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Urban Design Interventions & Urbanity
The Case of Addington

A Dissertation
Submitted in partial fulfilment
of the requirements for the Degree of
Master of Landscape Architecture

at
Lincoln University
by
Dale Simon Harrop

Lincoln University
2014
I. Abstract

Figure 2. Three35 Lincoln Road development.
Urban public open spaces mirror the complex processes of urban societies and embed themselves deep within the character of a city. The quality and character of these spaces have an effect on people's experience of urbanity (Montgomery, 1998). The concept of urbanity in its simplest form is the experience of urban life, this experience is made up of different spatial and social components that combine to provide a person with a certain type of experience.

Drawing on public life study data gathered through observation methods, this research examines the urban design and urbanity qualities of public open spaces and attempts to provide design recommendations at both a low budget and high budget scale that can enhance the experience of urbanity for the user, exemplified in this research through a case study of Addington, Christchurch.

The discussion advances theory around designing for urbanity and the use of low budget design solutions to test urban design ideas before permanent solutions are implemented, creating a successional urban design process. This urban design process has the potential to assist urban designers, landscape architects and property developers in sourcing solutions to urban design problems through low budget means in today’s austere economic conditions.

Keywords: urban design, urban regeneration, urbanity, public life study, landscape architecture, addington, case study
II. Acknowledgements

Figure 3. Morell & Co Bar.
I would firstly like to express my gratitude to my supervisors Dr Andreas Wesener and Dr Shannon Davis for their expertise, guidance and time to help me complete this research. I have learnt a lot through both of you and appreciate all the support.

A thank you to my mum and my late father for their encouragement and support.

A thank you to the Christchurch City Council Urban Design and Regeneration teams for all the advice and encouragement over the past year.

Lastly I would like to thank all my family and friends for putting up with me whilst completing my masters.
Figure 4. Main South Line running through Addington.
I. Abstract 5 4.3. Pedestrian Counting 46 8.0 Discussion 108  
II. Acknowledgements 7 4.4. Tracing 46 8.1. Introduction 109  
III. Table of Contents 9 4.5. Behavioural Mapping 46 8.2. Anticipated Outcomes 110  
IV. List of Figures 11 4.6. Issues & Constraints 47 8.3. Outcomes & the Experience of Urbanity 120  

### 1.0 Introduction 14 4.8. Methodology Summary 51 8.4. Potential Negative Effects 124  
1. Research Introduction 15 
1.2. Research Questions 15 5.0 Urban Design Site Analysis 52 8.5 Lessons for Urban Designers & Landscape Architects 124  
1.3. Addington Overview 15 5.1. Introduction 53 8.6. Limitations 126  
1.4. Methodology Overview 16 5.2. Section A Qualities 54 8.7. Future Research 126  
1.5. Guide to Chapters 16 5.3. Section B Qualities 57 8.8. Discussion Summary 127  
1.6. Introduction Summary 16 5.4. Section C Qualities 60 
5.5. Addington Mall Qualities 63 9.0 Conclusions 128  

### 2.0 Literature Review 18 5.6. Three35 Plaza 66  
2.1. Literature Review Introduction 19 5.7. Urban Design Site Analysis Summary 67 10.0 References 132  
2.2. Urban Design Planning Theory 19 
2.3. Typologies of urban public open space 20 6.0 Public Life Study Results 68 11.0 Appendix 136  
2.4. User design of public open space 21 6.1. Introduction 69  
2.5. Urbanity 21 6.2. Section A Data Results 69  
2.6. Measuring Success of Public open spaces 22 6.3. Section B Data Results 73  
2.7. Literature Review Summary 22 6.4. Section C Data Results 76  

### 3.0 Addington 28 6.5. Addington Mall Data Results 79  
3.1. Introduction 29 6.6. Three35 Plaza Data Results 82  
3.2. Context 29 6.7. Results Summary 85  
3.3. History 29 7.0 Design Recommendations 86  
3.4. Addington Issues & Constraints 33 7.1. Introduction 87  
3.5. Future 36 7.2. Summary of Results 87  
3.6. Addington Summary 37 7.3. Conclusions based on research results 88  

### 4.0 Public Life Study - Methodology 38 7.4. Strategic options to facilitate change 91  
4.1. Introduction 39 7.5. Implementation & Staging 105  
4.2. Study areas 39 7.6. Recommendations Summary 106  

