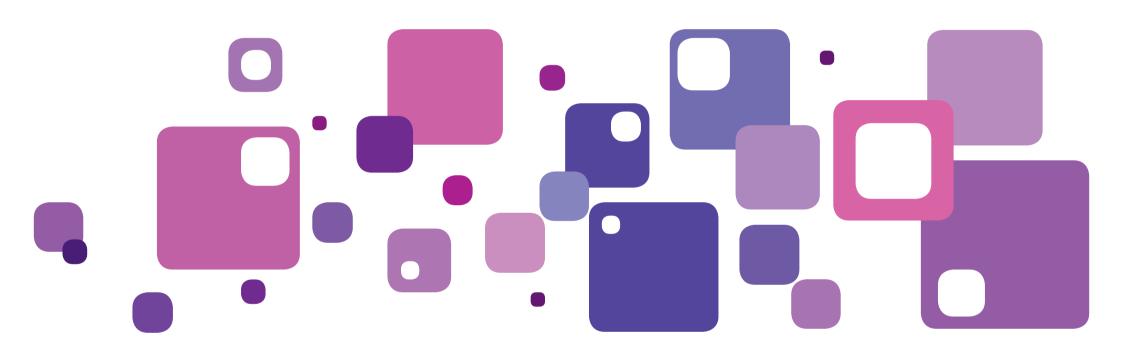
Shopping development owners and managers have aspects of control over the design of the tenants business by architecturally controlling and co-ordinating the design quality to compliment the

concept of the shopping centre (Scott N. , 1989, p. 179). Shopping hour regulations have existed throughout time and have recently became particularly constricting (Rouwendal & Rietveld, 1999). While a number of countries have subsequently relaxed their regulations, numerous countries, and local governmental units within countries, continue to constrain the hours during which shops may be open. A number of researchers have considered the effects of such regulations (Huxley, 1973; Morrison & Newman, 1983; Ferris, 1990; Clemenz, 1990; Clemenz, 1994; Lanoie, Tanguay, & Vallee, 1994; Tanguay, Vallee, & Lanoie, 1995; Thum & Weichenrieder, 1997; Rouwendal & Rietveld, 1999) with shopping centres not only have trading hours imposed for a collective operational space, but also for crime prevention factors. These stringent hours have allowed malls to be specifically designed as a day space, with only minimal consideration for night activity, usually for the benefit of public safety and security (Hendricks, Landsittel, Amandus, Malcan, & Bell, 1999, p. 996). However, a seemingly 'public' day space is often unutilised at night, creating a closed atmosphere, undesirable within the inner-city that is still engaged at night and must be manipulated and utilised at all hours.

Shopping malls do not only have control over the tenants but ensure control over the consumers subconscious, and physical movements by designing and implementing elements that correspond with regular human behaviour. The guidelines are usually concealed visually to the public, (Predtetschenski & Milinski, 1971; Sandahl & Percivall, 1972; Transportation Research Board, 1985) which are however, not very well suited for the prediction of pedestrian flows in pedestrian precincts or buildings with an exceptional architectural design. Although many people have the feeling that human behaviour is 'chaotic' or at least very irregular in complex situations, in standard situations however, individuals will usually not take complicated decisions between various possible alternative behaviours, but apply an optimized behavioural strategy, which has been learned over time by trial and error. Hence a pedestrian will react to problems, other pedestrians, and obstacles in a somewhat automatic way (Helbing, Molnar, Farkas, & Bolay, 2001, p. 364). These controls held by shopping development owners and managers know that this control allows the consumption to remain at its maximum; however, the balance between the control of the shopping centres and the control of the occupant still remains with one assumption commonly held by those who seek to empower consumers is that consumers will perceive any increase in personal control as a benefit (Wathieu, et al., 2002, p. 298), therefore there is a limit to the amount of control a consumer will withstand without being uncomfortable within the environment. A very clear example of this would

be that although heavy physical surveillance can act as a deterrent towards crime and vandalism, the negative potential of affecting the business success of the retail sector because of their presence suggests that the design of the development must enforce security to minimise the need for physical surveillance.

The shopping mall design principles proposed are all features manipulated from the original street atmosphere and the translation back to the street is just as transparent. The anchors and retailers are important as to bring an influx of consumers to the development and to coordinate their movements between opposing ends. This allows maximum retail displays to the smaller businesses which will contribute to the business success and organising the current chaotic retail mix upon the street. The shopping mall configuration techniques is important as to allow an appropriate atmosphere to be created which also assisting the current retail mix and configuration upon the street, but also utilises all the available space within the site. The interior of shopping malls researched assists the retail attractiveness and establishes appropriate users within the site which is a problem upon the street as well as enabling the space to become a uniform atmosphere that allows the space to be manipulated from individual retail outlets to a collective destination shopping hub. Finally, the control within the shopping mall supports crime prevention and allows a control over the consumers and retailers, allowing a specific and desired social behaviour as well as assisting towards business success, good retail mix and configuration, retail attractiveness, targeting the right users and utilising all the available space.



# PART THREE

Precedents

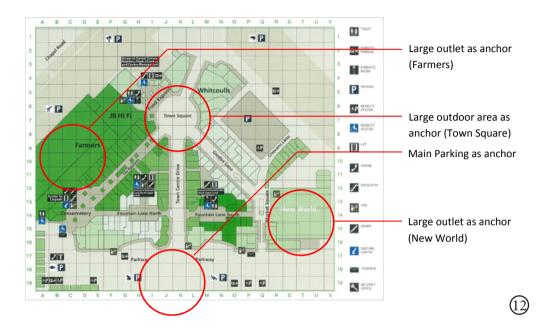
The precedents selected show examples how these issues have been addressed in practice as well as providing evidence of similar and variant incorporations of urban design and shopping mall design principles. The precedents chosen are architectural designs by both prominent architects and commercially successful designs by 'unnamed' architects.



# Chapter 3.1

Reviewing National Precedents

The national precedents act as built examples of the literature studied, which have been accumulated from global academic sources, to a national setting to see any similar and variant incorporations of the urban design and shopping mall design principles into the local built environment.



## i | NATIONAL PRECEDENTS

#### Botany Downs, Auckland

Botany Downs, On Chapel Street in Auckland, has created a successful community based design by seemingly replicating a traditional town centre. The town square, which is a casual meeting place, allows varying groups of individuals to culminate within the same space whilst allowing all individuals to remain comfortable. This has been achieved through the design by two apparent strategies; the first is the historic nature of the development, creating a community effect or a small town centre that offers all needed goods and services within one location and the second is that the centre has been designed to appeal to family users which has created a behavioural control over the public within this space by people knowing how to act once they enter the centre. This is also reinforced by Botany Downs playing a role in the local community by supporting local community groups and participating in a range of programs and initiatives (AMP Capital Shopping Centres, 2010). Furthermore, Botany Downs Shopping Centre acts as a focal point for the rapidly growing neighbourhood. This familiar centre is one of the largest outdoor shopping complexes in the southern hemisphere; it allows for an indoor and outdoor shopping experience whilst having the safety and comfort of a traditional box mall. There are also surrounding retail areas around the mall that are supported by the influx of consumers from the mall.

The layout design and configuration is another key feature of the success of the mall. There were no apparent businesses failing within the mall and the one unoccupied space was promising an 'opening soon' sign; the retail mix consists of everything a consumer could need or want which applies to the design of the mall replicating a traditional town centre; corresponding anchors allows the public to move between them forcing the consumer to move past as much merchandise as possible; the maintenance and crime prevention were highly enforced with cleaners constantly on site and security systems such as patrol and mechanical being apparent; all these principles act towards the success of the shopping mall.

However, on the unsuccessful side of Botany Downs, the overall design of the shopping mall is unconventional in design by falsifying the idea of shopping even further by building new but replicating different eras of architecture and is neither desirable nor a sustainable inner city retail

Figure 12: Botany Town Centre plan showing configuration and elements (Botany Town Centre, 2011).

















neighbourhood as these environments already exist in other parts of the city and the necessary factor of building already out of fashion architecture without the rich atmosphere attached to them through time. The developer has manipulated the traditional town centre into a large scale shopping mall to benefit the community environment which has resulted in the streets, frontages and even different architectural stylistic movements are represented as an obvious artificial space. There have been design decisions within this shopping mall that have come into question. In my opinion, by creating a falsified timeline of character within the shopping mall to produce a community based atmosphere is completely unappealing. Also, shopping centre administrators are reconsidering the original plan, agreeing to place a roof above an exposed area. This is interesting when comparing Porirua's City Centre decision to remove their canvas roof in an effort to revitalise that area.

Figure 13: Botany Town Centre personal pictures showing the architectural elements and design implementations.



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# ii | NATIONAL PRECEDENTS

City Centre, Porirua

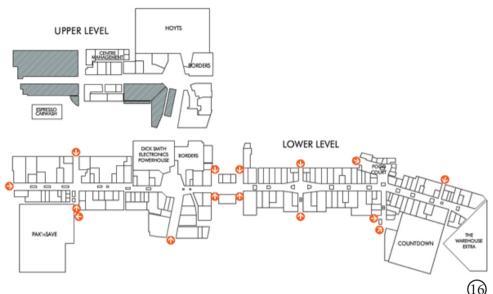
There are times when Porirua's City Centre has more resemblance to a morgue than a vibrant and thriving retail destination. City Centre revitalization committee chairman Trevor Campbell said the city centre's key problem is that it does not meet meets 21st century needs (Presstige Community Newspapers, 2011). North City, a mall that opened next door in 1990 was extended seven years later. The pull of North City forced Porirua City Council to upgrade the city centre with canopies costing \$4 million which was installed to provide cover for shoppers. Therefore in this instance the co-location of a shopping mall and the street was detrimental to the existing street retail, although the desire to improve the atmosphere of the area to attract more consumers cannot be considered a bad development. While they proved successful in protecting them from the rain, they also had the unintended effect of keeping out the sun, ensuring the area underneath was often cold and uncomfortable (Presstige Community Newspapers, 2011).

The Porirua City Council, differing from Botany Down's decision, has determined to take down the distinctive white canopies in an effort to revitalise the heart of the business district. This effort has led to little protest from the local community with the Mayor of Porirua Nick Leggett adding that "It is breathing some life into the 1960s kind of look, introducing some modern streetscape and providing a better haven for businesses, and some really good community spaces" (Torrie, 2011). In my opinion I must agree with Mayor Nick Leggett in supporting this decision in that I believe that the canopies have created business failure, dead space, diffuse light creating artificial space and an unnecessary noisy exasperation.

I believe that the idea of using canvas was not thoroughly investigated as the detrimental effect of the material used was the only negative aspect. If a more modern, durable, transparent material such as glass was used, it would still be sufficient for weather protection, depending on the original design, whilst adding to retail attractiveness and comfort for the public. The attention to the interior ideal was not apparent as materials of the common street appeared to be used and was not well maintained or appeared to be uniform throughout the site. It appeared that the retail environment began to suffer which forced a lower income for the development as more businesses left or went under creating a closed loop; poor business due to the bad environment and a bad environment due to the poor business.

Figure 14: Sailing Away: Porirua's distinctive white canopies scrapped in the revamp of the city centre (Torrie, B., 2011).

Figure 15: Cardiac Surgery: A drawing of how Porirua will look revitalised within the centre of the business district (Torrie, B., 2011).











# iii | NATIONAL PRECEDENTS

#### Sylvia Park, Auckland

Auckland's Sylvia Park is located at Mt Wellington and sits at the geographic and demographic centre of Auckland. Sylvia Park is a highly sought after shopping and entertainment destination. Its prominence, exceptional location and public transport links ensures easy access for shoppers (Sylvia Park, 2011). However, one of the critical success factors that have made Sylvia Park the leading retail and entertainment shopping centre in New Zealand is its location. Located in the demographic heart of Auckland, New Zealand's largest city, allows over 50% of Auckland's population access to Sylvia Park within a 20 minute drive time. This is improved by Sylvia Park boasting an impressive 200 store retail mix, more than 4,000 car parks and a full bus and rail service. These retail outlets are anchored by a strong collection of major, mini major and entertainment and dining locations, all heavily maintained with quality finishes which contribute to the overall attraction of the consumer to the mall (Sylvia Park, 2011). These aspects have allowed Sylvia Park to become the dominant shopping location for Auckland residents as offering great accessibility, choice of retail, retail attractiveness and comfortable environment.

I believe there are only two real downfalls within the mall; the sheer size of the mall being one of them. With the space being so overwhelmingly large it can be difficult to find a particular store or product when consciously looking for it. In theory, this potentially means fewer sales; if the consumer is unable to locate their desired product they will just leave. The generic shopping mall design is the other flawed aspect of Sylvia Park, there is just nothing unique about it which could progressively create a dull and unoriginal experience for the consumer.

Sylvia Park is just a long covered pedestrian street, the difference was the highly maintained surfaces that allowed the mall to appear brand new; the configuration and retail mix was highly managed to appeal to as many consumers as possible; the great accessibility through the number of free car parks and public transport and the strong anchor tenants allowed a large influx of potential consumers.

**Figure 16:** Sylvia Park store layout, configuration and anchor tenants (Sylvia Park, 2011).

Figure 17: Sylvia Park images showing the architectural space and successful design principles (Mr\_kiwi\_fruit, 2011; Stuff, 2008; Sylvia Park, 2012; Williams, S., 2011).











## iv | NATIONAL PRECEDENTS

Chews Lane, WellIngton

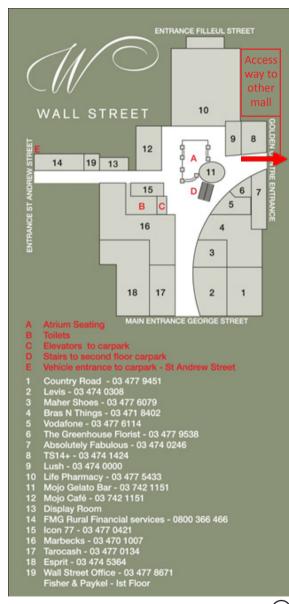
Wellington's Chews Lane has created a unique atmosphere for the surrounding patrons within the Wellington business district. This high customer demand location is a location where local patrons can get their morning coffee fix and get grab 'n go lunches. As well as the reputable hospitality attractions of Chews Lane, it ultimately acts as a stepping stone between the business district of Lambton Quay and Courtenay Place. This adds to the success of Chews Lane as it is an addition to the existing retail of surrounding areas and as such, the size of the development extends beyond the boundary of the site. The overall success of Chews Lane has been proven with the Supreme Award winner at the Property Council New Zealand Rider Levett Bucknall Property Award's for 2009.

There are many features within Chews Lane that are appealing as a commercial location, including retail mix, utilisation of space, layout and configuration, crime prevention and an appealing postmodern design. Looking at the plan and seeing the site, Chews Lane appears to have had a lot of management influence in creating the space with respect to 'retail mix and configuration', 'maintenance', 'crime', 'retail attractiveness' and 'targeting the right consumers'. The strongest design principle within this project is the 'utilisation of space' between the two buildings that has enabled it to become a usable site, opening up the possibilities of extra business space by allowing additional frontages away from the hectic two main streets, Victoria Street and Willis Street. The appealing postmodern space shows the atmosphere created through the architecture is open, systematic and has a unique architectural style.

The unique architectural style is enforced mainly by the weather protection technique. The surrounding buildings appear to have been pulled apart to make way for Chews Lane and as such the weather protection is the structure above. I believe this wouldn't work in a larger development as the lack of sun and wind tunnelling effect but small distances between the opposing open streets has created a small architectural gem, concealed from the hectic surrounding areas and is a great example of a successful development within the inner-city that adds to the existing location.

Figure 18: Chews Lane configuration retail layout showing configuration and tenant selection (Willis Bond & Co., 2011).

Figure 19: Chews Lane site images showing the architectural space, quality and implementation of design principles (Oregono, 2011).



# v | NATIONAL PRECEDENTS

#### Wall Street. Dunedin

Dunedin's Wall Street shopping centre, although primarily a traditionally designed mall, is a hidden achievement. The complex comprises three buildings linked together, and at its heart is a large central atrium allowing natural light to filter through. The layout design links Dunedin streets and neighbouring malls, allowing consumers to shelter from Dunedin's sometimes variable weather. This has enabled consumers to walk from one end of town to the next, under cover through the open glass, steel and stone space which has created a unique atmosphere for shopping, dining, and socialising. Wall Street has added vibrancy to an increasingly thriving shopping precinct. Team Architects stated that their design for Wall Street was 'to create an *enclosed streetscape* in keeping with the unique character of Dunedin that links areas of the central city and provides a place for citizens and visitors to shop, meet, celebrate or simply pause' (Team Architects, 2010).

The successful design principles that have been instilled into the Wall Street shopping centre are the usual collection of typical traditional mall design; this includes maintenance, utilisation of space, crime prevention, modern design, retail mix, layout and configuration. The layout and configuration of space in particular is successful in that it has created a successful community atmosphere by connecting an access route to other malls, the Golden Centre and the Meridian, allowing a mutual respect between the parties to be made and further creating the 'one stop shop' with more merchandise under the one roof. The mall is interesting and unique as it follows closer with the urban design principles rather than typical shopping mall design. The development is restricted to the ground floor for the public, very much like the surrounding street; it offers very little personal retail excluding the adjoining malls; no opposing anchor tenants were in place, (just one, the pharmacy) and there were many exits, with one always being visible where ever you were.

I had many informal discussions with the mall manager who was very helpful in discussing the problems the mall faced to the local community. The public was against the construction of the mall because of the believe that the mall was constructed through tax payers money, however it was funded by a Dunedin Trust that offers additional jobs to the growing Dunedin workers. The construction of the mall allowed Fisher and Paykel, who were going to move their office facility overseas, to occupy the entire

Figure 20: The layout of the Wall Street Shopping Centre showing access routes, configuration and tenant selection (Dunedin City Council, 2009).





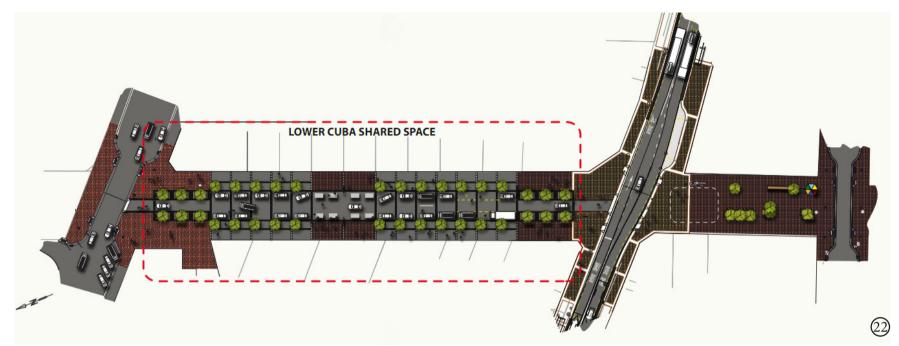






second floor of the mall. The manager believed that convincing the public that the malls construction was a good step forward for the community was the hardest part of his job, creating large marketing campaigns to reverse the negative stigma that had been created towards the mall and it was apparent that the mall was struggling to increase the foot traffic and hold onto the public for longer as I believe that the exclusion of traditional shopping mall design principles was detrimental to the business success

Figure 21: Dunedin's Wall Street images showing the architectural quality and implementations of design principles.