9 Table of Contents
IV. List of Figures

Figure 5. Multi-use development 285 Lincoln Road.
List of Figures

Figure 1. Woods Brothers Mill 1
Figure 2. Three35 Lincoln Road Development 4
Figure 3. Morell & Co Bar 6
Figure 4. Main South Line running through Addington 8
Figure 5. Multi-use development 285 Lincoln Road 10
Figure 6. Modern office development at 351 Lincoln Road 14
Figure 7. Three35 Lincoln Road development 18
Figure 8. Policy directions to foster an urban sense of place (or place making) 23
Figure 9. Pedal Pusher bar at night 28
Figure 10. Addington context map 30
Figure 11. Addington Water Tower, the only remnant of the Railway Workshops 31
Figure 12. Wood Brothers Flour Mill Post Earthquake 31
Figure 13. Jailhouse Accommodation 31
Figure 14. St Mary’s Church and Church Square 32
Figure 15. Canterbury Sale Yards pre-demolition 32
Figure 16. Hornsby Arena 33
Figure 17. Ad Hoc Development 33
Figure 18. Increase in average rent in Christchurch, shown by ward with CERA residential red-zone and Technical Land Categories 35
Figure 19. Collecting public life observation data 38
Figure 20. Addington case study areas 40
Figure 21. Lincoln Road looking north towards Section B. 41
Figure 22. Lincoln Road looking south west towards corner of Clarence Street and Lincoln Road 41
Figure 23. Lincoln Road main pedestrian crossing, looking north. 42
Figure 24. Lincoln Road main pedestrian crossing in Section B, looking south. 42
Figure 25. Section C of Lincoln Road looking south towards modern developments 43
Figure 26. Section C of Lincoln Road. Streetscape looking north towards Christchurch city centre. 43
Figure 27. Section C of Lincoln Road, looking west towards the 359 Lincoln Road commercial development. 43
Figure 28. Addington Mall, looking south towards the centre of the mall. 44
Figure 29. Addington Mall, looking north towards the mall entrance. 44
Figure 30. Three35 Plaza, looking west towards the centre of the plaza. 45
Figure 31 Three35 Plaza looking west towards Lincoln Road 45
Figure 32. The Court Theatre, Addington 52
Figure 33. Section A Location 53
Figure 34. Section A Site Analysis - Figure Ground 53
Figure 35. Section A Site Analysis - City plan zoning 53
Figure 36. Section A Site Analysis - Car parking 53
Figure 37. Section A Site Analysis - Pedestrian Space 53
Figure 38. Section A Site Analysis - Shade diagram 53
Figure 39. Section A Car Parking and vehicle traffic 54
Figure 40. Section A pedestrian space 54
Figure 41. Section A connections to surrounding areas 54
Figure 42. Section A street activity 55
Figure 43. Section A safety concerns 55
Figure 44. Section A planting 55
Figure 45. Section A sensory experience 55
Figure 46. Section B Location 56
Figure 47. Section B Site Analysis - Figure Ground 56
Figure 48. Section B Site Analysis - Zoning Map 56
Figure 49. Section B Site Analysis - Car parking 56
Figure 50. Section B Site Analysis - Pedestrian Space 56
Figure 51. Section B Site Analysis - Shade diagram 56
Figure 52. Section B Car Parking and vehicle traffic 57
Figure 53 Section B pedestrian space 57
Figure 54 Section B connections to surrounding areas 57
Figure 55 Section B nighttime economy 58
Figure 56 Section B street activity 58
Figure 57 Section B comfort/relaxation 58
Figure 58 Section C location 59
Figure 59. Section C Site Analysis - Figure Ground 59
Figure 60. Section C Site Analysis - City plan zoning 59
Figure 61. Section C Site Analysis - Car parking 59
Figure 127. Three35 Plaza weekday average stationary activities vs. transient activities per hour 82
Figure 128. Three35 Plaza weekend average stationary activities vs. transient activities per hour 83
Figure 129. Three35 Plaza social interaction averages weekdays vs. weekend 83
Figure 130. Three35 Plaza Tracing Map Weekday 84
Figure 131. Three35 Plaza Tracing Map Weekend 84
Figure 132. Three35 Plaza Behaviour Map Weekday 84
Figure 133. Three35 Plaza Behaviour Map Weekend 84
Figure 134. Low Budget Scenario Strategic Plan 90
Figure 135. Section A Low Budget Strategic Plan 92
Figure 136. Section A Perspective 92
Figure 137. Section B Low Budget Strategic Plan 93
Figure 138. Section B Perspective 93
Figure 139. Section C Low Budget Strategic Plan 94
Figure 140. Section C Perspective 94
Figure 141. Addington Mall Low Budget Strategic Plan 95
Figure 142. Addington Mall Perspective 95
Figure 143. Three35 Plaza Low Budget Strategic Plan 96
Figure 144. Three35 Plaza Perspective 96
Figure 145. High Budget Scenario Strategic Plan 100
Figure 146. Section A High Budget Strategic Plan 100
Figure 147. Section A Perspective 101
Figure 148. Section B High Budget Strategic Plan 101
Figure 149. Section B Perspective 101
Figure 150. Section C High Budget Strategic Plan 102
Figure 151. Section C Perspective 102
Figure 152. Addington Mall High Budget Strategic Plan 103
Figure 153. Addington Mall Perspective 103
Figure 154. Three35 Plaza High Budget Strategic Plan 104
Figure 155. Three35 Plaza Perspective 104
Figure 156. Hazledean Business Park Development 108
Figure 157. Section A before 120
Figure 158. Section A after low budget scenario 120
Figure 159. Section A after high budget scenario 120
Figure 160. Section B before 121
Figure 161. Section B after low budget scenario 121
Figure 162. Section B after high budget scenario 121
Figure 163. Section B before 121
Figure 164. Section B after low budget scenario 121
Figure 165. Section B after high budget scenario 121
Figure 166. Section C before 122
Figure 167. Section C after low budget scenario 122
Figure 168. Section C after high budget scenario 122
Figure 169. Addington Mall before 123
Figure 170. Addington Mall after low budget scenario 123
Figure 171. Addington Mall after high budget scenario 123
Figure 172. Three35 Plaza before 124
Figure 173. Three35 Plaza after low budget scenario 124
Figure 174. Three35 Plaza after high budget scenario 124
Figure 175. Addington Mall 134
Figure 176. Woods Brothers Mill. 138
Figure 177. Addington Coffee Co-op 136

List of Tables
Table 1. Typologies of public open space. Adapted from (Francis, 2003). 22
Table 2. Summary principles for achieving urbanity (Montgomery, 1998). 24
Table 3. 2013 Census ‘usually resident’ population count by territorial authority (MacPherson, 2013). 35
Table 4. Effects of gentrification (L. S. Lees, Tom & Wyly, Elvin 2008) 36
Table 5. Qualities for retrofitting neighbourhoods (Watson & Kessler, 2013). 40
Table 6. Addington Public Open Space What Works and What Doesn’t Work 89
Table 7. Section A Anticipated outcomes 110
Table 8. Section B Anticipated outcomes 112
Table 9. Section C Anticipated outcomes 114
Table 10. Addington Mall Anticipated outcomes 116
Table 11. Three35 Plaza Anticipated Outcomes 118
1.0 Introduction

Figure 6. Modern office development at 351 Lincoln Road.
1.1 Research Introduction

With a global shift in population patterns moving from rural to urban and over half the world’s population and 85% of New Zealanders living in urban cities, the design of public open space within cities is a growing concern. The concept of urbanity is becoming more popular throughout urban design and planning, with many academics attempting to redefine the term and its principles. Academics have concluded that a positive experience of urbanity in public open space is essential to the success of public open space and urban life, however little research has been undertaken to provide case study examples where public open space qualities and use have been surveyed and analysed with suggested interventions to specifically enhance the experience of urbanity.

The research will provide a critique of current public open space design in a suburban neighbourhood in Christchurch. The research will then provide an insight into improving the experience of urbanity for users through design interventions based on current urbanity theory and research. It will provide a data set relevant to the urban design and landscape architecture community. This is especially relevant to Christchurch with regards to the post-earthquake rebuild and will be of particular interest to local government, design and planning practitioners involved in the rebuild, and academics alike. It aims to fill a gap in the current discussions of ‘designing for urbanity’.

1.2 Research Questions

1. What are the qualities of public open space (POS) in Addington?
2. How do users interact with the existing public open space in Addington?
3. What urban design interventions could improve the sense of urbanity in Addington’s public open space?

1.3 Addington as a case study

Addington is a suburb of Christchurch that has seen a boom in development post earthquake. Addington is located 2.5km southwest if the Christchurch city centre. It sits in liminal space between the CBD and outer suburbs of Christchurch. Historically Addington was a thriving industrial and railway hub of Christchurch that entered into a state of decline due to many factors. As a direct result of the 2010 and 2011 earthquakes, Addington suffered much damage with a significant number of buildings being demolished. Due to Addington’s unique location within close proximity to the city centre, the suburb has boomed post-earthquake as businesses attempted to relocate out of the CBD (which remained within a military-controlled cordon until June 2013) into the surrounding areas. The result is the development of various office buildings along Lincoln Road that are servicing businesses from the CBD. The relocation of AMI Stadium (due to the structural damage incurred to the previous stadium in the city) and the Court Theatre (formerly located in the Christchurch Arts Centre, which suffered significant damage during the Christchurch earthquakes) have aided in directing and shaping new businesses in Addington. The numbers of bars, restaurants and cafés have grown in Addington and are improving the local economy (Council, 2012). The development of Addington has occurred via market drivers due to a loophole in the city plan in place pre-earthquake (due to the lack of interest in Addington) being exploited post-earthquake to accommodate fast growth of commercial buildings to house displaced companies from the CBD.

Addington is currently being developed at a fast rate, which is creating new public open spaces and affecting existing public open spaces, making it a suitable case study to explore the current state of Addington’s public open space, how it is being utilised and how the experience of urbanity can be improved through intervention.
1.4 Methodology Overview

The research employs a public life study methodology pioneered by urbanists such as Gehl & Svarre (2013), Jacobs (1961), Whyte (1980). The methodology takes an observational approach, recording pedestrian numbers, activities and movements. By employing this type of methodology, results can reveal how individual public open spaces are utilised for a specific case study providing an understanding of the issues and opportunities of each space. This allows the production of design interventions to improve the spaces’ experience of urbanity. To measure the potential outcomes and success of the design interventions, a framework was derived from urban design and urbanity literature that would allow each space to be analysed against a set of urban design and urbanity indicators.

1.5 Guide to Chapters

Chapter 1, the Introduction, establishes the context of the research and introduces the ideas behind public open spaces and urbanity. The introduction outlines the aim and questions that the research attempts to answer. Chapter 2, the Literature Review, outlines the literature surrounding urban design, urbanity and measuring the success of public open spaces. This chapter also outlines the definition of urbanity for this research. Chapter 3, Addington, outlines the case study for the research and describes Addington’s industrial heritage, context and the issues that have shaped it into an appropriate site for this research. Chapter 4, Methodology, describes in-depth the methodology utilised in the research. It highlights the use of a public life study to obtain data on public open spaces and the use of indicators to assess the urbanity of public open spaces. Chapter 5, Public Open Space Analysis, is a response to the first research question (What are the qualities of public open space in Addington?) by analysing each public open space against a set of indicators derived through the literature review. Chapter 6, Public Life Study Results, responds to the second research question (How do users interact with the existing public open space in Addington?) by providing complete public life data gathered over one week that illustrates how many people utilise the spaces, where they walk, what activities they engage in and where they perform these activities. It presents the results in the form of graphs, tables and maps. Chapter 7, Design Recommendations, responds to the third research question (What urban design interventions could improve the sense of urbanity in Addington’s public open space?) by outlining concept plans for each public open space based on the results. These are shown in the form of plans and perspectives. Low and high budget scenarios are produced to allow a comparison between the two. Chapter 8, Discussion, advances the answers outlined in chapter 7. The chapter discusses the comparison between the low and high budget scenarios and how positive changes to the experience of urbanity can be made despite budget restraints. The chapter also discusses lessons learnt from the research for landscape architects and urban designers and concludes with potential future research surrounding urbanity, urban design and Addington. Chapter 9, the Conclusion, presents the conclusions of the research. It explains the limitations encountered in the research and opportunities for future research in the field of urbanity and Addington as a case study.

1.6 Introduction Summary

The introduction has identified the importance of public open spaces and the concept of urbanity. It has established an aim and questions that the research
will attempt to answer. The chapter has introduced Addington as a case study and highlighted a methodology that will be applied for the study. The following chapter will explore the literature of urban design, urbanity and public open spaces to provide a solid foundation of previous research to build upon.
2.0 Literature Review

Figure 7. Three35 Lincoln Road development.
2.1 Literature Review Introduction

The previous chapter outlined the aims of the research and how the research is structured. The first half of this chapter will explore urban design and planning theory in literature to provide a brief introduction to the evolution of urban design and planning theory.

The second half of this chapter will explore the concept of urbanity to reveal its importance in the design of public open spaces in contemporary society. The chapter will also outline the attempts by urban design theorists to measure the success of public open spaces. This will allow the research to draw from the literature a set of indicators that determine high quality public open spaces.

2.2 Urban Design & Urban Planning Theory

Urban planning can be traced back to the work of Hippodamus for the Greek empire in the 5th century BC, which was characterised by orthogonal layout with square street blocks (Morris, 2013). Urban planning moved through the medieval period in the form of fortress cities that were planned via a grid street pattern. The expansion of these cities ended following the great depression of the 14th century (Morris, 2013). The European renaissance followed, where cities were planned based on baroque influences. Important discussions at the time were based around traffic flows, sanitation and aesthetics (Friedman, 1988). The European enlightenment period (1700-1800) followed, marked by various disasters that became catalysts for redesigning major cities as a show of power to other nations. This was a significant time for urban planning. Spanish engineer Ildefons Cerdà coined the term ‘urbanization’ in his plan for Barcelona, where he aimed to improve the health of Barcelona’s inhabitants, enhance social integration and improve the sunlight exposure of urban open spaces (Busquets, 2005).

This brief timeline shows the historical movement from top down planning methods towards a more human scale method of planning that has more recently been discussed in detail by post-modern urban theorists such as Jacobs (1961), (Lynch, 1960) and Whyte (1980).

More recently, the 19th century gave birth to modern planning ideas as a direct consequence of the industrial age and its effect on the urban poor (Howard, 1902). What emerged was Ebenezer Howard’s garden city movement which theorised that the working environment should be separated from where people lived, providing them with a healthy living space from where they could commute into the city to work. This method of planning became popular throughout England and the United States of America (Fishman, 1982).

The 1920’s brought about the Modernism Movement within urban planning, pioneered by modernist architect Le Corbusier who produced the ‘contemporary city’ concept that proposed a city for three million people who would be housed within large skyscrapers placed in the centre of large parks. The idea was to house people in high-density buildings, allowing for more public open space surrounding these buildings. Le Corbusier promoted the car as a means of transport and segregated it from pedestrian paths (Fishman, 1982). Modernism was criticised towards the end of the 1960’s for its grand scale of planning and architecture that disconnected the city from its inhabitants (Goodchild, 1990). This led to post-modernism ideas theorised by academics such as Jacobs (1961) who believed that planning should focus on the human scale and criticised the top down planning ideas of the modernist period (Jacobs, 1961). Jacobs work in “The life and death of great American cities” is seen as a normative precedent for urban design and planning that many academics use as a basis for urban design and planning today. Jacobs (1961) critiques the urban renewal policies of the 1960’s and discusses how they destroyed communities and created isolated urban ecological habitats. Jacobs (1961) discusses what makes a vibrant street, theorising that eyes on the street create safer streets...
and diversity in activity attracts people to socialise on the street, creating vibrant urban spaces. Jacobs (1961) also discusses the need for mixed uses, small blocks and heritage buildings – a distinct change from the grand scale of urban design theorised in the modernist movement. Lynch (1960) discusses similar ideas but focuses on legibility and way-finding within the city. These ideas echo theories discussed by Jacobs (1961), reiterating planning at a human scale (Lynch, 1960).

(Alexander, 1964) proposed the idea that urban design and planning was too focused around the idea that cities consist of separate functions, and argued that this type of planning is unhealthy for the way cities are planned; that in fact cities are full of overlapping functions. Alexander (1964) used the language of patterns to explain these differences, explaining that a planned city has a tree pattern, whereas a natural city has a semi-lattice pattern. This point echoes the critiques of Jacobs and Lynch of 20th century planning methods and introduced human complexity into planning that at its core is a key part when designing urban space.

Whyte’s (1980) study on users within public urban open space reinforced many of the ideas discussed by Jacobs (1961) and Lynch (1960). The study focused on what made certain urban spaces successful and unsuccessful. Whyte used cameras to video spaces throughout the day and night from different angles to capture how the space was used by people. From this study, he was able to discuss the differences between urban open spaces and what made them work. This critique of modernist planning principles provides a theoretical framework for evaluating urban open spaces by outlining normative elements that create successful urban open spaces. This was a ground-breaking study into the behaviour of people within public urban open spaces and is essential when evaluating public urban open space.

Twentieth century urban planning and design theorists still echo the post-modern theories devised by Jacobs (1961), Lynch (1960) and Whyte (1980). These ideas were developed over 50 years ago, yet cities and their public urban open spaces are still criticised as it seems there is a gap in the implementation of these post-modern ideas. One architect/urban planner who has managed to implement some of these ideas is Gehl (2010), who expanded on the theories of post-modern academics. Much like Whyte (1980), Gehl focused on redesigning cities on a more human scale and has implemented strategies for Copenhagen, Melbourne and New York. The strategy for Melbourne has turned the city centre from being deserted to vibrant, named the most liveable city in the world by The Economist magazine (Unit, 2011). The evolution of planning from the top down to a human scale has helped turn cities and suburbs from unattractive, deserted places to vibrant and liveable places. These ideas help shape my survey, observation and analysis of Addington’s public open space and also help to inform my suggestions for intervention.