 $\overline{23}$ 

## vi | NATIONAL PRECEDENTS

Lower Cuba Street Development, Wellington

The Lower Cuba Street Development, as part of the Restoring the Golden Mile Project by the Wellington City Council, provides a clearer pedestrian link from Cuba Mall to Civic Square and the waterfront. It provides space where people can sit and rest and street buskers can perform, be able to be closed to traffic on occasions to help accommodate large street events, give pedestrians priority by limiting vehicle speeds to walking pace and provide one-way vehicle access and some parking (Absolutely Positively Wellington, 2011).

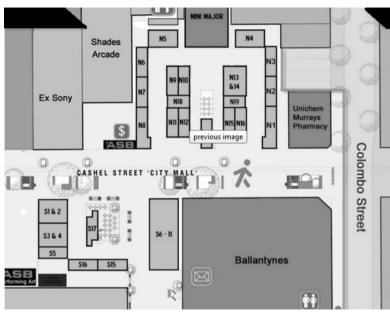
This once desolate space, which was partly segregated from the remaining Cuba Mall, excluding a few more renowned stores within the area, had taken on a thrift store location for businesses. These included the Cash Converters store and the Down Town Local Pub, which downgraded the value of the location. This new urban development allows more recognised businesses to populate the area and at present is under construction upon the site with a new indoor mall replacing the Down Town Local Pub that connects the Lower Cuba Street and Manners Mall internally.

As this development already had an existing market area, although being increased in stature, is not overly applicable to the revitalisation of inner-city space that is dilapidated with no market audience because of urban design principles not allowing a new market to be created although arguably a different clientele are shopping there now. It has increased the productivity and public traffic within that area. Combined with the shopping mall design principles however, which would create a new market trade area, these principles of urban design may be applicable to increase the productivity and public traffic within the urban fabric of the space.

The accessibility to the site with connectivity created through new retail developments is the most powerful marketing outcome that originated by the lower Cuba Street development. It is evident that the retail attractiveness and community approval increases productivity and foot traffic that is essential in the revitalisation of dilapidated areas.

Figure 22: Lower Cuba Street proposed plan of change showing the integration of shared space and connection to corresponding streets (WCC Watch, 2011).

Figure 23: Lower Cuba Street images showing the architectural quality and implementations of design principles (Robyn, 2010; Shelton, L., 2011).



# vii | NATIONAL PRECEDENTS

#### Box Mall. Christchurch

One of the world's first pop-up container shopping precincts is fast taking shape in Christchurch's City Mall which provides a central-city retail hub for the renewal of Christchurch after a devastating earthquake (Beynen, 2011). The brightly coloured stacked boxes hold 27 stores as part of the City Mall Re:START project. Thousands of visitors flocked to the temporary mall's opening the first weekend to enjoy the café, the large pedestrian area and two horse-shoe shaped pavilions. The mall offers a bit of normalcy to the residents, and some serious contemporary eco-style. The project is one of many shipping container designs we have seen, but this particular design has come under fire by another group for breach of intellectual property rights. The group is currently using every means to either get a licensing agreement or shut it down (Michler, 2011). As reported on Treehugger the developers of the London based Boxpark Mall are not too happy about this "pop-up" mall and feel that their idea has been stolen. They are seeking a legal action for the "blatant breach of the Boxpark intellectual property rights" (Michler, 2011).

Christchurch has lost a lot of it infrastructure by the February 22nd earthquake. The town was looking for novel designs to help the city bounce back. The shipping container mall is one of the most striking features of the cities renewal with most of the stores being locally owned and have been a part of the community for years. The development took only months to put together, but still has a level of thoughtful design, as well as bright open spaces with interesting gathering areas to linger on a warm spring weekend. The mall is expected to stay intact for a least a year until the downtown pedestrian mall areas can be restored (Michler, 2011).

Figure 24: Christchurch's Box Mall layout showing the configuration and tenant selection (Michler, A., 2011).













The Box Mall has many positive characteristics that allow the space to work not only aesthetically, but economically as well. The colours chosen are vibrant and give a sense of revitalisation and comfort to the residents of Christchurch to give them hope about the future of their city. The idea and application of shipping container crates is not exactly a new fresh idea, but the architectural manipulation of the containers allows the mall to be dynamic and appealing to the public without the sense of cheapness or rushed design for the sake of consumerism surviving in the torn city. The positive economic approach consists of bringing familiar businesses into the box mall that previously existed within the city, allowing the public to have a sense on normality to their shopping regime and community acceptance of the development. This business approach works due to the known success of the businesses within the city before the earthquake and allows a successful market to be recreated.

Figure 25: Christchurch's Box Mall images showing the architectural quality and implementations of design principles (Michler, A., 2011).











# iix | NATIONAL PRECEDENTS

#### Chancery Square, Auckland

The leading light in Auckland's central city fashion district, Auckland City's Chancery is a fascinating, eclectic mix of world-leading fashion, beauty, cuisine, giftware and vibrant al fresco cafes. This is international shopping normally only expected in established fashion capitals like Paris, Milan and New York (Girdhar, 2011). There are stores for those in love with all things colourful, beautiful and fragrant, fashionable and stylish. A glass of wine in the cobblestone plaza while soaking up the sunshine is a must (Auckland NZ, 2011).

I stumbled upon Chancery Square in Auckland when I was loitering about the central city. This tucked away gem was a destination spot with high end stores and availability for quiet drinks. What I noticed most about the development was that the seating arrangements were in the centre of the square, forcing consumers and the public to walk past the stores rather than cutting across if passing through. The vegetation and weather protection allowed glimpses of opposing store windows to intrigue the public to move from one side of the square to the other.

The materials and finishes used within the square were of high grade, and the different aesthetic of architectural themes between the buildings created a rich atmosphere. The only apparent downside to the development that I could see was that there was no weather protection for the public. The awnings above the stores covered little and would force you to hug the walls to get away from the rain - although this could, in theory, be a successful ploy to encourage consumers to get closer to the merchandise, personally, my mind was focused upon staying out of the rain, rather than the merchandise of the stores. Although the eating and drinking area is entirely covered with umbrellas to help slow consumers and allow comfort for the public who are actually buying the merchandise rather than all that are moving through the space.

There was no strong anchor tenant that I could see, however the design principles that were evident is the organisation of the retail outlets with good retail mix and configuration made little business failure apparent; the retail attractiveness was supported by an increased quality of the site compared with surrounding areas with high grade materials being used, although not interior materials, it did

Figure 26: Auckland's Chancery Square images showing the architectural quality and implementations of design principles.

appear to work; has expensive up market merchandise and services which created particular and similar target users; utilised all floors with retail outlets continuing to the first floor; the private development was gated at night to protect against crime and vandalism and the site appeared to be well maintained with very little neglect.















# ix | NATIONAL PRECEDENTS

#### Westfield Downtown, Auckland

Westfield Downtown upon Queen Street near the Britomart Transport Centre is the perfect example of 'location is everything.' In 2005, the centre had retail sales of NZ\$ 56.9 million, and 5.8 million customer visits per year. These are mostly CBD workers, tourists and the growing innercity population (Gibson, 2006). The centre has been called "Westfield's most underperforming shopping centre in New Zealand. Lying in the middle of a much more densely built up CBD and being considered underdeveloped with only three stories above ground, various other plans for the site have been mooted in recent years." (Gibson, 2007). The mall itself is terribly designed with awkward configuration, bad placement of seating, tacky displays, poor retail mix and an entrance consisting of extremely large billboards that cover the entire facade, which have also faced problems with the local Council officers (The Bob Dev Property Report, 2005). The seating placements are either out in the open - vulnerable to the occupant, or down strange alleyways towards elevators and service ways.

The retail mix appears to consist of extreme thrift marketing displays and high-end stores with the proximity being far too close to each other creates a lack of threshold or transition between the two markets. The configuration is also a problem with nothing working together, somehow merging into a cluttered and uncomfortable setting. I believe the design configuration needs to be simplified and modernised. This could be achieved by removing the tacky signage and aesthetically displeasing displays which are thrown in your face in every area of the mall. This proves how important location is with the mall even being poorly designed the mall is still attracting a large number of consumers by being so close to the large transport hub.

Figure 27: Auckland's Westfield Downtown images showing the architectural quality and implimentations of design principles.



# Chapter 3.2

Reviewing International Precedents

The international precedents act as built examples of the literature studied, which have been accumulated from global academic sources, to their intended setting to see the incorporations of the urban design and shopping mall design principles into the built environment.









## i | INTERNATIONAL PRECEDENTS

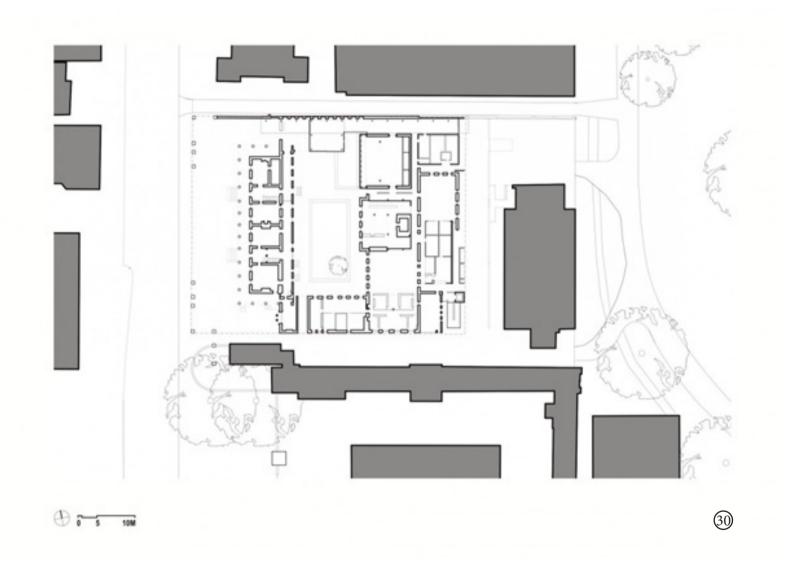
Laneways, Melbourne

The laneways within Melbourne are on a much larger scale than the typical alleyway and have been used to utilise the space behind and perpendicular to the main roads. This allows a larger variety of retailers and outlets for the larger population of Melbourne with respect to the additional attraction of the place as a tourist destination. Individually, each laneway could easily be manipulated into a Wellington site with the addition of single management, maintenance, retail mix, crime prevention, and other typical shopping mall design principles.

The complete integration and utilisation of the space behind the main streets is an innovative design with respect to the original urban framework. The laneways have opened up new possibilities by allowing an alternative to large scale mall design within each street block. This feature is within the context of this thesis - by allowing these side streets and back alleys to be filled with a 'surprise factor', the consumer is enveloped by each laneway differently, creating a different emotion within each street. This is more successful than the 'fantasised world' created within the mall.

The downfall of the laneways is that there is an alarming design issue which is that some laneways, which appear within the same situation as others, are not a successful space and have degraded in terms of business tenant selection. They present a large number maintenance issues, including crime and general abuse. The only conclusion that can be conducted is that the location of these laneways is an important factor in determining laneway success. Therefore, the integration of location, configuration, anchorage, maintenance, retail mix acts as the essence of a successful laneway.

Figure 28: Image manipulated to illustrate the urban framework of the main streets against the laneways within Melbourne (Google, 2012). Figure 29: Melbourne Laneways images that depicts the different atmospheres and show the architectural quality and implementations of design principles (Khee, J., 2010).



## ii | INTERNATIONAL PRECEDENTS

The Mint. Sydney-AUS

The Mint building is the new head office for the Historic Houses Trust of New South Wales located on Macquarie Street, Sydney, Australia. The Mint Project is the transformation of one of Sydney's oldest and most precious historical sites on Macquarie Street into a new meaningful public place formed and characterised as much by the carefully inserted contemporary buildings as the conserved and adapted heritage structures (Saieh, 2010). These clearly defined public rooms and facilities are gathered around a central courtyard that is given new life and form as a significant public space of the city (e-architect, 2010). Whilst the contemporary architectural forms have been carefully designed to form direct and clear relations with the existing buildings in terms of scale and proportion, they are uncompromisingly new. They have sought to create a new architectural layer on the site designed in the innovative and 'forward looking' spirit that underpinned the original 1850's constructions (Saieh, 2010).

Although The Mint has no attachments to the retail sector, the 'layered' approach of placing new and old in a bold transforming relationship is apparent in the general organisation of the project and in design of the new courtyard. The strict symmetry of Trickett's original plan with central pavilion and identical wings has been transformed into an asymmetrical axis about a pair of related, pavilions of 'opposite/dialectical' character, new and old, light and heavy, stone and glass. The outcome is a rich and complex assembly of form and spaces through which the layers and events of the site can be read and interpreted (Saieh, 2010).

The mint is a perfect example of the revitalisation of a space whilst protecting the existing built structure. The combination of new and existing materials allows the historic structure to be brought into the present architectural trend and allows the operation of the building to once again be utilised. The layout of the space allows the square to be segregated from the surrounding area of the city enabling the architecture to be its own and become a unique destination spot for tourists. This is an important and powerful tool in attracting tourists and can easily be translated into the commercial environment to encourage and maximise sales through the architecture. The most impressionable part of The Mint is the protection of the historic structure by the new materials

Figure 30: The Mint plan showing the layout and segregation of the courtvard from the main street (Saieh, N., 2010).













and the symbolic relation of this protection to the Historic Houses Trust that operates within the building. This gives a powerful statement to the public through visual representation as opposed to the information being presented through a more generic approach such as text.

Figure 31: The Mint images showing the combination of the existing historic structure and the new architecture and the architectural quality and implementations of design principles (Saieh, N., 2010).





## iii | INTERNATIONAL PRECEDENTS

The Market, Rotterdam - GER

Dutch architects MVRDV design is a mixed use project in the new inner city heart located in the Laurens Quarter. It is expected to be completed in 2014. The project, commissioned by Provast, includes an open air market, which due to new hygienic constraints of Dutch laws has to be covered. It also includes 246 residences that form an arc, covering the open market area (Basulto, 2009).

The interior face of the arc is covered with LEDs which creates an ever changing interior. The front and backside are covered with a flexible suspended glass facade, allowing for maximum transparency and a minimum of structure (Basulto, 2009). The concept of the integration of close quarters between market produce and residential living is a powerful idea that should be integrated into the inner-city shopping market with the increase of residential occupants inhabiting the inner-city. The brightly lit structure allows a vibrant area for the public as well as an interesting atmosphere for the residents surrounding the structure. A potential problem with The Market in Rotterdam is that the enclosed atmosphere of the market breaching the residential space of the occupants that live there may create an offensive impression upon the residents' private space with no real boundaries between the public and private threshold.

There is a need for organisation of the markets within the inner-city of Wellington, currently being situated in car parks around the fringes of the inner city<sup>13</sup>. A commercial local example of this is the Moore Wilsons recent development of fresh produce although this is completely owned and run under the management of Moore Wilsons instead of multiple produce owners within a confined space.

Figure 32: The Market images showing the combination of the unique market space atmosphere with the residential apartments (Basulto, D., 2009).

<sup>13</sup> One fresh produce market is upon Dixon Street, whilst the other is down near the waterfront beside the Te Papa Museum.





#### IV I INTERNATIONAL PRECEDENTS

Cherry Hill Mall. Penn

The complete renaissance of Cherry Hill Mall has repositioned the centre as an elegant, contemporary shopping and dining experience. This features and design of this mall exemplify the difference between a mall failing and a mall succeeding. The structural and aesthetic progression of the mall has created dramatic change bringing it forward from its original failure. The Owner, Pennsylvania Real Estate Investment Trust, recognized that strong customer demographics existed and thus, to begin - a new multi-level parking structure was created and the complete renewal of the interior mall was constructed whilst the centre remained in full operation.

The existing one and two-level mall, parts of which date back to the original 1962 Victor Gruen design, were completely renovated from top to bottom starting with the relocation of an existing food court. The modernized grand court is now a radiant showcase space for featuring daily and seasonal events. New escalators and elevators were added to improve circulation within upper and lower mall areas, including the important 'transition' court and its critical sight lines leading to the existing two-level portion of the mall. By incorporating all new tile floors in contemporary colours and patterns, upgraded skylights, new horizontal ceiling planes, new lighting, richly detailed wood column covers and other refreshing amenities, a distinct fashion-forward image was brought to Cherry Hill Mall (Henry, 2011).

Existing amenities in the grand court were removed and a striking new fountain and seating area was created. Likewise, topiary trees, soft seating, benches, and landscaped planters were designed with a customer friendly attitude, while supporting the mall's interior architecture and retail purpose. New beautifully landscaped entry plazas now provide a welcome feeling and introduce the renovated entries with a material palette of warm stone, satin finish metal and clearstory sky lit ceilings (Henry, 2011).

An important note to summarise is the difference materiality can make. Although other changes to configuration, capacity and comfort were addressed, the type of materials used brighten the mall allow a fresh, new and modern appeal to be brought forth to the public. The visual proof of change

Figure 33: Cherry Hill Mall plan showing the layout and configuration of the mall (Henry, C., 2011).



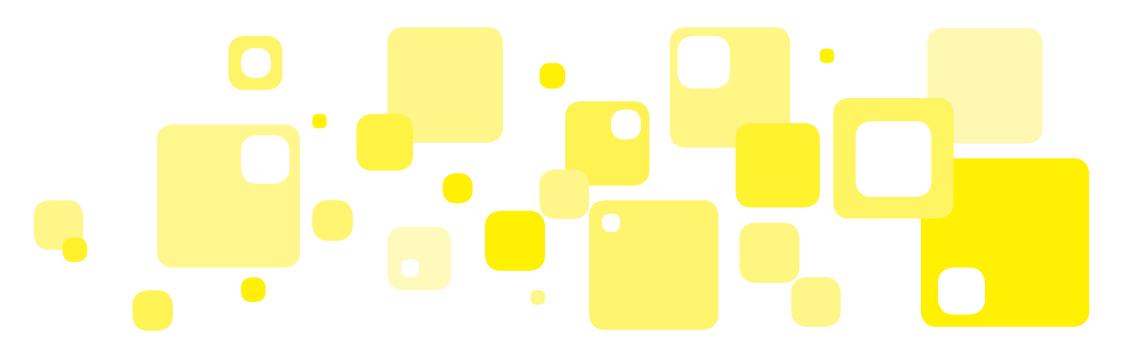






allowed the revitalisation of the mall to succeed with the end result being that Cherry Hill Mall has successfully repositioned itself in the marketplace.

Figure 34: Images of Cherry Hill Mall showing the architectural quality of the interior space and entranceway (Henry, C., 2011).



# PART FOUR

Design Case Study

The design case study section is a discussion about a personal design with the implementation of urban design and shopping mall principles. It begins by introducing the design outcomes and an analysis of the site context. This is followed by an outline of design development preliminaries that would be done as though constructing a shopping mall. An analysis of the existing build structure is determined to define the boundaries of the design is done before the panning of the development can begin. Finally the design concept and process of the development is shown with the final outcome shown through three-dimensional architectural software which includes evidence towards the literature studied. Following this chapter is a comprehensive discussion of the final design outcome.



# Chapter 4.1

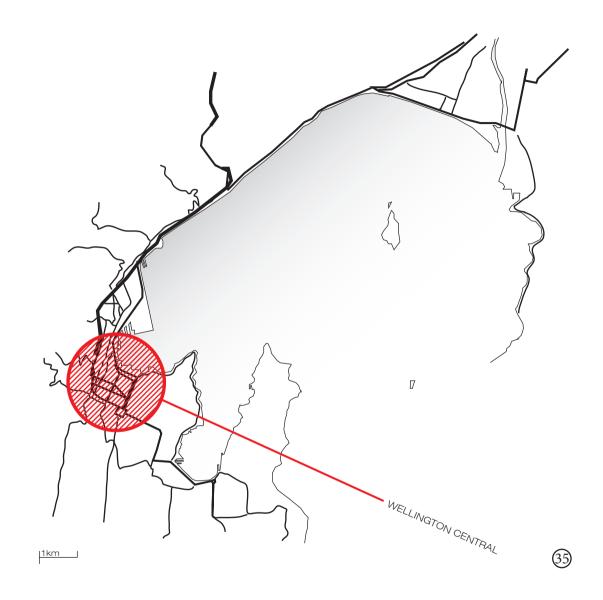
Design Outcomes & Site Context

This chapter introduces the design outcomes and site context analysis. As the research analysed both architectural and business aspects of revitalizing space, the design case study follows the design process of a shopping mall to allow the integration of the disciplines to come through in the design.

#### DESIGN OUTCOME

The development case study provides a feasible solution that developers, investors and designers could use to help improve the street retail sector, the street conditions and the residential 'backyard' conditions. The design acts as evidence that the principles that have been discussed through the research are successfully able to be implemented into the existing urban fabric.

The design seeks to challenge the traditional shopping mall and street retail through their relationship to the contemporary user and its integration into the Wellington context. The re-designing of the site allows a successful solution for small neighbourhoods that have become dilapidated through abuse and become secondary to the main streets that pull the potentially large amount of foot traffic away from the site. The main focus of the design case study is the connection between the urban design and the shopping mall design principles as both are essential in the success of this and similar sites. This connection between the existing site, the urban design principles and the shopping mall design principles did have limitations as certain elements of the existing structure and the shopping mall limited the architectural outcome.



# i | SITE & CONTEXT ANALYSIS

#### Wellington Region

Wellington City has been developed recently to improve public transport, with the Golden Mile adjustments; retail areas, with lower Cuba Street improving aesthetics and productivity and many additional developments and improvements to the waterfront act as large tourist attractions. However, these developments remain only upon the existing bustling streets with an already established market trade area. The improvements to the dilapidated backstreets remain untouched and revitalised, further damaging these areas due to surrounding locations improving their quality of space. A prime example of this would be the Manners Street development being converted from a pedestrian only thoroughfare to a main bus route as part of the Golden Mile restoration. Although this area has been subject to a significant urban upgrade, the clean environment recently created continues to deteriorate (Dibble, 2008).

As part of the principles of the shopping mall design process; an analysis of potential mall locations was conducted to identifying the most suitable location. The Wellington downtown is a combination of segregated locations that appeal to different users. The acclaimed character-rich Cuba Street is mainly subject to students and young professionals that feel most comfortable in a trendy setting; Lambton Quay is a location where the more well off users with high end retail in the main central business district appealing to 'the businessman' and finally Courtenay Place, where the in-between of both Cuba Street and Lambton Quay reside by offering almost all food and entertainment services, although excludes fashion outlets. Streets that run parallel to, or perpendicular to the main streets, (Cuba Street, Courtenay Place and Lambton Quay), have low foot traffic and are therefore used as space for either larger commercial or specialty businesses. The Lambton Quay area was regarded as an unsuccessful location for the implementation of a shopping development as the area has many qualities of the shopping mall already instilled within with the narrow focus of target users, the maintenance upon the space, retail mix, configuration and less of a business failure to other areas of Wellington's inner-city.

An accumulation of images have been selected to demonstrate the artistic, entertainment and

Figure 35: Greater Wellington region plan showing the location of the inner-city district to surrounding context.



















architectural elements within the inner-city. It is important to understand the atmosphere within the successful areas of Wellington, even though these images do not demonstrate the success within the retail sector, the entertainment, destination or artistic elements that draws people to the location is important to distinguish what is successful within the surrounding context. The images show artistic implementations ranging from the very iconic bucket fountain on Cuba Street, to the metallic fern trees in Civic Square; the iconic destinations within Wellington such as the beehive in Thorndon to the local beach in Oriental Bay; and the historic architecture of inner-city churches to the Te Papa Museum. Each of these elements has an attraction to the public and similar aspects can be used to become one of these objects to attract additional consumers. It is important to note the entertainment busker upon the old Marion Street attracting large numbers of the public, and slowing them down within a retail space.

Within the inner-city, the locations that were considered was a waterfront development, where an existing large amount of foot traffic already existed; Edward Street, a very small precinct that has a lot of potential being close to Manners Street and attached to Victoria Street :Cuba Mall, which is already renowned as a vibrant shopping centre, but has become dilapidated over time; Left Bank, as a development attachment to Cuba Mall that has proven to be unsuccessful; Car park behind lower Cuba Street, which was a prime location for a new urban shopping centre as the Wellington City Council redeveloped lower Cuba Street; Swan Lane Car park, which was a waste of good urban space and was not overly utilised. These possible sites that were selected, being determined by active developments within the area, potential connection to surrounding markets, size of the site location, hypothetical revitalization outcome and community benefit through the development, the most obvious areas of development were the lanes running perpendicular to Courtenay Place and Ghuznee Street. There is an opportunity to take advantage of these areas as they can act as shortcuts between Cuba Street and Courtenay Place, which very much act independently from each other as prominent bustling shopping lanes.

Figure 36: Accumulation of Wellington images showing the positive atmosphere of the innercity and what it has to offer (Wellington City Council, 2011).



# ii | SITE & CONTEXT ANALYSIS

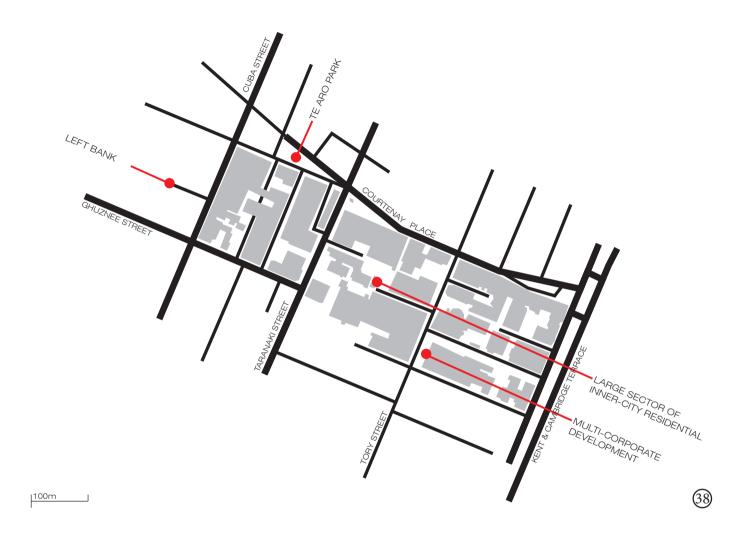
### Cuba Street - Cambridge Terrace

The Cuba Street to Cambridge Terrace block, (perimeters stopping at Courtenay Place and Ghuznee Street), is a unique area that has remained dominant of (language)large commercial destination areas that remain off the main foot traffic routes of Courtenay Place and Cuba Street. This has unfortunately caused the space to become a dilapidated area of 'destination' businesses with no control, comfort, cohesive design, crime prevention or maintenance applied into the site.

This space is a prime location for shoppers, being so close to the existing Cuba Street and Courtenay Place, with a previous infrastructure of car parking, foot traffic and high demand businesses, (i.e. theatres, restaurants, specialty stores, etc...) seen on the image on the opposing page.

The main issue is which part of this large area is the most appropriate location for not only the beginning of a large scale development, but also, a location where the integration of the shopping mall design principles is the most flexible with design redevelopment, profitable, and appealing to the public's awareness.

Figure 37: Wellington central plan showing the locations within the inner-city for proposed sites of development.



### iii | SITE & CONTEXT ANALYSIS

#### Leeds Street - Eva Street

The Leed to Eva Street building block is the most suitable site with an already established surrounding trade area of Cuba Street and Courtenay Place. The lane comprises of mostly commercial businesses on the ground floors, and residential occupants above. With the commercial businesses being at the ground floor levels, it is apparent to note that these spaces are the easiest to manipulate into a new design layout that would accommodate the shopping mall design principle needs.

This site runs parallel to Cuba Street and has a great opportunity to develop into a vibrant shopping centre, with Wellington's 2040 analysis on developing Wellington's inner city, stating that this site would be a prime location for developing and expanding Wellingtons shopping area.

This space is also relevant to the aim of this thesis by being a space that might not be revitalized through urban design alone, and therefore needs an alternative, or an accumulation of different design strategies.

Figure 38: Wellington central plan showing the focused proposed location with surround locations of importance.



















The atmosphere and condition of Leed to Eva Street site has been demonstrated through a collage of images shown to the left. The images show the dilapidated location, overrun with vehicular traffic, dangerous areas, criminal activity, business failure, awkward architectural themes and proportions, unmaintained and a gated private space. These images show how the location has been forgotten and become unappreciated for its potential. There is a rich history within this site with the Hannah's Factory buildings and one of Wellington oldest brick structures. The sites potential is because of its location, by being so close to Courtenay Place and Cuba Street, and its layout, with wide streets and open areas.

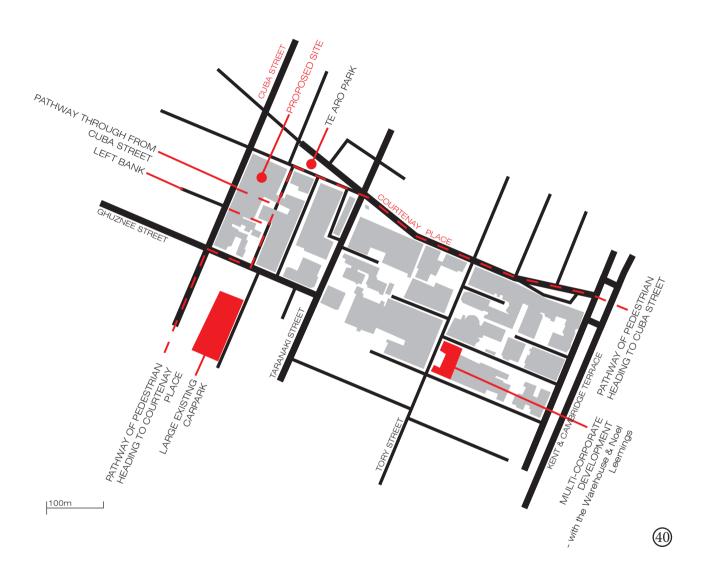
Figure 39: Wellington central plan showing the focused proposed location within the Cuba Street to Cambridge Terrace.



# Chapter 4.2

Design Development Preliminaries

This chapter is a necessity before the design commences because the principles of the shopping centre states that the site must be evaluated before any substantial costs into the design are used to ensure the investor is going to have an understandable return upon the intended site. As this is an architectural thesis many of the typical economic analyses prepared have been researched by the associate student Ian Calder, studying Masters of Business Administrative at Victoria University allowed a further insight to these economic elements.



### il Market & ECONOMIC ANALYSIS

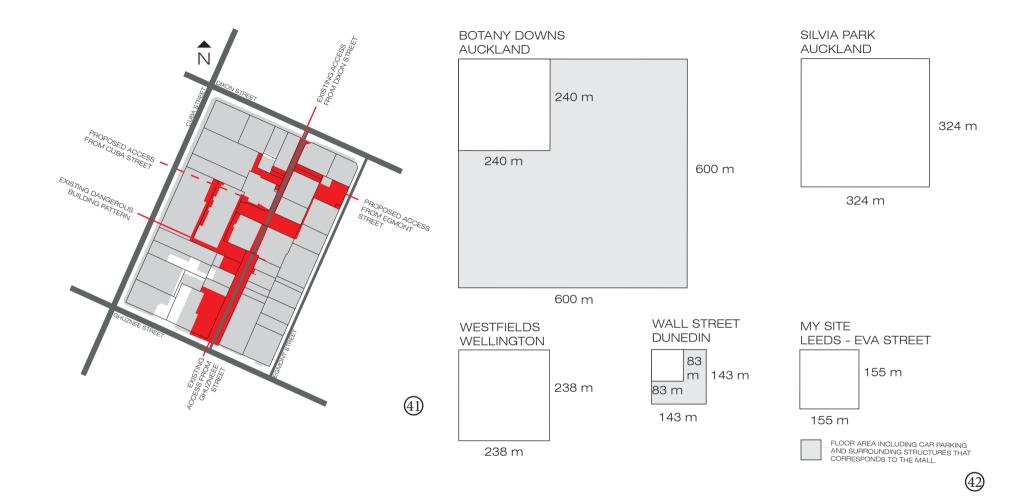
#### Leeds Street - Eva Street

There must be a market and economic analysis before embarking on any shopping centre project. A developer must identify and evaluate the community, then calculate its potential patronage of commercial outlets. In such situations, the entrepreneur must be sure the community can absorb the proposed increment in retail selling space with a new merchandising mix (ULI, 1978, p. 23). It is very important to understand that a shopping centre cannot generate new business or create new buying power; it can only attract customers from existing businesses, which may be obsolete, or capture the increase in purchasing power that accrues with population growth. It can cause a redistribution of business outlets and consumer patronage, but it cannot create new consumers (ULI, 1978, p. 24). This has been addressed by proposing that only small businesses are to be allocated within the new development that are being undervalued due to their location and that do not impede upon the success of surrounding businesses by targeting different users. This is important as the new development does not want to cannibalise from the surrounding existing market areas of Cuba Street, Courtenay Place and Lambton Quay, instead, this development is trying to strengthen them by allowing more foot traffic within the area and improving conditions for retail attractiveness; an example of this is Wall Street in Dunedin.

#### Location

Site location is of paramount importance in the success of all shopping centre types. From the standpoint of this location, the site represents an impregnable economic position. The site's superior access, greater convenience, better merchant array, and improved services make it impractical for another project, similar in type, to later be introduced nearby (ULI, 1978, p. 34).

Figure 40: Leeds - Eva Street site analysis, and surrounding analysis.



#### Access

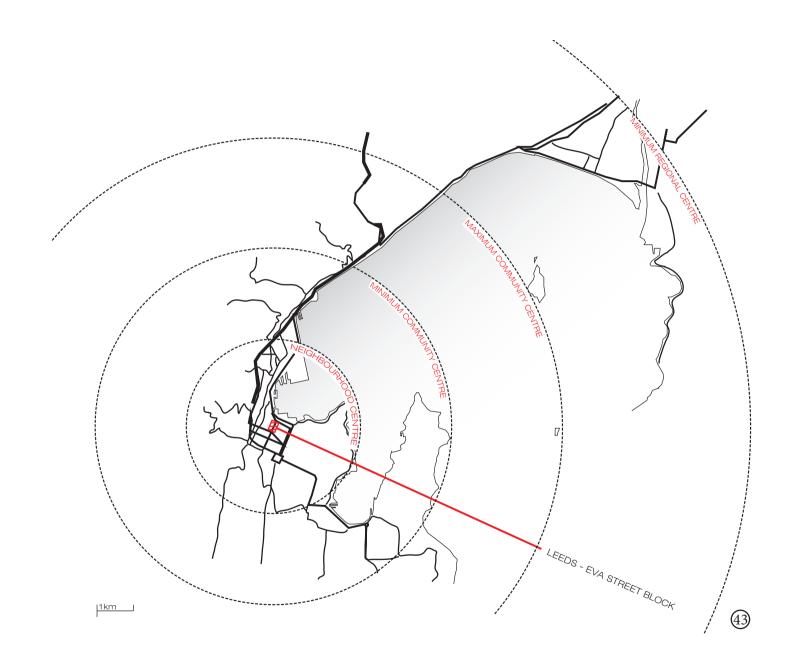
The site is easily accessible with large open entrances from Dixon and Ghuznee Street and parking being currently provided upon the site. However this site is very much undeveloped and the access and safety of the site must be manipulated to accommodate the consumer's and business needs. An additional access route or routes may be appropriate to allow further connection to surrounding markets. As Wellington's 2040 suggests the proposed addition routes are the connection through to Cuba Street as an already established market the development can feed off the current foot traffic and Cuba Street businesses can feed off the influx of new consumers that the development creates. The reason for the location of the thoroughfares is that they have a direct relationship to the existing built structure through either creating a convergence of foot traffic at the connection and the minimisation of deconstruction.

#### Size

Size is an important factor in shopping mall design. A common rule is that more land is better than not enough, as the remaining amount of land can be used from expansion and strengthening the centre. As this site has so much of an existing built environment, the question is how much of the site should be redeveloped into the newly developed shopping experience (ULI, 1978, p. 42). All estimated ground floor plans are to distinguish between the size of my site to other malls around New Zealand. It must be noted that Botany Downs, Silvia Park and Westfield's all reside in suburban areas (regional malls) and therefore follow the traditional mall ideals. My site and the Wall Street Shopping Mall in Dunedin both reside in the city centres and therefore need to accommodate different needs. Read your lit review, you discuss this

Figure 41: Leeds - Eva Street existing site access.

Figure 42: Leeds - Eva Street site size comparing with other malls throughout New Zealand.



#### Trade Area

To a great extent, families buy food and sundries within their immediate neighbourhoods. They go considerable distances to buy 'big ticket' items such as furniture, major appliances, and clothing (ULI, 1978, p. 25).

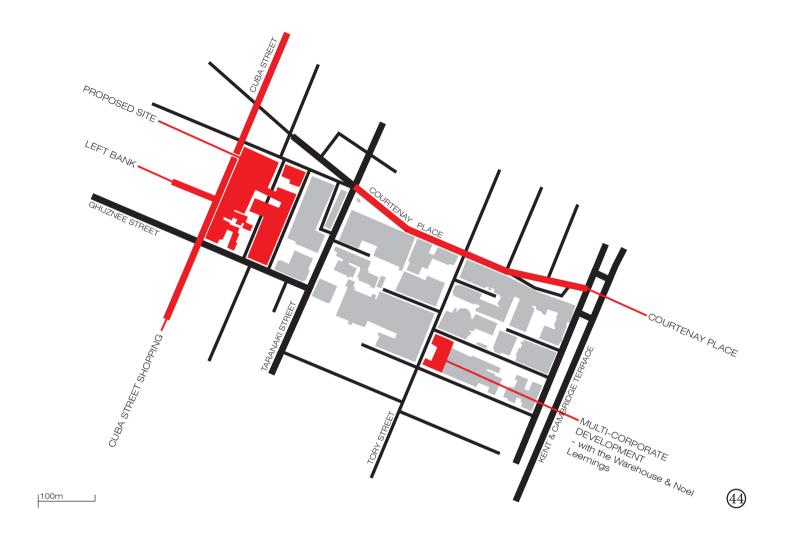
The following are rules of thumb for theoretical trade area distances:

- Neighbourhood centre draws from a radius of 2.5 kilometres
- Community centre draws from a radius of 5-8 kilometres.
- Regional centre draws from a radius of 13 kilometres or more.

(ULI, 1978, p. 27)

This supports the development ideals as not to cannibalise off the immediate surrounding areas and instead bring additional consumers from outside the Wellington inner-city who normally shop in the suburbs at the large shopping malls.

Figure 43: Wellington central region plan showing the trade area analysis between different types of malls.