2.3 Urban Design Typologies

Typologies of public open space developed out of necessity for areas where the public can gather. However, some spaces are formed informally, due to pressures such as lack of defined public open space, urban development and social interactions. Addington has a unique public open space that has developed through formal planning procedures such as various public parks and squares. However some spaces, such as the footpaths of Lincoln Road, have developed into popular public open spaces. Public open space typologies can be placed into categories and subcategories (Table 1) adapted from (Francis, 2003).

This table provides a basis for classifying public open space. However, these
ideas of public space have originated from a certain necessity that evolved through the need for particular typologies of open space and not all will apply to Addington. This literature review will focus on four core categories of public open space that are at the heart of Addington: Parks, Squares, Streets and Playgrounds.

**Parks**
Public parks have evolved from medieval times where land was set aside for royalty and aristocracy to utilise for hunting (Rackham, 1976). Following the industrial revolution, parks were utilised to preserve and bring nature to the middle of urban cities, and this is largely unchanged in today’s urban design and planning context.

**Squares**
Squares and plazas were originally located at the crossroads of trade routes to exchange goods (Moughtin, 2003) and evolved into meeting places usually associated with important cultural elements such as memorials, churches and government buildings (Moughtin, 2003). The design of town squares and plazas was discussed as early as the Roman Empire, as the classical Roman architect Vitruvius designed the Roman forum, theorising that town squares must be in proportion to the number of inhabitants so it may not be too small a space to be useful, nor look like a desert waste for lack of population (Vitruvius Pollio. & Morgan, 1960). Squares and plazas can be seen as the centre of the oldest cities (Moughtin, 2003), relating to discussions by Lynch (1960) about nodes being the central anchor points to cities. This makes the design and planning of squares and plazas an important part in the imageability of the city (Lynch, 1960).

**Streets**
Streets developed as a way of moving armies in ancient Greece and Rome and evolved to provide networks to connect places and cities. They were a host to activities crucial to civilisation. Streets during the modernist movement were neglected and seen as simply a network for vehicular traffic (Moughtin, 2003). However, Jacobs (1961) changed these ideas by theorising that the street was an important public civic space, a hub for social interaction and a sense of community (Jacobs, 1961). This idea has been reiterated and cemented in design theory by a number of other academics (Matthew Carmona, 2003; Matthew Carmona & Wunderlich, 2013; Carr, 1992; Francis, 2003; J. Gehl, 2010; Watson & Kessler, 2013; Whyte, 1980). The street provides people with a public open space right outside their front door step, but modernist planning resulted in residents seeing the street as a place of danger so would rather stay in their homes or travel in their car. This is slowly being changed by contemporary planners and urban designers such as Jan Gehl, who advocates appropriate streetscape design that encourages multiple uses and encourages a space where pedestrians are the majority owner of the space, as opposed to vehicles (Gehl, 2011).

2.4 User design of Public Open Space

Public open space design at a human scale was neglected throughout the modernist movement of urban design and planning. Theorists such as Lynch (1960) and Jacobs (1961) revitalised this movement by theorising a more human scale approach relating to the concept of urbanity, described in this literature review as the human scale urban design and planning principles that improve the experience of a place (Montgomery, 1998). These principles have been reinforced by research completed by Carmona & Wunderlich, 2013; Carr, 1992; Gehl 2005; and Whyte, 1980. The analysis of these studies shows a common theme of seven categories that Francis (2003) believes should be considered when designing public open spaces for user needs, comfort, relaxation, passive engagement, active engagement, discovery and fun (Francis, 2003). These elements are important when suggesting interventions for enhancing public open space in Addington.
<table>
<thead>
<tr>
<th>Typology</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Parks</td>
<td></td>
</tr>
<tr>
<td>Public park</td>
<td>Publicly developed and managed open space that is important to the city, e.g. Hagley Park</td>
</tr>
<tr>
<td>Commons</td>
<td>Large green space developed in communities for leisure activities</td>
</tr>
<tr>
<td>Neighbourhood park</td>
<td>Open space developed in residential areas may include sporting facilities, playgrounds etc</td>
</tr>
<tr>
<td>Pocket parks</td>
<td>Small urban park bounded by buildings</td>
</tr>
<tr>
<td>Squares/Plazas</td>
<td></td>
</tr>
<tr>
<td>Central Square</td>
<td>Square or plaza historically located at the centre of cities, developed as a meeting point of main streets. Publicly managed, e.g. Cathedral Square</td>
</tr>
<tr>
<td>Memorials</td>
<td>Public place that memorialises people or events</td>
</tr>
<tr>
<td>Markets</td>
<td>Open space or street used as a market, often temporary</td>
</tr>
<tr>
<td>Streets</td>
<td></td>
</tr>
<tr>
<td>Pedestrian footpaths</td>
<td>Most commonly planned footpaths connecting places</td>
</tr>
<tr>
<td>Pedestrian Mall</td>
<td>Pedestrian only street, with pedestrian amenities such as furniture and planting</td>
</tr>
<tr>
<td>Traffic restricted streets</td>
<td>Streets used as public open space with vehicle restrictions</td>
</tr>
<tr>
<td>Town trails</td>
<td>City-wide marked trails that connect different parts of the city</td>
</tr>
<tr>
<td>Playgrounds</td>
<td></td>
</tr>
<tr>
<td>Playground</td>
<td>Play area with dedicated play equipment located within a neighbourhood</td>
</tr>
<tr>
<td>School Yard</td>
<td>School yard as an informal play area</td>
</tr>
<tr>
<td>Skate park</td>
<td>Skate park that includes play equipment designed for skateboarders and roller bladers</td>
</tr>
<tr>
<td>Community Open Spaces</td>
<td>Neighbourhood designed and managed open spaces, e.g. community gardens</td>
</tr>
<tr>
<td>Greenways/Linear Parks</td>
<td>Connected recreational and nature areas through pedestrian and cycle paths</td>
</tr>
<tr>
<td>Urban Wilderness</td>
<td>Underdeveloped natural areas near cities, popular for hiking and recreation</td>
</tr>
<tr>
<td>Atrium Indoor Marketplaces</td>
<td>Indoor private space developed as an indoor pedestrian street or plaza. Privately developed and managed</td>
</tr>
<tr>
<td>Found/Neighbourhood Space</td>
<td></td>
</tr>
<tr>
<td>Everyday spaces</td>
<td>Publicly-accessible open space such as street corners</td>
</tr>
</tbody>
</table>
ton. However, they are only a basis for design and strategy interventions and do not address the experience of urbanity directly, rather assuming that urbanity will follow if these themes are considered in the design.

2.5 Urbanity

The term urbanity has been defined as ‘urban life’ and originates from the French word urbanite, which means belonging to the city (Concise Oxford Dictionary, 1992). The concept of urbanity has been covered in the literature by academics since the 1960’s and Jacobs (1961) indirectly covers many of the aspects that make up the experience of urbanity. Her book attacks then-current 1960’s post-modern urban planning practices and attempts to fabricate urban planning principles for planning a city. Jacobs’ work evaluates different types of urban space and discusses the spatial and social dynamics of the city and how traditional top-down planning methods can create disconnected public open spaces for users (Jacobs, 1961). The Life and Death of Great American Cities is seen as a historical precedent used by other academics as a basis for research in urban spaces, providing the historical precedent for a framework to evaluate the vitality of the city. This is essential to evaluating the social and spatial dimensions of urban open space. However, Jacobs does not directly define urbanity, but rather discusses the elements that contribute to the experience of urbanity, such as diversity, safety, social interaction and block size. These ideas have been expanded upon by Henri Lefebvre, who was critical of modern urban planning and believed that it undermined urban life. Much like Jacobs, Lefebvre believed that urbanity was about spontaneous social encounters and interaction that happened as a result of the spatial layout of the built environment (Lefebvre, Kofman, & Lebas, 1996). This led to discussions about what elements make up the experience of urbanity. Sherman (as cited in Montgomery, 1998) formulated a table on the indicators of successful urban places, with twelve indicators of successful urban places. However, the indicators discussed by Sherman fail to address why they make an urban place successful. This was identified by Montgomery (1998) who attempted to distil Sherman’s ideas into principles of achieving urbanity. Montgomery (1998) discusses that although Sherman’s indicators are good in identifying a successful urban place, they do not address the dynamic structure and activity that underlies a successful place. Montgomery explains the concept of place within urban design and theorises along with many other theorists that successful urban places combine physical space, activity and sensory experience, and that activity creates urbanity.

Figure 8. Policy directions to foster an urban sense of place (or place making) (Montgomery, 1998).
Table 2 Summary principles for achieving urbanity (Montgomery, 1998).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Principle</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Principle</td>
<td>Activity</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Generating pedestrian flows</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Seeding people attractors</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Achieving a diversity of primary and secondary uses</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Developing a density of population</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Varying opening hours and stimulating the evening economy</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Promoting street life and people watching</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Growing a fine grained economy</td>
</tr>
<tr>
<td>Image</td>
<td>Principle</td>
<td>Imageability&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Legibility</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Imageability&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Symbolism and memory</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Psychological access</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Receptivity</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Knowledgeability</td>
</tr>
<tr>
<td>Form</td>
<td>Principle</td>
<td>Form</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Achieving development density</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Zoning for mixed use</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Building for a fine grain</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>Adaptability of built stock</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Scale</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>City blocks and permeability</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>Streets: contact, visibility</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>The public realm</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Movement</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Green space and water space</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>Landmarks, visual stimulation and attention to detail</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>Architectural style as image</td>
</tr>
</tbody>
</table>

<sup>2</sup> See Lynch (1960)
Montgomery (1998) discourse on what components make up activity and explains that diversity within activity creates successful urban places. This echoes the theories of Jacobs (1961) and provides a useful diagram for directives to foster an urban sense of place (Figure 8). Montgomery concludes his research with a table that indicates 25 principles within three categories (Activity, Image and Form) for achieving urbanity (Table 2). These categories will be adapted for this research project when evaluating Addington’s urban spaces and will help explain why some public open spaces are more prevalently used than others.

This is directly linked to modern day urbanity discussions, such as Lees (2012) who argues planning for urbanity. Lees uses the example of HafenCity in Hamburg, Germany to illustrate an attempt at planning for urbanity and the principles used to try and achieve an improved experience of urbanity. The development is a large urban regeneration project of mixed-use inner city space. The project encourages diversity of people and uses to encourage social mixing by seeking to bring a myriad of different users, lifestyles and interests together into a neighbourhood. The aim is to create spontaneous interaction within public open space to create an experience of urbanity. However, this example does not have been proven to be a success when planning for urbanity on whether this example of planning for urbanity has been a success.

Today the definition of urbanity is debated in literature due to the complex nature of the elements that make up the concept (Lees, 2012). As the definition of urbanity is constantly debated, a concrete definition is needed for this research. Urbanity for the purposes of this research is an experience made up of multiple factors that combine to give a place a certain character. To categorise these factors and how they create urbanity I have been influenced by the principles outlined by Montgomery (1998), which combine to create a sense of urbanity. I believe that urbanity is an aesthetic experience of a place, created by variety and frequency of activity, a sense of memory and legibility of space, vibrant streetscape with landmarks and visual stimulation with spontaneous social interaction with both friends and strangers.

2.6 Measuring the success of public open spaces

The dynamic and complex nature of public open spaces makes their success difficult to measure as observations can be purely subjective. A definition of good quality public open space is absent, despite a large body of theoretical knowledge by theorists such as (M. Carmona & Tiesdell, 2007; Francis, 2003; Jan Gehl & Svarre, 2013; Jacobs, 1961; Madanipour, 2006; Montgomery, 1998; Whyte, 1980). Many theorists focus on the aesthetics and qualities of public open space and others on the experience of public open spaces and their safety and comfort. Research in the urban design field however has revealed common themes and dimensions of good quality public open spaces.

Francis (1987) outlined dimensions of a successful public open space compiled from various other academics. Francis states that these are only some of the dimensions of public open space due to the continuing research on success in public open spaces.

Safety & security
(Francis (1987) outlined that safety and security had previously been identified in literature as an important dimension of users' perception of public open space (Schroeder & Anderson, 1984; Stewart & McKenzie, 1978). Through these studies it was identified that main concerns that surround the safety of public open space stem from traffic speed (Moudon, 1987), undesirables occupying the space, and the safety of women, children and the elderly (Francis, 1987).

Comfort
The dimension of comfort within public open space was defined by Francis
as a combination of comfortable seating, solar access and protection from wind, rain and other climatic events.

**Stress**

Stress was deemed an important dimension of public open space and is directly related to planting within a public open space (Francis, 1987).

**Aesthetics and perception**

As outlined by Francis (1987), aesthetics and perception of public open space are poorly understood. Many studies have outlined factors that contribute to a positive perception of public open space: vegetative cover and sound (Matthew Carmona & Wunderlich, 2013). It was also noted that users from different socio-economic groups have different perceptions of public open space (Kaplan, 1985).

**Meaning**

Francis (1987) concluded that use of public open space may not be enough to make a successful open space and that the symbolic meaning of a place also contributes to a space's success.

**Control and participation**

The interest in public control and user participation in public open space design is noted by Francis (1987) as a major part of space satisfaction.

**Natural ecology**

Francis (1987) notes that the theory of public open spaces being a part of larger ecosystems is an important theme in public open space, as is the relationship between people and the natural environment.

These dimensions have been reinforced by more contemporary studies such as Carmona and Wunderlich's (2013) study on the public open spaces of London. Their study attempted to analyse London’s public open space and evaluate their quality. The study identified through the users of public open space what they preferred, both socially and physically. Many of these aspects of public open space were similar to dimensions previously discussed. Carmona and Wunderlich (2013) noted that socially, users preferred:

- relaxed, safe and comfortable spaces
- spaces that encourage social interaction
- spaces that are full of life
- family-friendly community spaces
- quiet green spaces in residential areas
- well-used and overlooked spaces

Physically, users liked:

- fun features within public open spaces
- spaces that feel open and encourage public use
- vegetation cover
- a distinctive setting with historic features, memorable landmarks
- clean, tidy and well-maintained spaces
- adequate comfortable seating and toilets
- spaces without traffic

These dimensions outlined by Carmona and Wunderlich (2013) reinforce and expand the ideas of (Francis, 1987). A study by Watson and Kessler (2013) also reinforced the statements. Carmona & Wunderlich (2013) concluded what users of public open space like both physically and socially by identifying twenty qualities deemed important through a review of urban design literature. These qualities were:

1. Overall quality of place
2. Linkages and permeability
3. Perceptions of safety
4. Distinction between public and private
5. Robust and adaptable
6. Comfort
7. Relaxation
Passive engagement
Active engagement
Discovery
Sense of belonging
Neighbourliness
Vitality
Affordances for young people
Inclusivity
Health
Sustainability
Sensory experience
Sense of ownership
Care and maintenance

These qualities, when compared with the qualities outlined by Francis (1987) and Carmona and Wunderlich (2013) create a comprehensive list of dimensions of a successful place. These dimensions are useful when assessing the anticipated outcomes of the research and discussing their effect on the experience of urbanity.