#### Competition

A new shopping centre will not, of course, attract all the business in its trade area, it will draw on three sources: new population growth, patronage from existing stores in the trade area, and patronage for outlets of goods and services desired but not already offered in the area (ULI, 1978, p. 29). No formula exists for estimating the share of the buying power that can be attracted to a new centre. The single exception is Reilly's Law of Retail Gravitation. Richard L. Nelson stated that "All this law says is that people normally will get to the biggest place they can the easiest" (ULI, 1978, p. 29). As the development is much smaller in scale than the three surrounding market areas, the development will act as a bridge between two of them, Cuba Street and Courtenay Place. As the surrounding retail consists of either low or medium end services and the size of the development in comparison to Lambton Quay, which is quite a distance from Leed – Eva Street, there is a market for high end retail and services within this area because of certain surrounding services such as coffee and food is still desired from typical high end consumers and have no immediate high end retail in the nearby vicinity. An important note is that this development must be aware of its surround destination areas. Courtenay Place, Cuba Street and Te Aro Park are among the most dominant locations to the site, and taking advantages of these locations is necessary in revitalizing the space.

#### Population Data

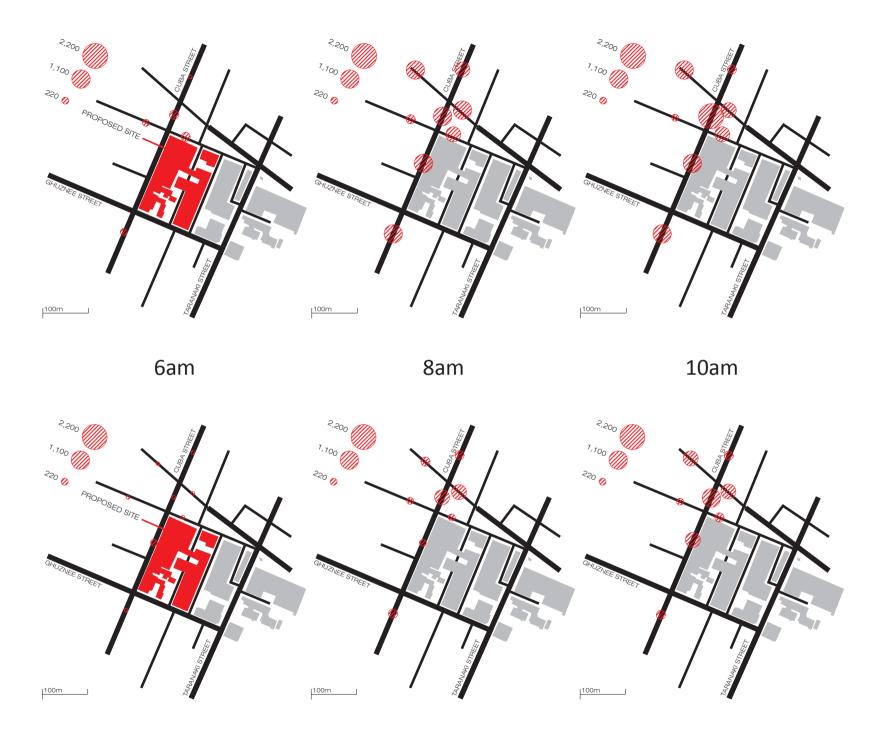
Within the limits of the trade area as defined through the above process, characteristics of the population must be studied. These include such things as present population and future growth possibilities, and composition by age, income level, and family and household unit sizes (ULI, 1978, p. 27). The 2006 census states that the total population of people living in the Wellington City is just below 180,000 people, an increase of just below 16,00 people, or 9.5 percent, since the 2001 census. The most common occupational group in Wellington City is professionals who demand a high quality of environment to fit their lifestyle with the median income, for 15 years and over, in Wellington City being \$32,500, in comparison to \$24,400 for the entire of New Zealand (Statisphere, 2007).

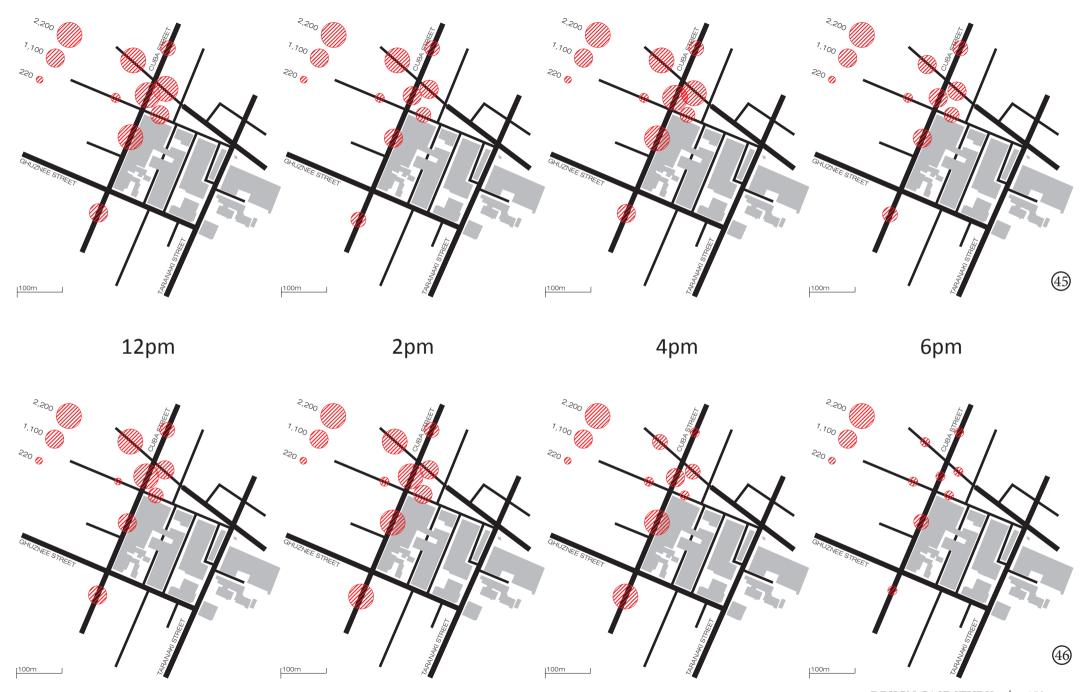
Figure 44: Wellington central region plan showing the surrounding competition.

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Figure 45: Population data showing the amount of people currently within the area during the weekdays reconstructed (Wellington City Council Report, 2011).

Figure 46: Population data showing the amount of people currently within the area during the weekends reconstructed (Wellington City Council Report, 2011).







#### Kind of Centre

With the trade area and a sales potential outlined, the kind of centre that can be built begins to emerge. Due to the site having such an established existing built structure, the kind of centre can be broken into three configurations, the strip mall and the L-shaped mall, which would take the pedestrian from Leed Street or Eva Street through to Cuba Street, and the generic mall at this convergence of Cuba Street and Leed to Eva Street. The proposed redevelopment site incorporates all buildings along the active edge from Leed Street to Eva Street as well as the buildings that would be redeveloped with the Cuba Street route connection. Looking at the trade area, the corresponding analysis of the kind of centre proposed to be developed will inherit aspects of the neighbourhood, community and regional centre to maximize the trade area of the development. Whilst the shape of the site is exceedingly similar to the strip mall configuration, there are areas of importance that need to be noted; the central parking area has potential to be the heart of the development with its large open space. Also to note, there is ample area of redevelopment upon Eva Street with the current rundown buildings.

# Topography

As this site is fairly level, with a gentle slope, it is easily adaptable from a shopping centre (ULI, 1978, p. 44). Although most structures within the area have their ground level approximately 1500mm above the actual ground plane. This has caused a differentiation between the external in internal environment and must be redeveloped to accommodate for the desired shopping experience.

Figure 47: Leed - Eva Street main elements shown upon site.

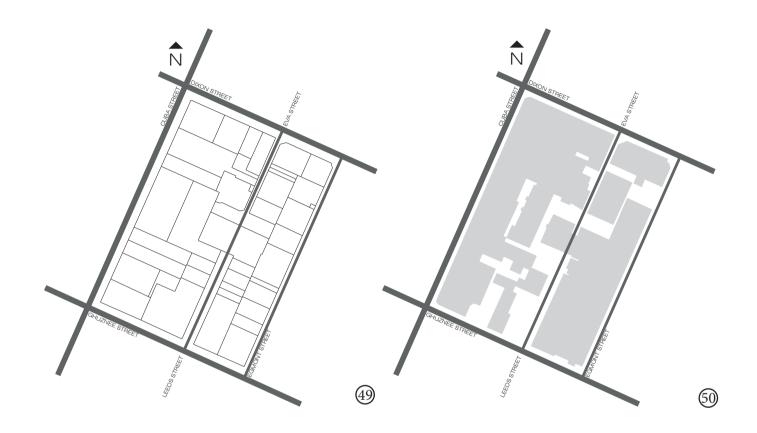
Figure 48: Leed - Eva Street typography showing the gradient of the existing ground plane.



# Chapter 4.3

Analysis of Existing Built Structure

This chapter investigates the existing built structure to evaluate which structures may be deconstructed or demolished, and which may be redeveloped. This evaluation comes through a series of analyses upon the site.



## ilexisting structure & use

Leeds Street - Eva Street

Property Boundaries

The property boundaries display how this concept of shopping mall design principles differs from the generic shopping mall design by incorporating multiple investors towards a common goal. Ian Calder and I envisage the ownership model to be a corporate retail organisation comprising combinations/ hybrids of retailer and consumer cooperatives. This is to maximise the social returns of the shopping mall to the communities that support it, whilst retaining incentives to invest and alignments of interests. Under the umbrella ownership structure, the independent retailers would be able to use a central buying organisation and pool their promotion efforts, in much the same way as conventional shopping malls can. With a co-operative, distributed ownership (i.e. body corporate, land trust), investments and incentives can be directed towards the maximisation of the common good (e.g. opening stores, appointing management, voices in decisions, receiving dividends). Commercial surpluses can be reinvested to benefit the space and the community. The tenant-owners position at the nexus of the value networks, as strategically befits their power and proximity.

Existing Built Structure

The existing built structure displays the layout of the built environment as it stands today. The diagram illustrates the awkward pathways, dangerous for the pedestrian with hidden areas, especially at night with low lighting. This is evident in the photograph shown to the left.

Existing Building Use

The existing building use is important for noticing what is within the area and being successful.

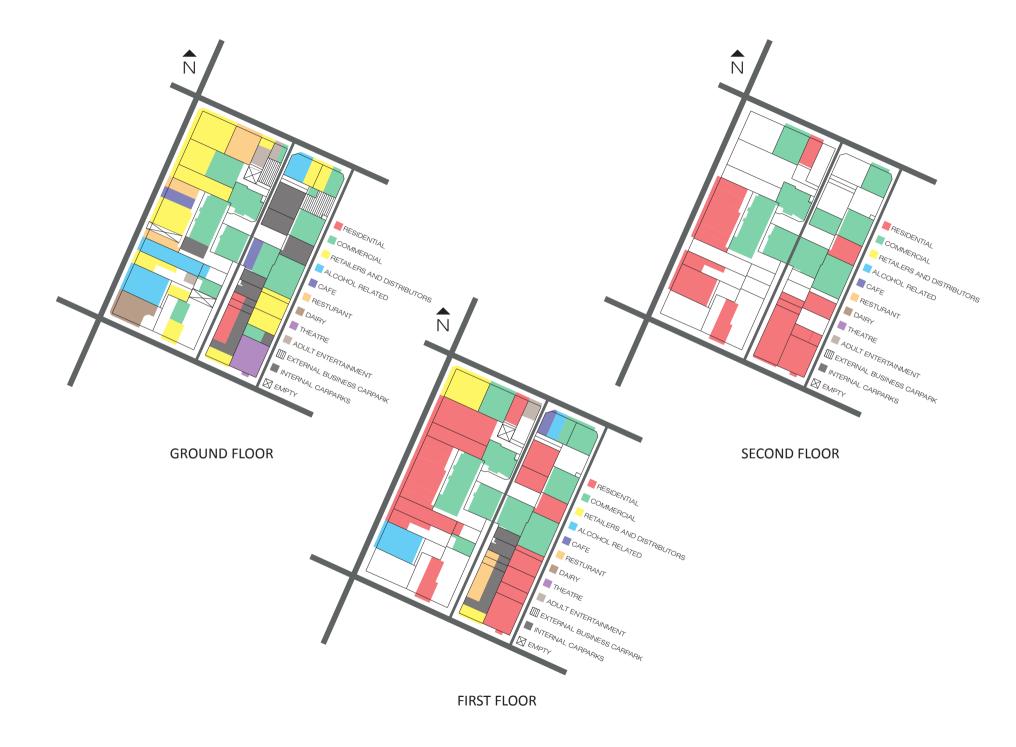
- Ground Floor: Many commercial businesses are within this area on the ground floor, with some structures even having interior car parking, i.e. Hannah's Factory, and the residential complex on Leed Street.
- First Floor: First floor comprises of continued commercial space as well as residential apartments beginning to emerge.
- Second Floor and Above: Residential apartments remain the dominant feature; with very little space being used as commercial space. This is important to note, as the development must not impede upon the living conditions of the dwellers within this space.

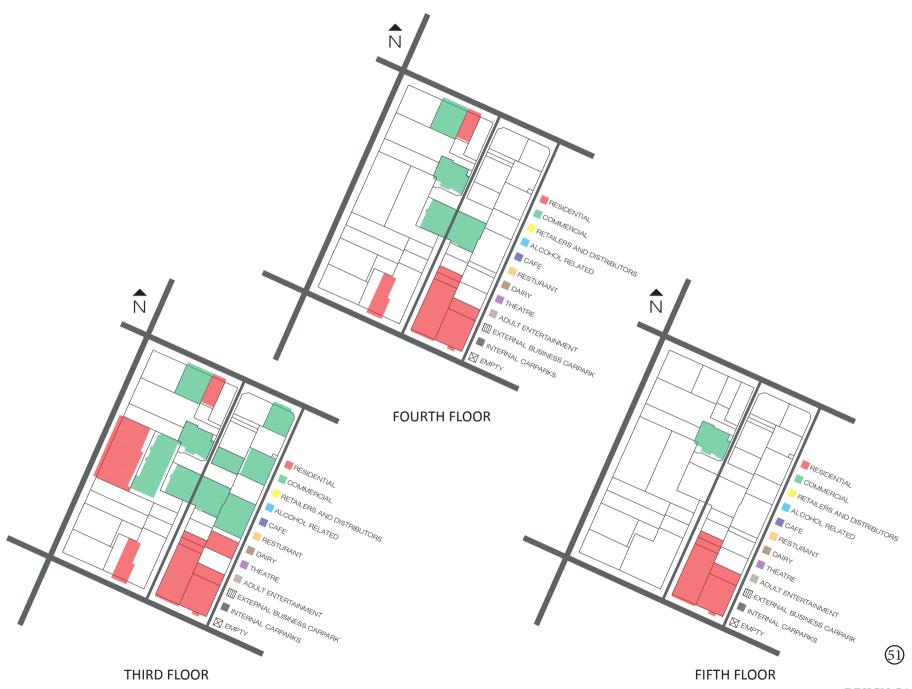
Figure 49: Leeds - Eva Street property boundaries.

Figure 50: Leeds - Eva Street site showing the existing built structure.

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Figure 51: Leeds - Eva Street showing the existing building use.





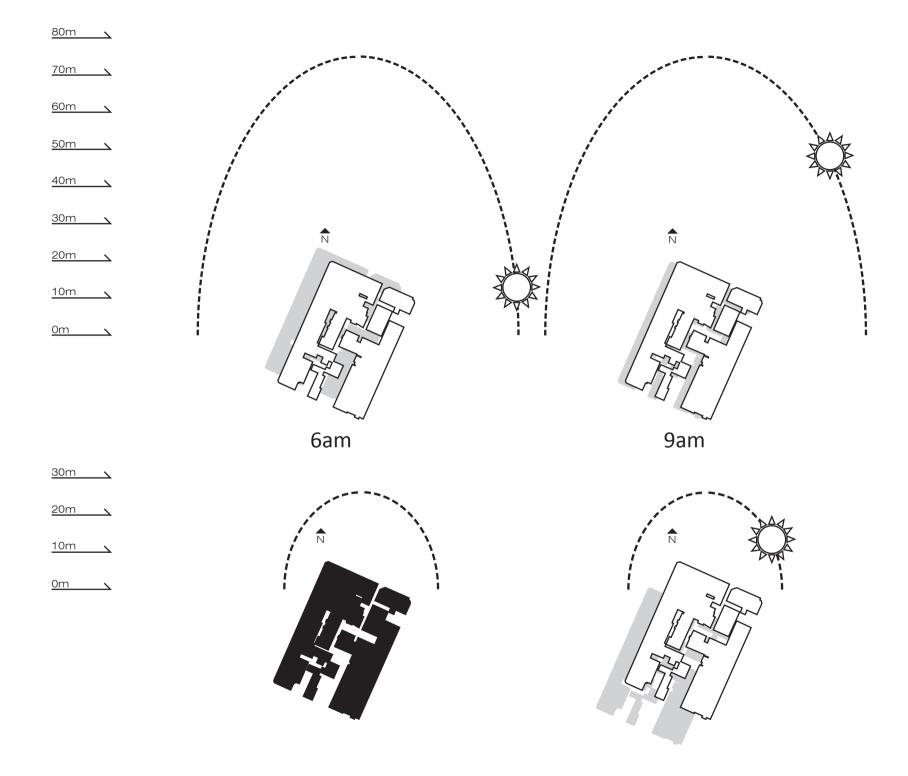
# Sun Study Diagram

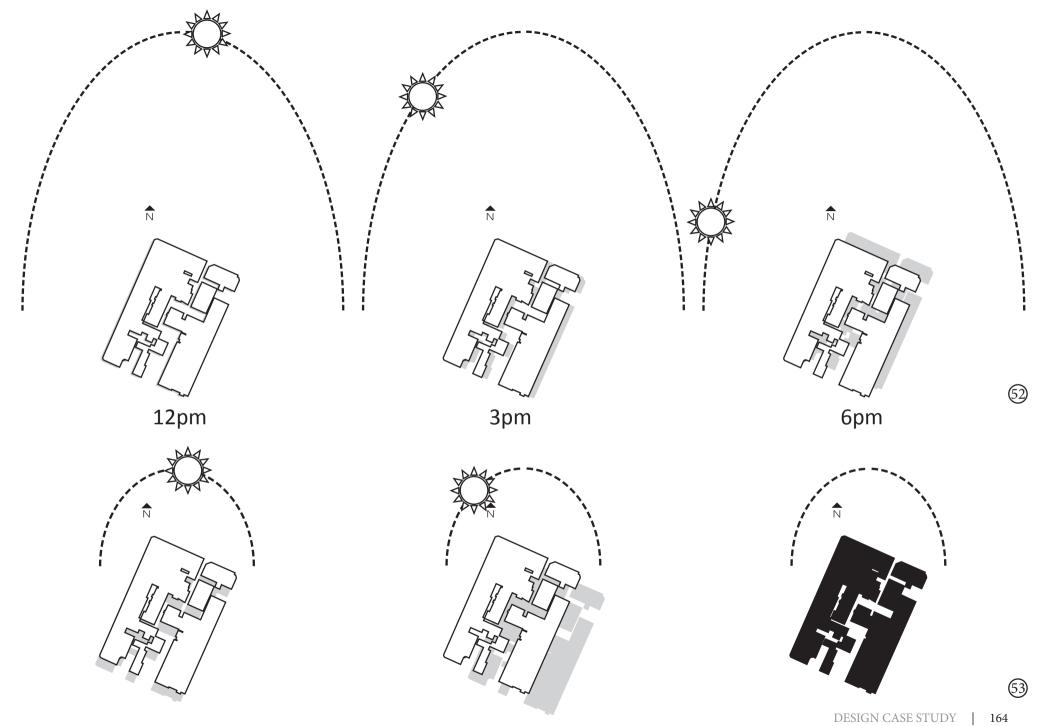
The visual sun study representation upon the site is important as to understand the direct sunlight potential, especially within the open areas. As being built within the inner city, it is important to grasp onto and take advantage of any direct sunlight as it will act as a benefit over surrounding locations. The obvious best time of day is at 12:00pm on the day of the summer solstice, December 22<sup>nd</sup>, where the sun is at its highest. However, it was interesting to see the potential at 9:00am and 3:00pm on the day of the summer solstice as it showed direct sunlight entering into the middle of the site. It was however unfortunate, but expected, to see that by 6:00pm, the site was mainly covered in shadow from the surrounding buildings as 6:00pm is a time where people go shopping after work and a design solution that reflects diffuse sunlight into the site would be beneficial. The winter solstice, June 21st, the site is constantly covered in shadow with the sun not even being up by 6:00am and has gone down by 6:00pm. As there is no way to help this, the design implementation to diffuse light into the space when the sun is up will help comfort the users within the site.