An improvement in the experience of urbanity will be beneficial to the people of Christchurch as it creates an environment that is vibrant, lively, safe and more diverse (Jacobs, 1961; Montgomery, 1998). Current urban design interventions need to be evaluated to show how they affect social and spatial structure of the place and how urban design interventions could improve the experience of urbanity in a neighbourhood such as Addington. A large amount of theory exists on public open spaces. However, there is a gap void in the research linking design interventions to the improvement of the experience of urbanity. This research will attempt to bridge this gap by surveying Addington’s public open space, observing users within these public open spaces and suggesting interventions that can improve the experience of urbanity based on current urbanity research.

2.7 Chapter Summary

This chapter has highlighted the development of the idea of urbanity and its importance in a contemporary society where people are gravitating towards living in an urban environment as opposed to a rural environment. The public open spaces of an urban environment are an important factor in this contemporary society, the literature review has outlined that these spaces have an effect on a person’s health, wellbeing and perception of the city. The aim of the literature review was to identify a gap in current urban design and urbanity research between the concept of urbanity and the implementation of its principles to a case study. This review has shown that the concept of urbanity was seen to follow from the implementation of urban design schemes and that urbanity was a byproduct. As the aim of this research was to attempt to provide urban design recommendations to a case study and measure there anticipated outcomes and level of success, a set of indicators were drawn up. The indicators were derived from a review of common urban design principles found in literature and common principles found throughout urbanity literature to create a set of indicators that public open space can be measured against to show if the space has a positive experience of urbanity. This literature review has created a base of information for the research to build upon.
3.0 Addington

Figure 9. Pedal Pusher bar at night.
3.1 Introduction

Addington is a suburb of Christchurch that has a unique character as it sits in liminal space, neither suburban nor urban. Originally an industrial hub of Christchurch, the land use has since transformed into an ad-hoc first suburb of Christchurch with many different industries. However, Addington has a unique character that many suburbs in Christchurch lack, with a distinct centre, a mixture of amenities and an ideal location close to the central city.

3.2 Context

Addington is located 2.5 km southwest of the Christchurch central city core as defined by CERA (CCDU, 2012). It sits in a liminal space between the CBD and outer suburbs of Christchurch. Originally a part of the suburb of Sydenham, Addington grew around Church Square, a historical centrepiece of Addington. Character houses of the 1880-1920 era can be seen in the surrounding streets. Over the years the centre of Addington has relocated to Lincoln Road, where businesses have developed due to the heavy vehicle and foot traffic. The suburb itself is surrounded by medium to low density residential to the west, south and east. To the north of the suburb is Addington Junction where the two main rail trunk lines in Christchurch, main north and main south lines, meet, providing a historical backdrop of industrialism to Addington. The central city and Hagley park are also located to the north, providing many recreational and employment opportunities close by. The suburb itself is a mixture of medium to low density residential, retail, light industry and larger business parks. The main arterial street that intersects the suburb is Lincoln Road, which connects the south western suburbs of Hillmorton, Hoon Hay, Spreydon and Halswell to the central city. The industrial heritage of the suburb is said to provide a true sense of community and self sufficiency (Wilson, 2008).

In the Christchurch City Plan, Addington consists of an L3 living zone, B1, B2, B3 and B4 Business zones, and a small pocket of L5 living zone.

- L3 living zone is defined in the city plan as medium density residential and is intended to provide provisions for a diverse range of residential development, redevelopment and infill compatible with the character of the surrounding areas.
- B1 business zones are defined as small scale retail shops with service areas and are characterised as strip developments with street frontages.
- B2 Business zones are defined as shops with a significant scale and intensity to service larger district centres and to the amenities of larger residential areas adjoining.
- B3 Business zones are defined as inner city industrial, dominated by light industry, warehousing and service industries.
- B4 Business zones are defined as suburban industrial, dominated by light industry, warehousing and service industries.
- L5 Living zones are defined as travellers’ accommodation.

3.3 History of Addington

In the original Christchurch city plan, Addington was located on the outskirts of the city, past Town Belt South (now called Moorhouse Avenue). As one of the city’s earliest suburbs, it developed as a railway settlement shortly after the construction of the main rail line south (1867) and main rail line north to Rangiora (1872). With these two main rail lines connecting in Addington at what was known as Addington Junction, Addington quickly became an industrial
Figure 10. Addington context map
hub facilitating the city’s saleyards, jail, railway workshops and immigration barracks (Wilson, 2008). As the use of rail grew, businesses took advantage of Addington’s unique location at a junction between north and south lines, and numerous manufacturing and processing industries developed such as a flour mill, brewery, a soap and candle maker and a jam factory, some of which can still be seen today (Wilson, 2008). The Addington railway workshops opened in 1880. They were located at the junction of the main northern and southern lines and became the centre for locomotive, passenger carriage and goods wagon construction, which at its peak employed 2,000 people, a major economic driver for Addington. The site not only drove the economy but was also the social hub of the suburb (Brown, 2009).

The railway drove Addington to evolve as an industrious working class suburb of Christchurch with unique character reinforced by the people who lived and worked there and had a strong sense of community and relied on self-sufficiency. The gradual decline of the railway in the 1950’s due to a lack of demand for rail as a means of transport, greenfield development and the rise in land prices drove Addington to begin to shed its industrious heritage. The result is a liminal suburb bypassed by people as they move on somewhere else. However, Addington has a distinct centre with a diverse range of people and amenities acting as an entranceway to the city.

The Wood Brothers Flour Mill opened in 1891 on Wise Street. It was located adjacent to the rail line and powered by steam, allowing it to have the largest output of flour in the South Island by 1936. The mill closed in 1970 and the building has since been re-used as a bakery, gym, exhibition space and residential apartments until the Christchurch earthquakes closed it (May, 1996).

Addington Prison was built in 1874 under the guidance of architect Benjamin Mountford who also designed the Christchurch Cathedral and Canterbury Museum. The purpose of the prison was to assist with the overcrowding of the Lyt-
telton prison. It has been utilised as a women’s prison and a military barracks, but since closing in 1999 when all Christchurch prisons were moved outside the city’s boundaries, the prison has been used as backpacker hostel accommodation called Jailhouse Accommodation.

The Anglican Church of St Mary, located in Church Square has long been the centre of the community. Originally a school and orphanage, the church opened in 1867.

The bell tower was erected in 1907 in memory of NZ Premier Richard Seddon. The Addington cemetery was significant in not only Addington’s history but also Christchurch’s history, as it was the first public cemetery open to all religions. Previously, the other major cemetery on Barbadoes Street provided only to Anglicans.

The Canterbury Sale Yards, originally built in 1874, were the hub for livestock trading in Canterbury until the early 1990’s. The site was purchased in 1997 for $5.4 million by a private investment company (Neowell Investments) run by a Taiwanese family and the value of the property has almost doubled since then (Napier, 2013a). Neowell Investments attempted to develop the land for business but under the Christchurch City Plan the land was zoned an L3 living zone and a battle between Neowell Investments and the Christchurch City Council ensued. In 2007, a deal was on the verge of being sealed which would allow the site to be developed for luxury high rise apartments, but consent issues and the economic recession resulted in this development stalling. Since then, a bitter contention between the owner and the council has been waged over who is responsible for the up-keep of the site, leaving it to become a haven for graffiti artists and homeless people forced out of the CBD since the earthquakes. In 2013, a development company proposed that the site be developed into car yards; however that was turned down by the council (Napier, 2013b). The site to date is still vacant with the remaining buildings demolished by the council as they were deemed a fire risk (Napier, 2014).
3.4 Addington’s Issues and Constraints

There are many issues surrounding the suburb of Addington, from earthquake damage, traffic, post-earthquake development and gentrification. These are shaping Addington into the suburb we see today and one of the future.

Addington fared well during the Christchurch earthquakes, with many buildings surviving. However, heritage buildings surrounding the Wood Brothers Mill were demolished and some shop façades and verandas collapsed, resulting in their demolition. As a result of the earthquakes and damage to other suburbs of Christchurch and the central city, the suburb has seen a revival of sorts with a high level of post-earthquake development happening in Addington since 2011. Following the earthquakes, key sporting and cultural venues such as Horncastle Arena and The Court Theatre relocated to Addington and have combined with Addington Raceway and AMI Stadium, informally creating a hub of sports and cultural events that have stimulated the local economy in Addington (Stylianou, 2014).

Development of the built environment within post-earthquake Addington occurred rapidly through a loophole in Living zone 3 rules as part of the Christchurch City Plan. This rapid development of Addington has increased the number of businesses and office workers, but has also increased rental and housing prices in the area as a growing number of people relocate to Addington to be close to the central city and business developments of Addington (Table 1). The rapid nature of this post-earthquake development has led some of the architectural developments to be critiqued, particularly through their perceived inability to speak to the human scale and their lack of reference to the character, history and context of Addington, resulting in an ad-hoc approach to the design of developments in the area (Figure 17). Although fitting within the B4 business zone planning rules, these business park developments detract from
the fine-grain urban form of Addington, creating a disjointed urban fabric.

The rapid development of Addington and the influx of money into the local economy has driven up housing and office prices in the area, resulting in the gentrification of the lower socio-economic class that predominantly lives in the area. Housing prices from the Ministry of Business, Innovation and Employment show that Addington saw an average rent increase of 35% between the three months to August 2010 and the three months to February 2013, shown in Figure 18.

Table 3 2013 Census ‘usually resident’ population count by territorial authority (MacPherson, 2013).

<table>
<thead>
<tr>
<th>Area</th>
<th>2001</th>
<th>2006</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>594300 Opawa</td>
<td>3,405</td>
<td>3,363</td>
<td>3,066</td>
</tr>
<tr>
<td>594400 St Martins</td>
<td>4,284</td>
<td>4,452</td>
<td>4,155</td>
</tr>
<tr>
<td>594500 Waltham</td>
<td>927</td>
<td>1,068</td>
<td>1,038</td>
</tr>
<tr>
<td>594600 Sydenham</td>
<td>5,169</td>
<td>5,478</td>
<td>5,913</td>
</tr>
<tr>
<td>594700 Addington</td>
<td>2,712</td>
<td>3,087</td>
<td>3,675</td>
</tr>
<tr>
<td>594800 Barrington North</td>
<td>5,151</td>
<td>5,361</td>
<td>5,493</td>
</tr>
<tr>
<td>594900 Barrington South</td>
<td>2,925</td>
<td>2,937</td>
<td>3,087</td>
</tr>
<tr>
<td>595000 Spreydon</td>
<td>3,219</td>
<td>3,432</td>
<td>3,552</td>
</tr>
<tr>
<td>595100 Hoon Hay</td>
<td>2,871</td>
<td>2,793</td>
<td>2,862</td>
</tr>
<tr>
<td>595200 Hoon Hay South</td>
<td>1,935</td>
<td>2,034</td>
<td>1,956</td>
</tr>
<tr>
<td>595300 Hillmorton</td>
<td>4,512</td>
<td>4,446</td>
<td>4,476</td>
</tr>
<tr>
<td>595400 Somerfield</td>
<td>3,321</td>
<td>3,543</td>
<td>3,660</td>
</tr>
<tr>
<td>595500 Beckenham</td>
<td>2,340</td>
<td>2,451</td>
<td>2,442</td>
</tr>
</tbody>
</table>
Figure 18. Increase in average rent in Christchurch, shown by ward with CERA residential red-zone and Technical Land Categories (MBIE, 2013).
This effect of gentrification can have both positive and negative effects on a community. Table 4, adapted from Lees (2008), outlines these effects.

The effects of gentrification have both positives and negatives making it difficult to manage; however, it is generally agreed that gentrification is positive for a community as long as affordable housing is available for lower socio-economic groups.

### 3.5 Future

The future of Addington as a first suburb in Christchurch is an important topic to discuss as it has been left out of the suburban centres programme master planning process due to it being deemed that unlike Lyttelton, Sumner and Sydenham, it did not receive a significant amount of damage from the Christchurch earthquakes. However, it is part of the case management stream that will provide support to business and property owners on the rebuild process on an individual basis. Rapid office developments in Addington are housing many businesses that used to utilise central city office space, such as Media Works, Boffa Miskell and

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
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<tbody>
<tr>
<td>Higher incentive for property owners to increase/improve housing</td>
<td>Displacement through rent/price increases</td>
</tr>
<tr>
<td>Reduction in crime</td>
<td>Secondary psychological costs of displacement</td>
</tr>
<tr>
<td>Stabilisation of declining areas</td>
<td>Community resentment and conflict</td>
</tr>
<tr>
<td>Increased property values</td>
<td>Loss of affordable housing</td>
</tr>
<tr>
<td>Increased consumer purchasing power at local businesses</td>
<td>Unsustainable speculative property price increases</td>
</tr>
<tr>
<td>Reduced vacancy rates</td>
<td>Homelessness</td>
</tr>
<tr>
<td>Increased local fiscal revenues</td>
<td>Greater take of local spending through lobbying/articulacy</td>
</tr>
<tr>
<td>Encouragement and increased viability of further development</td>
<td>Commercial/industrial displacement</td>
</tr>
<tr>
<td>Reduced strain on local infrastructure and services</td>
<td>Increased cost and changes to local services</td>
</tr>
<tr>
<td>Reduction of suburban sprawl</td>
<td>Displacement and housing demand pressures on surrounding poor areas</td>
</tr>
<tr>
<td>Increased social mix</td>
<td>Loss of social diversity (from socially disparate to rich ghettos)</td>
</tr>
<tr>
<td>Rehabilitation of property both with and without state sponsorship</td>
<td>Under occupancy and population loss of gentrified areas</td>
</tr>
</tbody>
</table>
Lease terms for the office buildings run for five years. When compared to the timeframes for the Christchurch Central Development Unit’s recovery plan for the central city, the plan anticipates that all Christchurch Central Development Unit anchor projects will be completed in the first quarter of 2017 (CCDU, 2012). By the end of 2017, Christchurch City is anticipated to be in the final stages of the recovery program with many businesses moved back into the city centre. When businesses reach the end of their lease agreement in the office buildings in Addington in 2018/2019, will these businesses extend their lease and commitment to Addington or will they see a better opportunity in the central city? Although there are many unforeseen variables, such as economic conditions and the recovery timeframe, the question poses significant issues if businesses suddenly move out of Addington as quickly as they moved in. Can these office developments be adapted to other uses, such as residential apartments or subdivided into smaller office spaces? Not only do these office developments pose concern to Addington but also the relocation of AMI Stadium to its new location in the central city and the relocation of The Court Theatre into the performing arts precinct in the central city. The money and foot traffic that these venues provide to Addington will be lost to the central city, with the potential to leave Addington in a state of decline as the central city thrives.