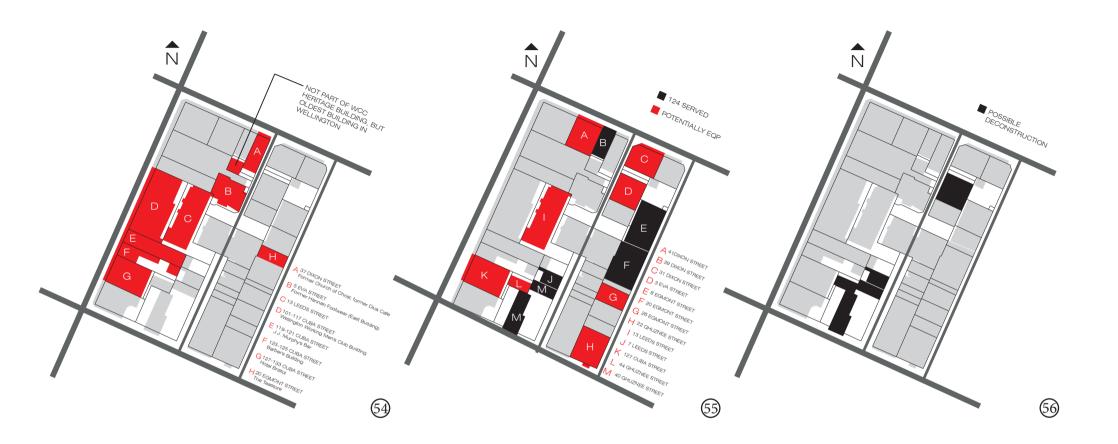
# ON FOLLOWING PAGE: 163-164

Figure 52: Sun study diagram of summer solstice.

53: Sun study diagram of winter Figure solstice.







# ii | DEFINING POSSIBLE DECONSTRUCTION / DEMOLITION

Leeds Street - Eva Street

Heritage Buildings

Shopping malls have a bad stigma upon the public eye of large multi-corporate businesses destroying what was, and creating a building that is unappealing, and extinguishing all existing business in the area that competes with them. As this development wants to have a positive influence in the community, heritage is a suitable way of displaying this to the public by showing respect for the past, and bringing these once glorious structures back to life in the present. This shall be a principle aspect of the design as it encourages community support.

## Earthquake Prone

After the Christchurch earthquakes in 2010 and 2011, Wellington City Council did a study of which building in Wellington would be able to withstand an earthquake, and all buildings that failed to do so were required to strengthen these buildings at the owner's expense. An earthquake-prone building is defined in government regulations as a building with strength that is one-third or less than that required for a new building on that site. The seismic loading standard currently sets this level (NZS 1170.5: 2004). This impact has been shown on the diagram to the left, indicating the buildings that need seismic strengthening.

The possible deconstructed/ demolished buildings that this thesis proposed were conducted by comparing the heritage buildings with the earthquake prone buildings within the designated area. Buildings that were earthquake prone and not on the Wellington heritage building list were prime candidates for deconstruction/ demolition as the advantages of new building structures outweigh the cost of these buildings being strengthened; demonstrated on the figure to the left.

**Figure 54:** Heritage buildings listed under the Wellington Heritage Trust Foundation.

**Figure 56:** Possible deconstruction analysis by merging both the heritage and possible deconstruction analysis together.

**Figure 55:** Earthquake prone buildings done by the Wellington City Council.



# Chapter 4.4

Planning

The planning section can now be conducted after the initial preparation of the site has concluded that the site is efficient in economic, social and environmental terms.



# I I T E N A N T A N A L Y S I S

## Leeds Street - Eva Street

Tenants are classified in several ways: by lines of business in which they are principally engaged; by overall credit rating and by ownership (ULI, 1978, p. 70).

- National chain store: a business operating four or more metropolitan areas in three or more regions.
- Independent store: a business operating in not more than two outlets in only one metropolitan area.
- Local chain store: a business that does not fall into either of the preceding categories.

As this thesis is not just creating another shopping mall, which would utilize well-established businesses, most often franchises, as their tenants to ensure the viability of the business income. The ownership model is to be a corporate retail organisation comprising combinations/hybrids of retailer and consumer cooperatives. This is to maximise the social returns of the shopping mall to the communities that support it, whilst retaining incentives to invest and alignments of interests. Under the umbrella ownership structure, the independent retailers would be able to use a central buying organisation and pool their promotion efforts, in much the same way as conventional shopping malls can. With a co-operative, distributed ownership (i.e. body corporate, land trust), investments and incentives can be directed towards the maximisation of the common good (e.g. opening stores, appointing management, voices in decisions, receiving dividends). Commercial surpluses can be reinvested to benefit the space and the community. The tenant-owners position at the nexus of the value networks, as strategically befits their power and proximity (Calder, 2011).

Within all shopping malls, key tenants are the essential characteristic that allows large amounts of foot traffic throughout the mall. These key tenants act as anchors that pull consumers from one key tenant to the other; often, key tenants are on opposite sides of the mall to offer maximum distance for the consumer to bypass other weaker and smaller businesses. Key tenant selection for this site comprises of a large, multi-storey car park as an attractor anchor of pulling people into the space from a farther distance than just the local consumer. The other tenant, because of the type of tenant selection that this development is after, would normally be a supermarket, thus the alternative is a food market where individual food suppliers can culminate.

Figure 57: Leeds - Eva Street tenants and key tenants locations.



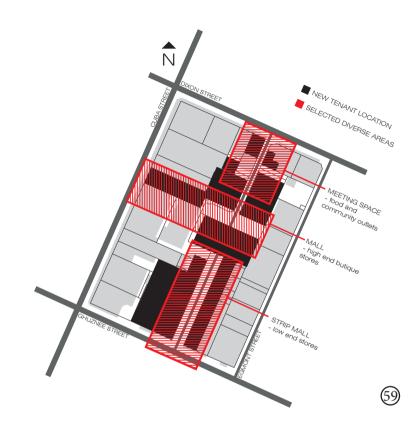
# ii | TENANT ORIENTATION

Leeds Street - Eva Street

## Placement

The tenant placement follows a simple rule: by locating the anchor tenants at each end of the strip or mall so that as much of the pedestrian shopper traffic as possible flows past the store fronts of supplementary tenants. The parking for the development is upon the fringe of the space so that the movement of customers to and from key tenants is convenient but also exposes the customer to as many other tenants as possible. Logical clusters have been proposed which are service and repair shops; food and food services; destination locations such as dentists, doctors and reception for firms; and fashion stores such as clothing, shoe and jewellery stores. This is discussed further in the Tenant evaluation section. The store locations of convenience good stores are to be placed for ready access from the parking area. This is similar to regional mall centres who often find it preferable to locate supermarkets and certain pickup personal service stores, such as dry cleaners, laundries, and carry-outs, at the edge of a parking area, allowing immediate access for quick, in-and-out parking.

Figure 58: Leeds - Eva Street showing the key tenant's locations.



# Composition

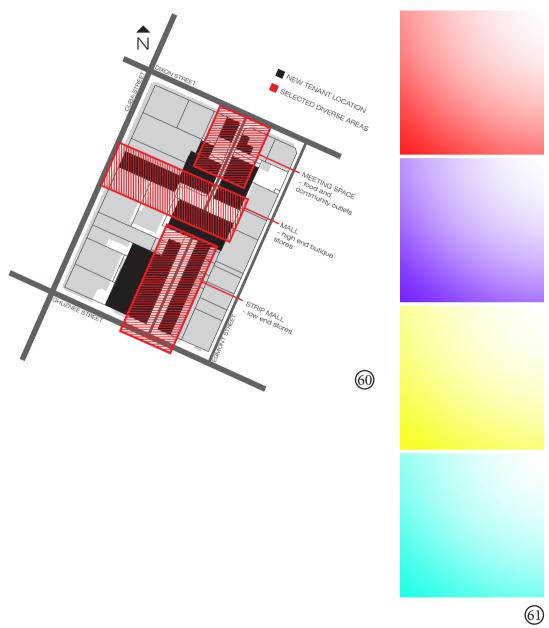
Seasoned leasing brokers, appraisers, landlords, and shopping centre operators have learned many things about grouping certain kinds of businesses:

- Men's stores shoes, clothing and haberdashery, sporting goods tend to swell each other's volume.
- Similarly, woman's apparel, shoes, and millinery and children's clothes and toys the soft lines – prosper in proximity to one another.
- Food products do well when grouped together groceries, meat and fish markets, delicatessens, bakeries, doughnut shops, and confectioners.
- Stores which sell personal services and conveniences naturally go together, but in shopping centres they should be as close as possible to the parking area.

(ULI, 1978, p. 72)

The store grouping have been arranged to provide the greatest amount of interplay between the stores. This has been accomplished by proposing to segregate the site into three different transitions: the meeting space, the mall and the strip mall. These different sections of the site will allow different spaces for different individuals, as described about clusters in the 'Placement' section..

Figure 59: Leeds - Eva Street composition of segregated areas.



## Tenant Evaluation

Tenant evaluation is important to the productivity and merchandise offerings in any centre. Operators of new centres must monitor and encourage tenant performance, particularly the performance of any tenants which are first-time entrants into a shopping centre (ULI, 1978, p. 77). The following are proposed categories of outlets that would be eligible for selection within the development:

## Food and Food Services

- Supermarkets
- Other Food Stores
- Restaurants
- Gourmet Food Marts
- Fast-Food Outlets

#### General Merchandise

- Department Stores
- Junior Department Stores

# Outfit Retail

- Apparel Stores
- Shoe Stores
- Furniture and Home Furnishings

## Discount and Thrift

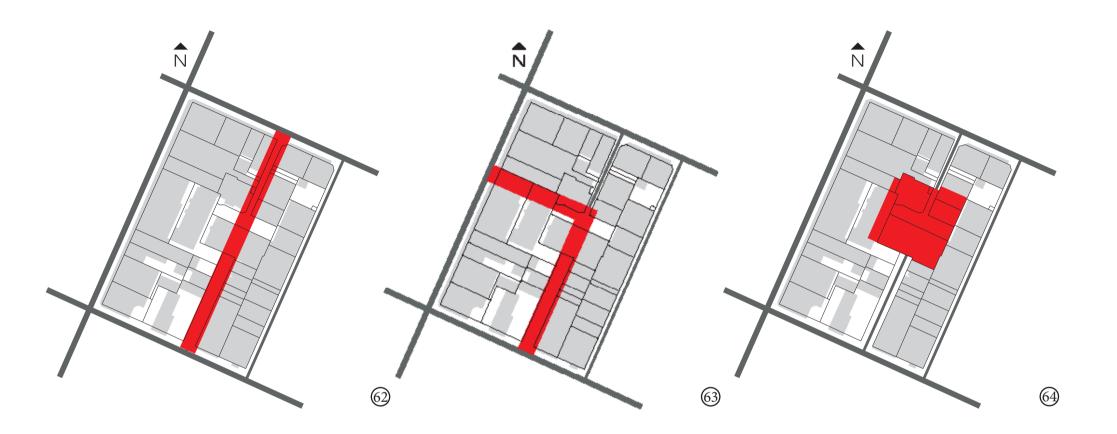
- Variety Stores
- Self-Service or Discount Stores

These categories have been particularly selected as the give the broadest range of merchandise to satisfy the maximum amount of consumers. This integrated with the combination of proposed placement within the different transitions allows the space to be designed around the type of stores applicable to each section. For instance, the discount and thrift store location that would be allocated to the strip mall outside the car parking is a lower grade of space due to being shared between foot traffic and vehicular traffic so the grade of the space will be less to accommodate the low rent structure.

The colour images shown are related to the specific nature of the categories proposed through the colour theory researched. As the red colour selected which is assigned to general merchandise stores to encourage impulse shopping; the colour purple is assigned to the outfit retail as it symbolises royalty or high end merchandise who traditionalists respond to most; yellow is assigned to food and Figure 60: Leeds - Eva Street composition of segregated areas.

Figure 61: Colour scheme proposed for the development by combining colour theory to business type.

food services as the guilty pleasure of eating is subdued by the feeling of warmth and happiness as it boosts moral; and finally the light blue colour is assigned to the discount and thrift stores as it responds best to budget shoppers and calms and relaxes people. The final colour, not represented but important to the user is the colour green, brought out in the proposed vegetation as green is easy on the eyes, and makes the user restful and tranquil. As the colours are proposed to be upon the exterior face of the facades, the combination of all the colours will apply to every individual and encourage impulse shopping whilst keeping the user comfortable.



# iii | BUILDING PATTERNS & SPECIAL TENANTS

Leeds Street - Eva Street

Building Patterns

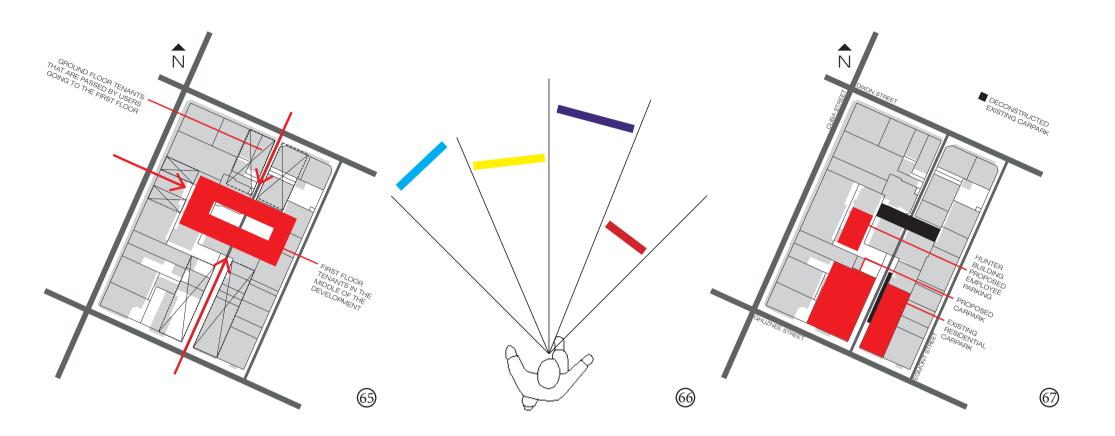
The building pattern within the site is relatively fixed, although particular patterns can be manipulated through the design. The site shows a very distinct strip mall appeal, with the street being a continuous straight line from Dixon Street to Ghuznee Street. A strip is generally the least expensive structure to build new and is easily adapted to most site conditions.

Manipulation to the design and incorporating the connection through to Cuba Street allows the space to change from a regular strip mall to the L shape mall. This reduces the length of the regular strip mall, and utilizes more space within the block. Creating the connection through to Cuba Street has allowed a moment to occur within the middle of the developed site. A convergence of foot traffic occurs from Leed, Eva, and Cuba Street. Within this convergence of foot traffic, a cluster mall building pattern can occur, with a multi-level shopping facility available to the public whilst being grounded by successful models of mall tenant and spatial configurations. The site takes on a multitude of building pattern designs, and would be placed under the category of a speciality centre; having no prescribed patterns, but using the building pattern best suited to the location and market area.

Figure 62: Strip mall configuration upon the existing site.

Figure 63: L shaped mall configuration upon the existing site.

Figure 64: Cluster mall configuration upon the existing site.



## Facilities for Special Tenants

As the first floor generally does not profit as much as the ground floor levels (ULI, 1978), first floor tenants will be comprised of destination businesses only including such businesses as doctors, dentists, architecture and design firms, banks, cinemas, optometrists, and other such establishments. This allows people to move through the ground floor, window shopping other tenants to get to a destination they were already set to go to. This is demonstrated on the image to the left.

Spatial syntax was an integral part of the configuration of space through utilising the colour theory and categories of shopping outlets. The line-of-sight is improved through spatial syntax and colour theory as users entering the development allows an organisational influence of traffic to occur. This is achieved through forcing the users to make as many turns as possible between each destination as it is crucial to the spatial experience. This is also enriched by shortening the perceived distance between outlets as the appearance of depth is minimised through the user knowing the type of outlet it is through colour theory. These two significant theories enable a control over the user and an enhanced mobility of the user through access and traffic patterns by design.

## Parking

As parking is an essential aspect of a successful shopping mall. Although parking is not a commercial use in itself, it is an essential auxiliary to the commercial use in the centre (ULI, 1978, p. 94). Parking for the employees must be segregated from consumer and the public parking. Employees are allday parkers and cannot be allowed to occupy prime parking spaces that are needed for customers, therefore, employee parking will be segregated to the parking spaces within the Hunter Building shown on the image to the left, which is similar to a strip convenience centre, employee parking is best placed at the rear of the stores (ULI, 1978, p. 102).

Figure 65: Movement of users past ground floor tenants by going to first floor tenants.

Figure 66: Spatial syntax and colour theory diagram of human perception.

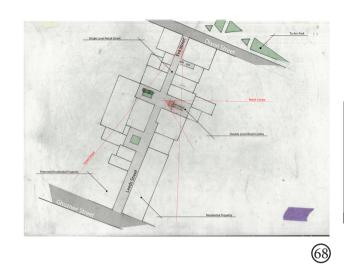
Figure 67: Proposed parking allocations to employees, private and public users.



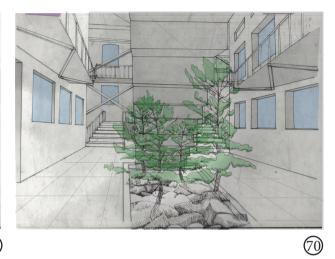
# Chapter 4.5

Design of Development

Now that all the preliminary analysis is done the actual design of the development can begin. The urban design and shopping mall principles are instilled from the start of the design process which allows for a coherent finalised design.







# i | DESIGN OF DEVELOPMENT

## The Design Concept

The beginning concept of the design, which originated very early on, began with aspects of ideas being quickly sketched that had arisen whilst researching into the shopping mall design principles. These quick sketches acted as an initial base collage that transformed the thoughts onto paper. These were then united to create the first recognisable piece of architecture with a plan and two sketches that encompassed the initial idea.

The plan was created to show the initial boundaries of the site and the transformation of space opening up and allowing breaks in the laneway to slow pedestrians and allow a moment of remembrance. It was clear by this stage that the centre of the site where car parking was originally offered to the businesses was going to be the heart of the space, accumulating the most attention to detail.

This sketch was drawn to show the relationship of the buildings. Whilst the overall buildings remained independent, elements brought the aesthetic quality together, unifying the development as a single entity. Design features at this stage were the large open glazing, the unifying elements, and the segregation of each side of the mall being brought to a centre point in the middle, which would act as the drain.

The second sketch, shows the motivation towards the utilisation of the first floor level of the surrounding structures with the walkways above protecting the public below from Wellington's variable weather conditions. It is also important to note the direction of the stairs facing away from the main traffic flow to maximise the public's viewing of the merchandise.

Figure 68: Concept plan sketch showing the beginning elements of implementing shopping mall design principles.

Figure 69: Concept sketch showing the uniform design implementation and improved architectural quality

Figure 70: Concept sketch showing first floor access and vegetation.





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# ii | DESIGN OF DEVELOPMENT

## The Design Process

Initially, a re-creation of the existing site was made, using three-dimensional architecture software, to determine the scale of space provided by the site, assisted by Wellington's City Archives plans and elevations. This allowed a beginning template to be created by containing the information gathered in chapters 3.1 to 3.4. It must be noted that the economic viability of the development was always conscious when designing, and through this, the design began very slowly with each decision being meticulous as to encourage the idea as a viable solution.

The preliminary presentation conducted exposed the primary principles of the shopping mall introduced into the space, with the segregation of areas being the meeting space, heart, and shared space. Within each segregation, different elements of the shopping mall design principles were introduced as the amalgamation of all the design principles throughout the site would yet be another recreation of a mall.

The meeting space, as a complete exterior space, was allocated with far more urban design principles than the shopping mall design principles although the idea of having a meeting place originated from the shopping mall; Increasingly, malls are creating meeting spaces beyond that of the food court and are introducing seating which does not require buying something. The idea was to introduce large amounts of vegetation in order to segregate the location from other areas within Wellington. This was further supported by Te Aro Park being situated at the outside the meeting space, allowing it to act as a waypoint towards the entrance into the development. The creation of a connection to Egmont Street was not only necessary for CPTED security but by also encouraging future expansion to progress from this development, and in turn allowing this idea to act as a catalyst. At this point, the operation of the new structure and the old brick building was unknown, and remained a blank space within the presentation. Ian Calder assisted me after the presentation stating that these buildings could act as externalities of the development by introducing community structures that brings more foot traffic into the development whilst supporting the users that come to the development for shopping motives. Ian Calder suggested that these structures could be businesses such as theatres, community teaching facilities such as night cooking classes, and child care facilities.

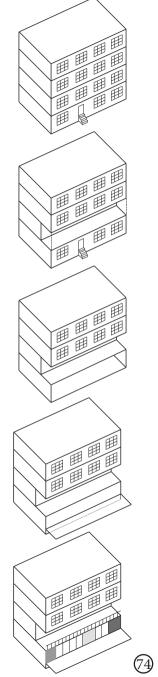
Figure 71: The preliminary meeting space design showing large vegetation areas and open space.











The earlier iteration of the heart of the development was being utilised with maximum frontages with an island arrangement being contained within the middle. This forced the public around the island when passing through the site, allowing a maximum of window shopping to occur which was a movement away from urban design and a decision solely based on the shopping mall design. The second floor has been utilised by removing a portion of the first floor to act as a walkway because the space within the site was limited and could not accommodate an external walkway being attached to the building.

At this stage the shared space was a greatly undeveloped location within the site. The main anchor being the car park had been decided, although by seeing the sheer size of the car park, and the unpleasant nature of the design of this car park, it was apparent that further development into the configuration and appearance was needed. It was interesting to notice the general heights of surrounding structures which allowed an understanding of the height of the new development.

The preliminary presentation showed the main ideas coming through, but certain elements were still missing, anchors; through the use of the car park and food market area, configuration; through the use of spatial syntax, colour theory and shopping mall design principles, and control were being developed without the assistance of the interior aesthetic; being specific to the materiality and the sense of enclosure. There was a distinct shift after the preliminary presentation from design through research to research through design. Experimental processes began and allowed a more in-depth analysis of the integration of the shopping mall design principles into the existing urban fabric. This was done by allowing installations of shopping mall design principles into an architecture program and allowing three-dimensional representations of the spaces to inform which elements of the shopping mall worked, and which needed to be manipulated for the urban context. Some of these are shown in the following section on 'interior aesthetic' when looking at experiments into the materiality and enclosure.

Figure 72: The preliminary heart space showing the configuration of space, the manipulation to the existing built structure and the use of control over the users.

**Figure 73:** The preliminary shared space showing the continuous retail outlets and car parking structure.

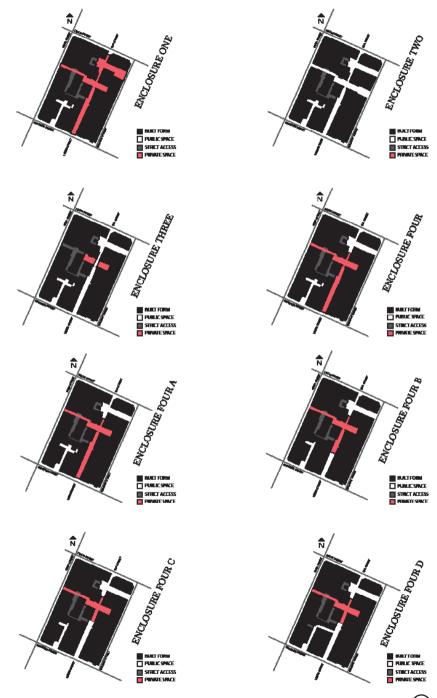
Figure 74: A diagram of the manipulation of the existing built structure as to inform the shopping mall design principles into the existing built environment.



The materiality of the space when following shopping mall design principles need to be high-grade, clean, crisp, bright and uniform to allow the intended users of the space to be comfortable, safe and appropriate. An experimental process was done starting with a base common material such as timber, concrete, metal and glass which transformed into an amalgamation of the different materials. As such, an unexpected conclusion was made, which was that the space needed to be different and surprising in order to attract consumers whilst having a sense of remembrance of the space and therefore, materials such as astroturf, real grass, and LED's were introduced; shown on the images to the left.

Lighting was an important factor within the design as it could not only liven up the atmosphere, but also direct the public around the boundaries of the space instead of just passing through. This directional analysis of lighting was assumed by personal experience. People tend to avoid standing on glass as for the fear of it breaking, so, if the lighting was contained within the floor, and focused upwards, in theory, the light could act as a wall for the public to move, whilst still not completely impairing the public's personal choice of movement, supporting both urban and shopping mall design principles.

Figure 75: The materiality experiment showing the different uses of materials within the space. The connection to research through design.



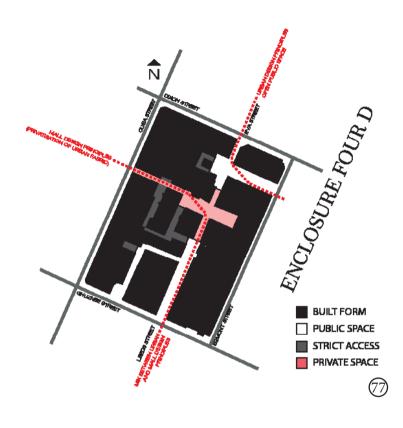
The amount of enclosure was the most aggravating but rewarding investigation within the development. The problem was the combination of urban design and shopping mall design principles that conflicted upon enclosure. Private versus public was the first obstacle that needed to be overcome. The space could not be completely enclosed as the space was also the back yard for residents and as such an analysis was done to determine how much, if any of the space was to be privatised.

Enclosure one was looking at the complete privatisation of the space, completely taking on the shopping mall design principles. It is gated at the boundaries, has a large enclosure, protects the investment from crime and vandalism and acts as a safe environment at all hours. Other implementations intended for an enclosure of this magnitude would be limitations on alcohol sales, strict operating hours and a possible complete interior enclosure, the common or circulation areas would become effectively private, and the community aspect of the space would be less effective, however the noise reduction and availability for use only by residential tenants would be improved.

Enclosure two was the opposite of enclosure one, being completely open to the public and specifically following the urban design principles. The control of the space would be towards protecting the investment from crime and vandalism as a very high cost to the developer as well as being very similar to other shopping environments such as the neighbouring Cuba Street. This did potentially make the space more dangerous after hours as the security elements would become less effective during darkness. It did create a good thoroughfare at all hours of the day and allowed the space to become a part of the urban environment by the transition to surrounding spaces being very smooth with businesses able to be open at all hours. The negative aspects of enclosure two is that the residential occupants would lose their private allocation of space and remain in a noisy and dangerous environment outside their homes.

Enclosure three suggested that the site be completely gated at the boundaries of the development, whilst the heart space acted as the resident's private property after hours. This made the space privatised and once again followed shopping mall design principles, which acts as a large enclosure, protecting the investment from vandalism and crime, is safe at all hours, but is an awkward privatised space. The awkward private space is through the segregation of the heart space, forcing residents

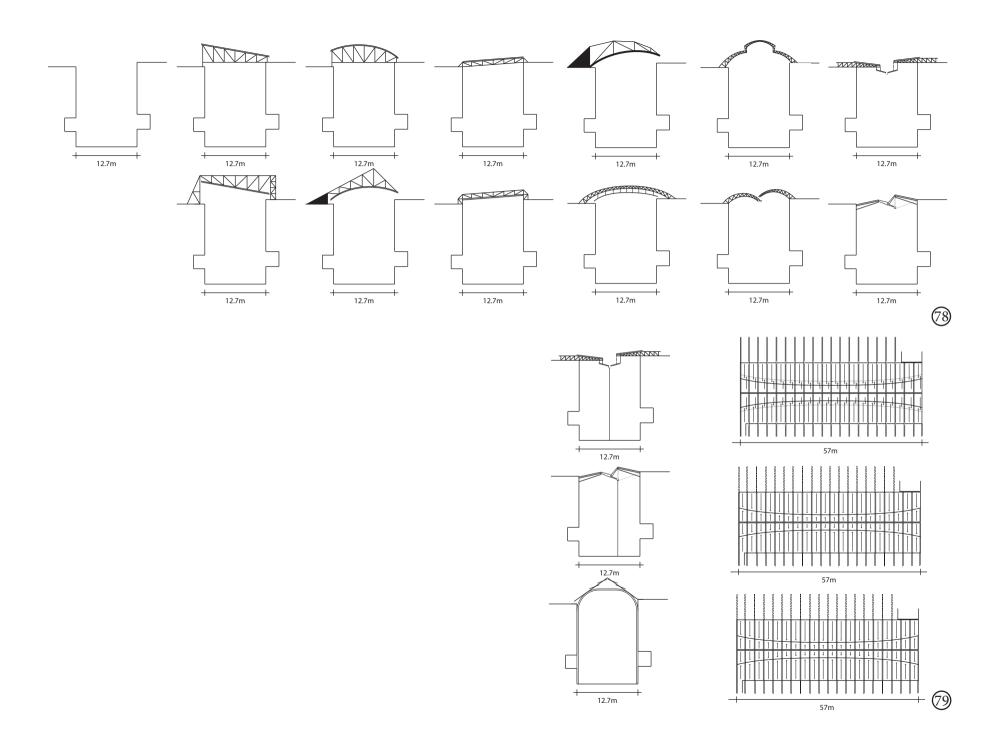
Figure 76: Enclosure amounts experiment on the proposed development.



to move between each segment through a public area as well as having the potentially large amount of public foot traffic, some intoxicated, right outside their personal space.

Enclosure four seemed to have created a successful amount of enclosure, with some modifications and development of the amount of enclosure. The heart space acted as the private space for residents after hours, whilst the access to the meeting space was still open to the public at all hours. The meeting space remained a safe location after hours by following CPTED with routes through to Egmont Street and enclosing off any hidden areas.

Figure 77: The final proposed enclosure amount in relation to the access of all parties involved.



The amount of enclosure didn't stop at the extent of access to the public and residents, with the precedents showing that coverings were a major issue within shopping malls. The enclosure analysis determined the most appropriate area for weather protection through a roofing system being the heart of the development, which was privatised for the residents and the main shopping hub of the development. As such, an experimental process of roofing systems was conducted to determine the shape and size of the roof.

The enclosing structure that was most suitable for the development was an arched cantilevered structure that allowed passive ventilation to occur and refracted light into the space. The roof was decided to be arched, which is against the rest of the design which remains very angular, because of the difference has a sense of individuality and catches the public's eye, forcing them to look up. This was important as to have the connection between the external environment and the new development, thus being a symbolic notion towards the difference from the traditional enclosed shopping mall design, segregating itself from the outside world.

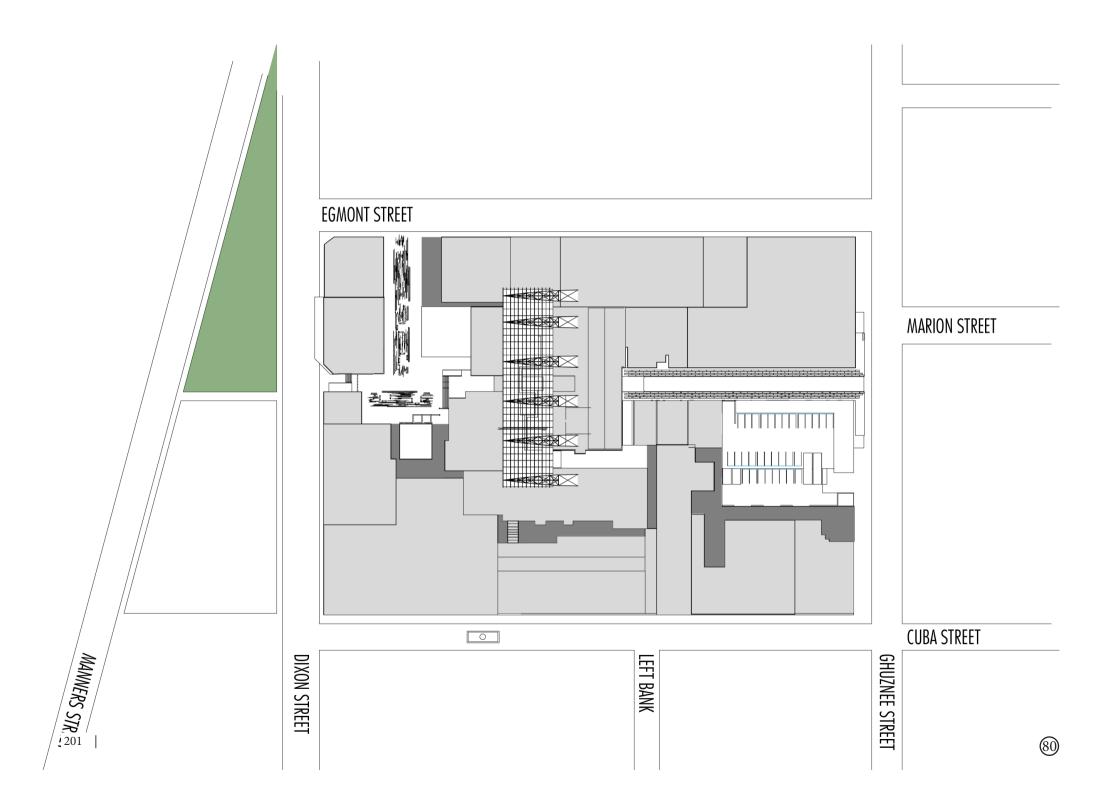
Figure 78: Enclosure experiments upon the roof structure within the heart of the development. Figure 79: Further research into the design by looking at the structure of the roof.

# iii | DESIGN OF DEVELOPMENT

# The Design Solution

The final design incorporates ideas from the shopping mall with those from urban design with new ways of thinking about retail in a new post-capitalist business model that has been researched and developed by Ian Calder. Ian Calder intended that the ownership model is to be a corporate retail organisation comprising combinations/ hybrids of retailer and consumer cooperatives to maximise the social returns to the communities that support it through the utilisation of the shopping mall principles. The independent retailers would be able to use a central buying organisation and pool their promotion efforts, in much the same way as conventional shopping malls can, with the commercial surpluses being reinvested to benefit the space and the community (Calder, 2011). The plans, elevations, sections, details and three-dimensional renders validate the potential for the integration of the successful shopping mall design principles into the existing urban fabric.

To not only improve the shopping experience for the public, but to also improve residential life within the inner-city of Wellington. It is important to note that the allocation of individual businesses, excluding the anchors and important organisations, was not undertaken as it would be up to the manager to determine the location of each business in respect to the information that the architecture, in this case the student's design, provided.



# Configuration & Crime, Vandalism & Neglect

The plans show the complete configuration and crime prevention elements of the development by defining the spatial qualities of the three individual spaces; the meeting space, the heart and the shared space. The plan also shows the shared utilisation of space borrowed off the surrounding buildings to allocate a successful retail environment. The anchors, the car park and the food market, being part of the shopping malls configuration principle, is shown on the plans at opposite ends of the development, allowing maximum distance between them to allow consumers to spend longer at the mall, and in turn spend more money.

The site plan shows the general layout of the development to its immediate surrounding streets with importance noted to Te Aro Park and the bucket fountain on Cuba Street. The bucket fountain is located just outside the entrance into the development as this iconic connection to Cuba Street is important to the development as one iconic location to another as well as the accumulation of foot traffic around the bucket fountain will also enable more foot traffic through to the new development.

The ground floor illustrates the connections to surrounding streets and established retail settings through the new pathways to Egmont Street and Cuba Street. This allows the development to not act alone as an individual retail location, and instead be part of the whole retail atmosphere that is Wellington's inner-city, which is acting as a large supermall. The configuration of the development and accessible areas allows for a safe environment to occur during the day and at night. The new pathway to Egmont Street allows the meeting space to remain safe by allowing an alternative exit of users.

The first floor, which is dominated by destination businesses such as dentists, doctors, commercial receptions, and other similar occupants, forces the people seeking these businesses by predetermined means to bypass the other businesses within the area. This area is non-accessible to residents after hours as the access ways to the first floor is gated off at the stairs and elevator access is unobtainable.

Figure 80: Site plan indicating the general layout of the built structures within the development.

The scale is 1:1000.

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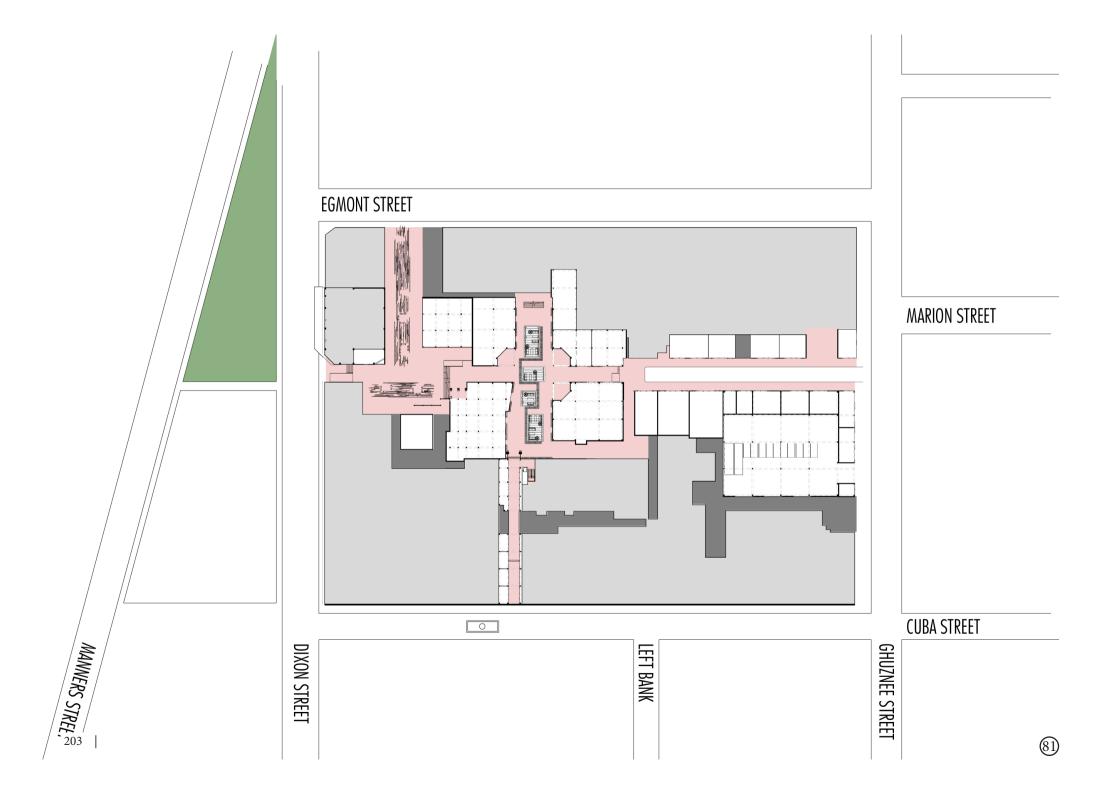
**Figure 81:** Ground floor plan illustrating the connections to surrounding streets, tenant location and the different sections within the site.

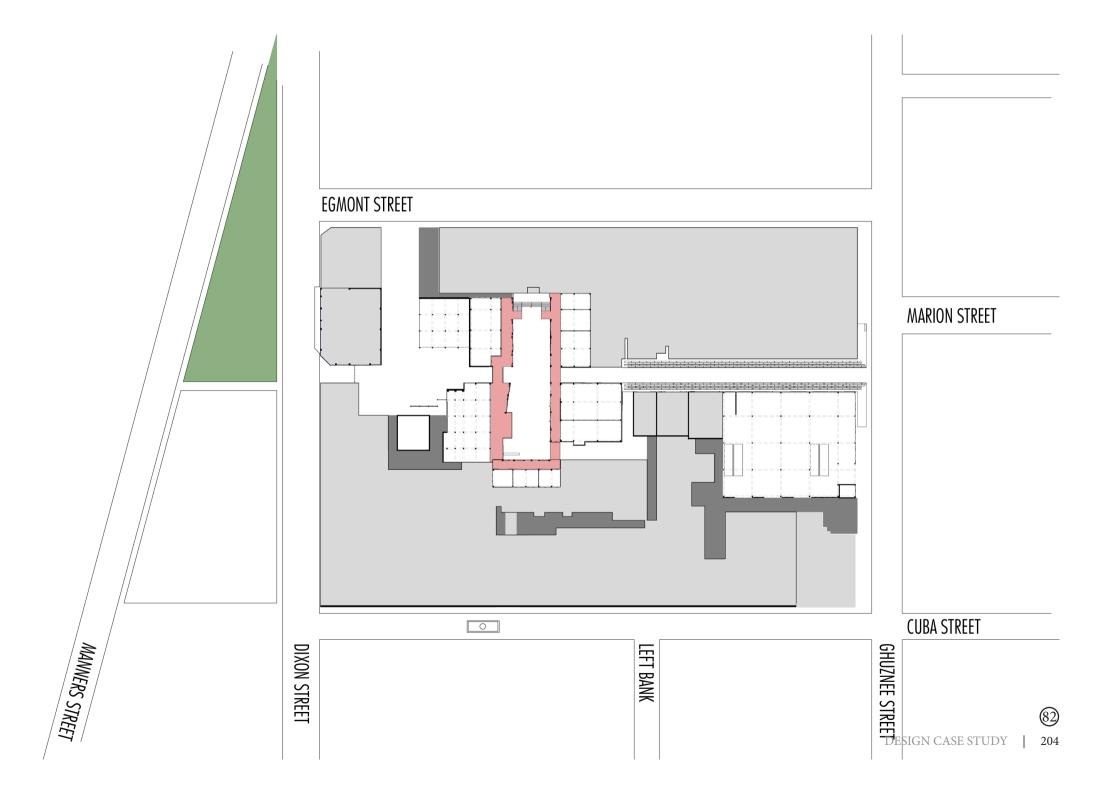
The scale is 1:1000.

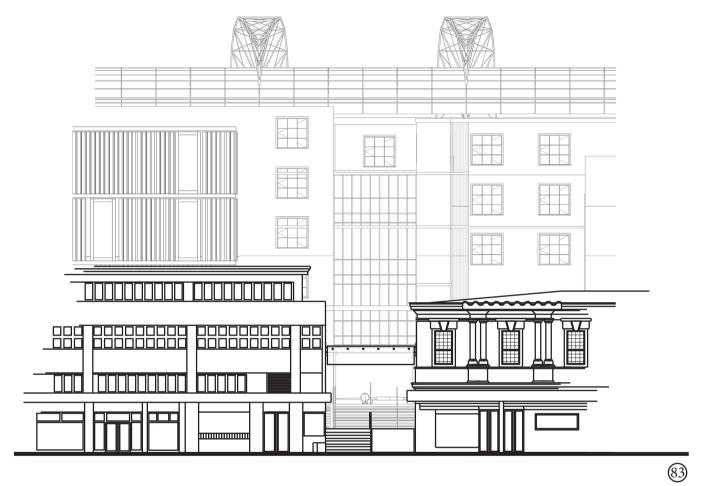
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Figure 82: First floor plan showing the location of destination tenants and access.

The scale is 1:1000.









#### Targeting Users

The elevations show the entrances into the development from Cuba Street and Dixon Street as there is a need to target the users of the immediate surrounding popular street markets of Cuba Street and Courtenay Place. These two entrances have been chosen as there is no element to draw them in like the other entrance from Ghuznee Street with the car park acting as the car park. The location of the entrance into the development from Cuba Street was very important as this entrance was proposed to pull users through from Cuba Street and as the other streets was already pre-determined entrances because of the existing layout. The entrance from Cuba Street has manipulated the existing Cuba Street roof structure and become the main element of the entrance by being curved which draws the eye when being surrounded by the angular awnings of other businesses. It also allows the hint of the curved roof within the development which allows a connection to the public when wanting to return. The Dixon Street entrance shows the hint of the interior of the development by being able to see right through to Ghuznee Street. The steps or ramp up into the development is a very successful element within shopping mall design, as the concept of 'the higher you go, the more extravagant the merchandise is'. This allows a mental segregation of the user from the street retail and allows the user to take on a behavioural change, targeting only desired users to enter the space. This is shown by the sections seen in the following pages.

The sections show not only the vertical configuration of the development, but also the modifications to the ground plane. Originally the site followed a gradual incline from Dixon Street to Ghuznee Street, which forces many buildings ground floor to be raised around 1.5 metres above the ground. As this is not an option within the constraints of shopping mall design principles, a flow from the exterior to interior of each business needs to be continuous and upon the same level, so the only option, other than lowering the ground floor of the buildings, was raising the ground plane with elevated floorings. The elevated floor is shown further on the following pages. This was successful in many respects as it also enabled a vertical transition between each segment of the development which is also seen within the segregation of certain businesses being allocated upon different levels in the shopping mall.

Figure 83: Elevation of entrance into the development from Dixon Street showing the access, configuration and view through the development.

The scale is 1:200.

**Figure 84:** Elevation of entrance into the development from Cuba Street showing the different architectural forms to encourage usage.

The scale is 1:200.

# ON FOLLOWING PAGE: 207-208

**Figure 85:** Transverse perspective section showing the access through to Cuba Street, the false flooring system, the roof structure and the existing building modifications.

Figure 86: Plan view of figure 83 section cut location.

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Figure 87: Longitudinal perspective section showing the access through from Ghuznee Street to Dixon Street, the false flooring system, the roof structure, the existing building modifications and the different levels for the different areas throughout the site.

Figure 88: Plan view of figure 87 section cut location.

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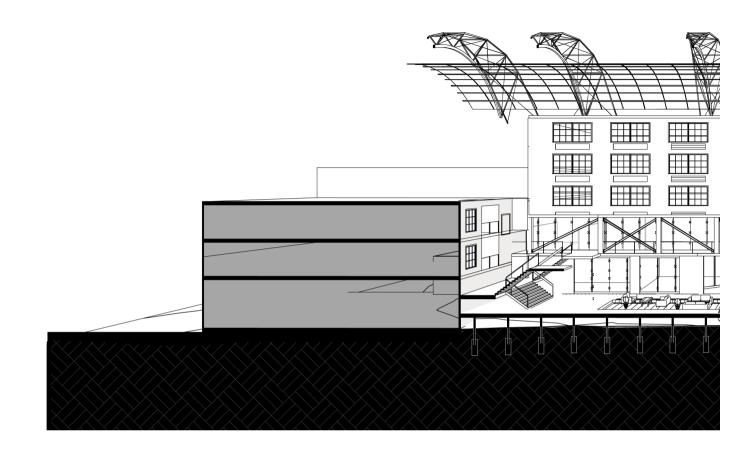
Figure 89: Plan view of figure 90 section cut location.

**Figure 90:** Three dimensional sections showing the layout, configuration and architectural quality.

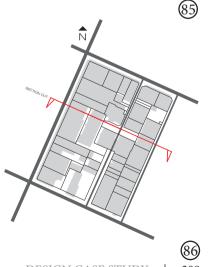
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Figure 91: Three dimensional sections showing the layout, configuration and architectural quality.

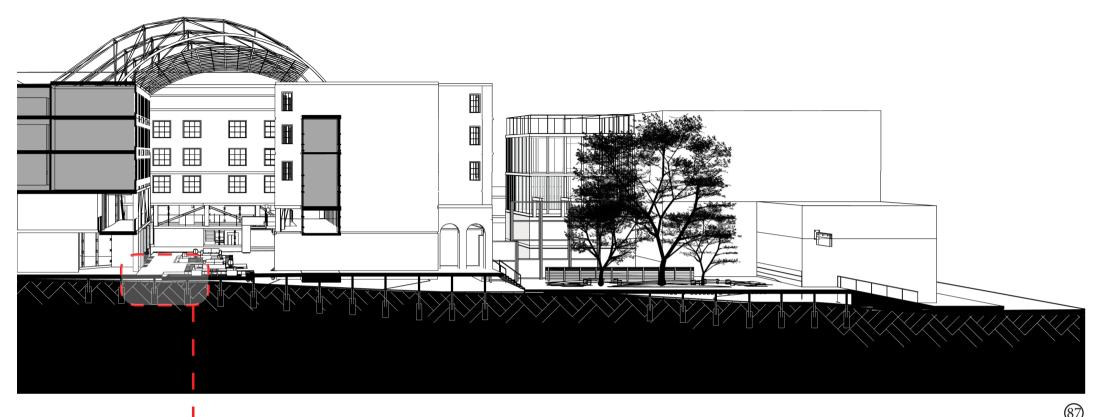
Figure 92: Plan view of figure 91 section cut location.



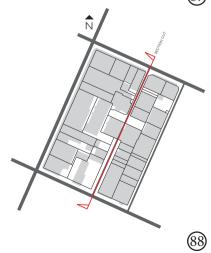


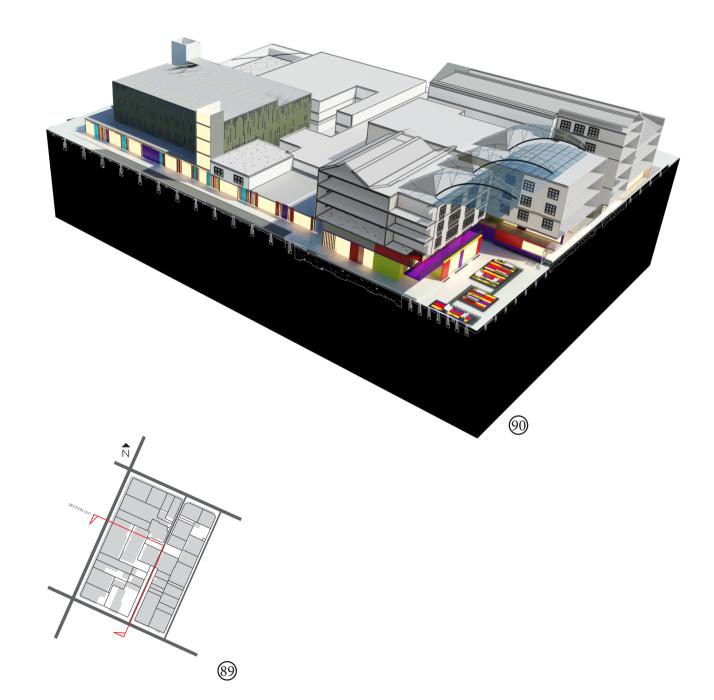




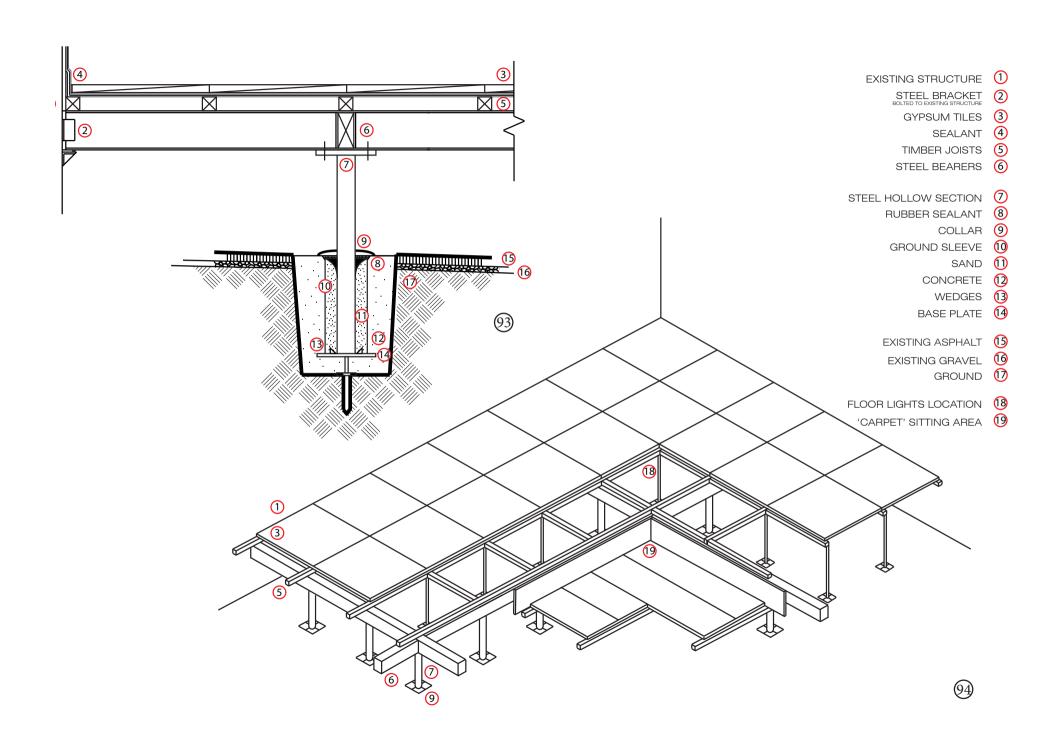


Detail 1: Figure 96









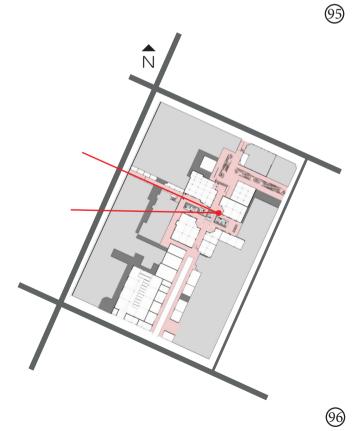
The details consist of the implementation of the elevated floor level between the buildings, particularly within the heart of the development. The floor is elevated by primary steel columns that attach to the bearers which are bolted into the surrounding structures. The secondary steel column supports are attached to the joists as the structure needs to be strong as to support a high load with the influx of people that will use the space. The three-dimensional detail illustrates the locations for the gypsum tiles, the ground lighting and the step down to the 'carpet' sitting areas.

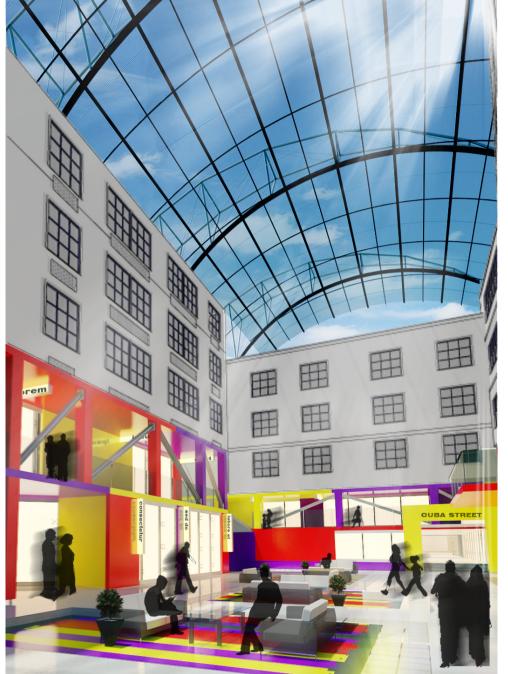
> Figure 93: Detail of elevated floor showing the connection to the existing built structure and the existng floor level.

The scale is 1:50.

Figure 94: Three dimensional detail representation of the assembly of the elevated floor showing structure.







# Retail Attractiveness & UtilIsation of Space

The three-dimensional renders represent the proposed design of the site in coordination with the research studied. The renders are evidence of the retail attractiveness and the utilisation of space that was a consistent problem within the street retail sector.

The heart space remains the most important aspect of the development, implementing the full extent of the shopping mall design principles. The initial impact upon the public within this space is the appreciation of retail attractiveness and the transformation of the existing built structure. This is then reinforced by the colour configuration that has been applied to the new facades. This sense of surprise from the public allows the individual to remember the space when contemplating where to go next time they want to go shopping. The carpet seating areas that have been created within the middle of the open space creates a break between the opposite sides of the space, encouraging the public to move around the edge of the space, instead of through. This is also reinforced by the lighting within the floor, which is glazed, that runs through the middle of the open space, as people are discouraged from walking on transparent materials. It was important to see all businesses on the ground and first floor to enable maximum appeal to the public by giving them as many propositions as possible.

It is apparent that the roof structure stands out in comparison to the rest of the ridged angular design with its curvaceous nature. The design has created a connection between the new brightly lit development and the external environment existing beyond the roof structure. Although this goes against historic traditional shopping mall design, it is seen more commonly in resent post-modern designs. An example of this is the Porirua City Centre as they are removing the roof entirely because of the lack of sunlight and segregation from external elements.

The other three-dimensional representation image of the heart space allows a full representation of the main retail space to be seen. The external access stairs, seen at the back, allows the space to remain open and with the stairs being so dominant it encourages consumers to venture upstairs to see more tenants, slow the consumer down and envelope the user into the development further.

This space also acts as the private space for surrounding residents. It is interesting to note the difference in attention between the two different hours of the day. During the day, the retail shopping area and the external environment becomes the dominant features within the space, whilst after hours the residential life becomes the dominant feature of the space, with the resident's apartments illuminating the space.

Figure 95: Existing built structure.

Figure 96: Plan showing the view plane of figure 97.

Figure 97: Three dimensional image of the heart during the day showing the retail attractiveness and utilisation of space.

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Figure 98: Existing built structure.

Figure 99: Plan showing the view plane of figure 100.

Figure 100: Three dimensional image of the heart (opposite direction) during the day showing the retail attractiveness and utilisation of space.

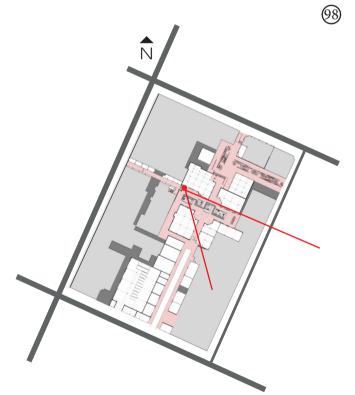
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Figure 101: Three dimensional image of the heart at night showing the retail attractiveness and utilisation of space.

Figure 102: Existing built structure.

Figure 103: Plan showing the view plane of figure 101.

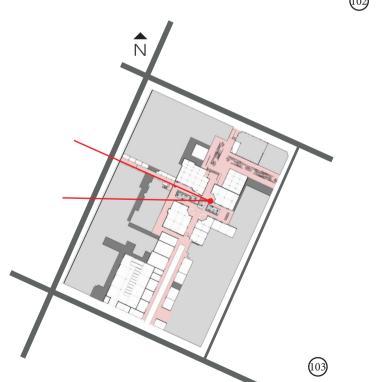


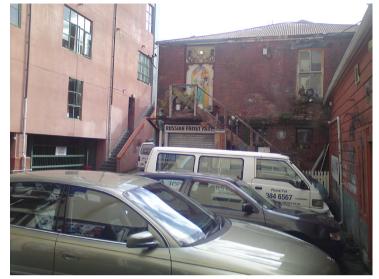


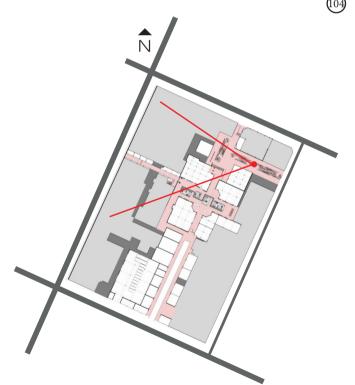














The meeting space, being mostly dominated by urban design principles as it is the permanent public space within the site but also used widely in shopping mall design, has a lot of vegetation within the area allowing a relaxing space away from the bustling main streets. This space is occupied by both a music school or music auditorium and a children's nursery and an amusement building, all proposed by Ian Calder as externalities to the development. These buildings create a unique atmosphere within the space by allowing real music to be heard and the laughter of children upon the roof top park area. These were important as to address the potentially artificial atmosphere created by shopping mall design, and create the same effect of comfort through a more realistic and personal manner. The music school's façade was designed with a louver system, allowing a control over the music offered, rather than any and all music being emitted into the space. The view through the development to Ghuznee Street is obtainable as soon as walking into the space. This is important as to initially draw people further into the development for people using it as a shortcut. Although this goes against shopping mall design principles, which suggest that exits should not be immediately apparent, it isn't until you are within the heart of the development where the shopping mall design principles being to take effect and hold onto the individual to maximise consumerism.

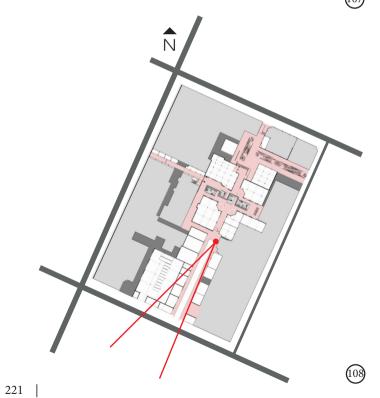
Figure 104: Existing built structure.

**Figure 105:** Plan showing the view plane of figure 106.

Figure 106: Three dimensional image of the meeting space during the day showing the retail attractiveness and utilisation of space.







The shared space allows vehicular traffic to have access into the Hannah's Building car park as well as allowing service trucks to have a closer access to the main shopping hub. This space took on the main urban design principles proposed by the Cuba Street District Plan, with the awnings and uniform design connecting the businesses together. It is proposed that this space would consist of mainly lower rental tenants. The car park, which acts as a major anchor, was a largely dominant feature within the preliminary presentation, and so a skin was applied to the facade of the structure allowing it to merge in with the surrounding context. The skin consisted of vegetation as to not only connect to the meeting space on the other side of the development, but to also reduce the carbon dioxide build up contained within and around the buildings. The ground level of the car park was also occupied by businesses around the fringes as to utilise every inch of space given and keep a continuous flow of merchandise offered to the users of the space. The materiality of this space is still of a higher grade than typical street retail to improve retail attractiveness with materials such as stained timber, high gloss coloured aluminium, excessive amounts of glazing and high grade paving. The quality of this location is not as high as the heart space as to make a distinction between the lower rental tenants and the high-end merchandise offered.

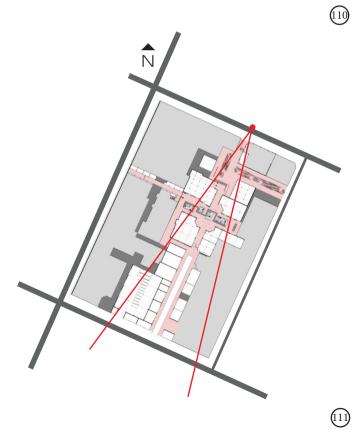
The transitional spaces are important to understand the differences in design, specifically the thresholds between the different areas, as some are gradual, and others very immediate. The three images illustrated is the entrance into the meeting space from Dixon Street, the entrance into the heart of the development from Cuba Street, and the entrance between the shared space and the heart of the development.

Figure 107: Existing built structure.

Figure 108: Plan showing the view plane of figure 109.

Figure 109: Three dimentional image of the shared space during the day showing the retail attractiveness and utilisation of space.







The entrance into the meeting space from Dixon Street is important as to encourage people into the space. The colours within the development catch the eye of the users going between Cuba Street and Courtenay Place, inviting them in through curiosity. The connection between the exterior and interior is supported by the Te Aro Park vegetation being connected to the vegetation of the meeting space. The large blank wall to the right of the image is a successful break between the exterior environment and the new development with small elements of colour seen in the distance.

Through Ian Calder's research, it was found that signage and brand makes a difference to the success of a location and as such the proposed brand name was investigated and came to a conclusion of 'Leeding Centre' which implies that this development not only respects the existing by implementing the existing name of Leed Street but also implies that this development is a step ahead of the rest with its new ideals. Other options that were investigated were 'Hannah's Centre', 'Leed Community', 'The Street', 'Centre PLUS...' and many more.

The entrance into the heart of the development from the shared space remains open with a false wall filling in the right archway to allow the flow through the space to remain unobstructed. The red gate is seen to the left of the image as it slides across when the centre is closed after hours, allowing the residents to be able to swipe in and get access to their private space. It is important to note the difference in materiality from other locations within the development as timber stops as soon as the threshold between the two spaces is crossed; this threshold are the steps or ramp that lead down into the heart of the development.

The entrance into the heart of the development through from Cuba Street is an important connection in getting the development to work. Suggested also by the WCC through their 2040 analysis, the connection would allow a filtration of people moving between Courtenay Place and Cuba Street. The space has been designed as a thoroughfare, with the proposal of small outlets that would be applicable for people on the move, i.e. phone, food and repair stores. The space also displays some of the merchandise that is on offer within the development, to once again entice people to return if leaving the development through this thoroughfare. The materials used were of high reflectivity to maximise the appearance of height of the thoroughfare as the ceiling heights were unfortunately quite low. The roof was a high gloss metal and the floor was the same tiling, gypsum, to allow the connection to the interior of the heart of the development, acting as an extension to the heart, or the main artery to Cuba Street which will benefit off each other.

Figure 110: Existing built structure.

Figure 111: Plan showing the view plane of figure 112.

**Figure 112:** Three dimensional image of the entrance from Dixon Street into the meeting space showing the retail attractiveness and utilisation of space.

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Figure 113: Existing built structure.

Figure 114: Plan showing the view plane of figure 115.

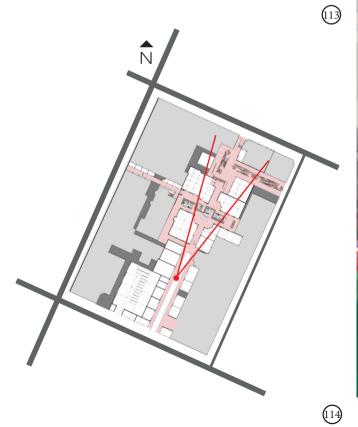
Figure 115: Three dimensional image of the entrance from the shared space into the heart space showing the retail attractiveness and utilisation of space.

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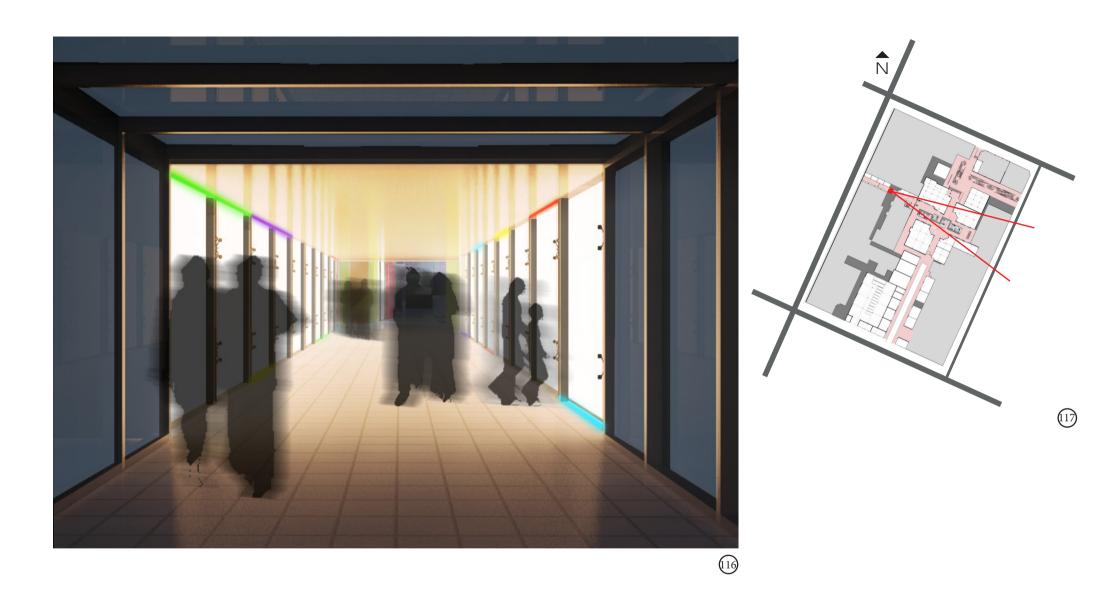
**Figure 116:** Three dimensional image of the entrance from Cuba Street into the heart space showing the retail attractiveness.

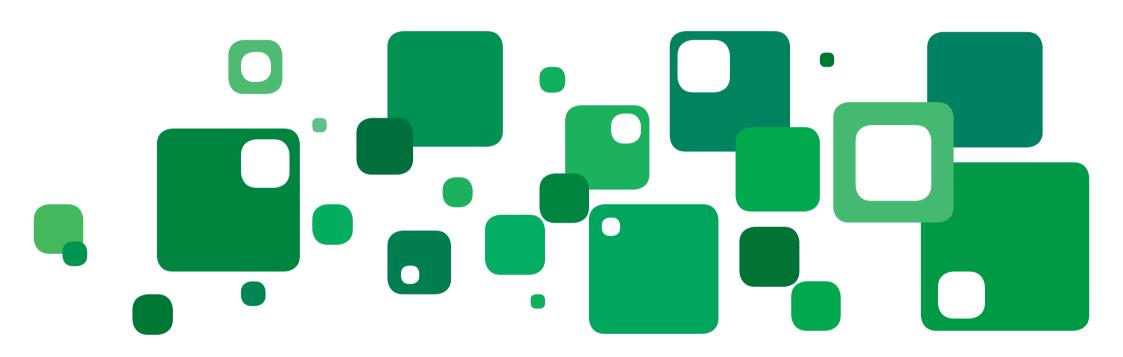
Figure 117: Plan showing the view plane of figure 116.











# PART FIVE

Conclusion & Discussion

#### CONCLUSION & DISCUSSION

The thesis set out to understand the role that architecture could play in the revitalisation of the shopping and residential inner-city, socially, environmentally and economically. As introduced earlier, this is essentially concerned with the integration of shopping mall design principles with standard urban design principles. This was explored through the reconstruction of a dilapidated Wellington back street; Leed to Eva Street. Although the research focused predominantly on the improvement of the shopping experience, it was found that the improvement of the residential conditions, as the more personal and poetic aspect to Wellington, held the greater authority to influence the perceptions towards the community. With the example of the Wall Street Centre in Dunedin, one of the most important aspects of a successful shopping environment is the understanding and acceptance from the public. As there is a closed loop between the success of the shopping development and the improvement of residential conditions, it enables the public to want the development to success instead of a stigma against these large scale developments.

The research through design discovered that the urban design principles are still a fundamental aspect of the urban environment, but in the context of the unutilised dilapidated area, shopping mall design principles allow the space to be revitalised and has the ability to create a new market area. The traditional shopping mall design is not a desirable design aesthetic for the current user and with retail attractiveness as a key component in retail success, a post-capitalist retail environment is essential. The principles of the shopping mall design is successful, however, the impact of the negative perceptions was found to have a significant impact on the revitalisation objective and was critical to address through the design.

The shopping experience has been improved through the research uncovering that the interior, anchors, configuration and control are vital sectors of the revitalisation and shopping experience. The elements of the interior enable a balance between private and public space during different hours of the day and enables a bright, new, revitalised aesthetic into the design allowing the idea of change to be visually apparent. The anchor tenants and configuration of the retail outlets allow additional consistent foot traffic through the development and create addition consumers within the

space due to the high demand that these anchors bring. The control over the interior design aesthetic, the configuration and the location of anchor tenants has allowed a collaborated development that combines multiple owners towards a common goal, this goal being the revitalisation of their assets, increased income, and improved the conditions to which the residents, consumers and public reside in.

The most important residential aspect within the design was the improved 'back yard' that resulted from the revitalisation of the space. This shared private space the residents acquired was contained within the heart of the development, allowing further community bonds to occur between the neighbours. This allowed an improvement on the utilisation of space by the shopping mall design principles in that the shopping area was utilised even after the shopping centre was closed. This improved the environmental dynamics of inner-city living, by utilising the space that already existed within the city, allowing maximum use of space with residential applications after hours, and a shopping centre during the day. Other additional improvements to the residents was a reduction in noise, a reduction in crime, additional space for entertaining, strengthens the community, and allows a personal connection to the street which in turn improves the quality and care of the space.

It is important to note the economical shift between traditional street retail developments and the implementation of shopping mall design principles. The research states that the shopping mall has the higher quality of space due to the additional income that is generated by the shopping mall design and business decisions. Within the scenario of this development, all aspects of the business owners, investors, public, consumers and residents are benefiting through the design. With a strict business owners policy proposed to occupy the site, the objections of franchises putting surrounding businesses out of work are eliminated, allowing public views of the development to remain positive. The benefit is not only for the tenants within the development, but the shopping environment acts as a hub for consumers that will travel from a larger distance to use it, and as such, the surrounding businesses will have additional foot traffic and improve the success of their business. Some specific externalities that the development has to support surrounding businesses is the child care centre, as parents can drop off their kids and shop around surrounding areas; the meeting space, as people influx to the area to relax and have to pass by or shop at surrounding businesses; the car park, for people to come from further distances into the inner-city; and the direct connections to surrounding

market areas with the improved configuration.

The public's view of the development must be positive as it is essential in the success and growth of the integration of shopping mall design principles spreading throughout Wellington. This is achieved through the reinvestment in the public space by the tenants to keep it fresh and exciting for the users. The proposed design was always intended to act as a catalyst for future developments, with the design allowing for growth towards Tory Street and through to Cuba Street. This growth was projected to eradicate the traditional shopping mall impending into the inner-city by having an already established shopping environment that utilised and had achieved the successful shopping mall design principles.

The problems faced in the design were the materiality, enclosure and the variation of floor heights by the integration of the shopping mall design principles. There was an additional problem although it wasn't applicable within this design proposal, which was the coordination of multiple owners towards a common goal<sup>14</sup>. The materiality, although doing many experiments in order to obtain an aesthetically unique and memorable design, was against my usual instincts with colour coordination and material use but worked in this situation. The amount of enclosure was another very difficult analysis that wasn't overly discussed in the research with precedents like Porirua and Botany Downs still adjusting their enclosure amount. Initially, no roof was added that left the space unfinished and exposed until the roof design was put through a trial and error approach by rendered design images being utilised to see the proposed atmosphere that the roof would obtain. The variation of floor height both worked for and against the development, it initially sparked the idea of a false floor being created to increase the interior and exterior flow and the segregation of the three individual spaces; the meeting, heart and shared space. The negative effects were the increase cost of the development and the assessment that the location was lucky to have the variable floor heights line up as they did, meaning that this principle may not work in other locations.

<sup>14</sup> There was an additional problem although it wasn't applicable within this design proposal, which was the coordination of multiple owners towards a common goal.

By developing the research through identifying the problem, then researching current urban design principles before identifying the successful shopping mall design principles helped inform how architecture could act as the tool to revitalise dilapidated spaces throughout Wellington. This implies that architectural research that investigates alternative options of revitalisation as a means to influence design could play a greater role in the contemporary business sector, as it provides a closer relationship between the retail market and the consumer. The research focused predominantly on the relationship between the retail sector and the consumer within Wellington. To some degree this neglected the relationship and desire of developers with the consumer, which could be investigated through further research to gain a richer understanding of the relationship between economic feasibility and the design integration. Therefore the business aspects for the retail sector would need to be further investigated through the needs of the developer in order to gain a more holistic model. Additionally, as this design is a research proposal for the adaptation of the shopping environment, actual testing on site, user feedback and economic evaluation would help establish them as a relevant and workable solution for developers.

This was partially achieved through the interdisciplinary research conducted by the MBA student lan Calder. The research he gathered complemented my research through the validation of business strategies and theories. The Architecture and Management schools at Victoria University agreed that this experiment is worth repeating, in some other project with another pair or group of students, and if this thesis acts as any kind of precedent, that too is a measure of success. As this interdisciplinary research was a success, the potential for emerging roles for architecture to facilitate the collaboration between tenants and small individual owners and city planners.

As a personal testament, this student has truly enjoyed the collaboration of the business school, the information and time given towards helping this thesis become comprehensive. It has been thoroughly rewarding, both personally and professionally, and has developed and taught this student a rewarding amount of information, unavailable at the Architecture and Design campus alone.

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