These questions create a significant amount of concern not only to the residents of Addington but also to the Christchurch City Council once the CERA Act 2011 expires in 2016, leaving the responsibility to the city council to deal with the potential fallout of CERA’s central city recovery plan. Addington is not the only suburb in this situation and the numerous business parks on the outskirts of the city, the potential is that businesses leave these suburbs to move into the central city or stay and leave the central city suffering the “doughnut effect” which is when suburban neighbourhoods surrounding the city centre experience development isolating the city centre.

3.6 Chapter Summary

The Addington chapter has introduced Addington as a case study for this research and outlined its context as a first suburb within Christchurch and the planning context it sits within. This chapter has outlined its industrial heritage and subsequent decline into a liminal space that has a distinctive heart and a diverse range of people and activities. It has explored the current issues surrounding Addington from gentrification, earthquake damage, traffic congestion and post-earthquake development and introduced potential opportunities and issues that Addington may face in the very near future.

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1 CERA Act 2011 was implemented as a central government response to the Christchurch earthquakes and requires CERA to plan and implement a recovery strategy for greater Christchurch, as a result giving significant power to CERA.
4.0 Methodology

Figure 19. Collecting public life observation data. (Photograph taken by Lynette Harrop, May 2014).
Good urban design requires a successful interaction between public space and public life. Many postmodern spaces designed by landscape architects, urban designers, architects and planners focus on the space itself and leave the aspect of human life behind in the design process. It has been argued that this happens because it is easier to deal with more permanent aspects of shape and form than the ephemeral complexities of human life (Gehl & Svarre, 2013). Factors such as design, gender, age, financial resources and culture determine how and why public space is used. These factors are constantly transforming from day to day, month to month and year to year. Public open spaces, the spaces between buildings that people use daily, need a positive experience of urbanity for pedestrians; for this to happen it is essential that the complexities of human life are taken into account when designing towards a positive experience of urbanity.

The research design for evaluating the urban public open spaces of Addington consisted of a pilot study, site survey and inventory, site observation and analysis of gathered data. The methodology will predominantly apply a qualitative research approach due to the complex nature of public urban open spaces and human interaction.

Observational research methods were used to collect data on public urban open spaces, to determine how they are used and how successful they are against a table of pre-determined public open space qualities derived from an extensive literature review. Observational studies were taken of public open space within Addington, with observations taking place throughout the day and night to determine type of people (i.e. age and gender), number of people, activity, position, and movement patterns. These observations provided qualitative data that allowed each site to be analysed against the research questions of this study:

1. What are the qualities of public open space in Addington?
2. How are the public open spaces in Addington utilised?
3. What urban design interventions could improve the sense of urbanity in Addington’s public open space?

Users were placed in a group purely by observation and were not approached during the study to ensure organic behaviour patterns, as this gave a more accurate indication of behaviour (Gehl, 2009). These methods are a form of empirical research common in landscape architecture (Deming & Swaffield, 2011). This method of research was applied as it provided a link between the quantitative data of public open spaces and its complexities with the experience of urbanity.

The methodology aimed to use the data to consider how the pedestrian experience of urbanity could be enhanced within Addington.

4.2 Study areas - Sites chosen throughout Addington

Following a spatial analysis of Addington, five sites were chosen as key public open spaces within this city suburb. The five sites were chosen as they were deemed to be most important to the character of Addington.

Lincoln Road
Lincoln road was chosen as a key area of study. And due to its length it was split into three sections to allow for easier application of the methodology.
Figure 20. Addington case study areas
Lincoln Road Section A

This section of Lincoln Road, from Whiteleigh Avenue to Clarence Street South, consists of mainly small, independent commercial shops with predominantly detached, privately-owned residential housing towards the south. This space forms a key pedestrian connection with the Addington village centre and is important as there is heavy traffic at the large intersection, combined with high pedestrian numbers walking to AMI stadium, CBS Arena and Addington Raceway.

Figure 21. Lincoln Road looking north towards Section B.

Figure 22 Lincoln Road looking south west towards corner of Clarence Street
Lincoln Road Section B

This section of Lincoln Road, from Clarence Street South to 335 Lincoln Road, consists of the main commercial area of Addington and can be considered the heart of Addington. Many businesses are located here, with the development of restaurants and bars occurring post-earthquake. This area also contains the major public transport links to Christchurch city centre and to the south west. The commercial and retail activity in this area are made up of a range of different businesses at different scales, from small local businesses, such as Regent Shoe Repairs, medium scale businesses, such as Tony’s Tyre Service, to larger businesses, such as MediaWorks.

Figure 23. Lincoln Road main pedestrian crossing, looking north.

Figure 24. Lincoln Road main pedestrian crossing in Section B, looking south.
**Lincoln Road Section C**

This section of Lincoln Road, from 335 Lincoln Road to the Lincoln Road railway crossing, consists of modern offices, some developed post-earthquake due to many businesses relocating out of the central city to this part of Addington. This section has a few restaurants and a bar, and is important due to Lincoln Road being the main connection between the south west and central city.

![Figure 25. Section C of Lincoln Road, looking south towards modern developments.](image1)

![Figure 26. Section C of Lincoln Road. Streetscape looking north towards Christchurch city centre.](image2)

![Figure 27. Section C of Lincoln Road, looking west towards the 359 Lincoln Road commercial development.](image3)
Addington Mall

Addington Mall was selected as an area of study as it connects many people from the residential areas in the south east of Addington to the central area of Addington where the main public transport routes are. The space is essentially used as a car park which is creating a tension between pedestrians and cars as they both try to navigate the space.

Figure 28. Addington Mall, looking south towards the centre of the mall.

Figure 29. Addington Mall, looking north towards the mall entrance.
Three35 Plaza

The plaza area of Three35 is a recent post-earthquake development that involves an open plaza area separating two office buildings. These buildings are two storeys high and are occupied by large businesses such as MediaWorks and Moore Stephen Markham Accountants that have between 50 and 100 workers. The plaza consists of a centrally-raised lawn with secondary seating surrounding it, with many changes in hard surface materials and the buildings address the street frontage.

Figure 30 Three35 Plaza, looking west towards the centre of the plaza.

Figure 31 Three35 Plaza looking west towards Lincoln Road.
4.3 Counting

Counting allows the measurement of ephemeral qualities of city life, as data on pedestrians and the public life of spaces is unknown (Gehl & Svarre, 2013). The counting method provided quantitative data that helped give a sense of how often public open spaces were utilised and helped answer questions around the success of the spaces. As Francis (1986) concluded, successful urban open spaces should have a variety of users and a variety of activities. The counting method allowed the analysis of these factors and thus gave an indication about the success of each space.

Pedestrian counts and surveys of activities were made for ten minutes every hour from 8 am to 12 am on weekdays Monday, Wednesday and Friday and both Saturday and Sunday. This method of pedestrian counts has been utilised in precedent studies and provides a precise picture of the daily rhythm of public open spaces (Gehl & Svarre, 2013). People were observed and recorded in age and gender groups by adapting the study methods used by Gehl Architects in their Public Life Study of Christchurch City Central (2009). These groups were:

Gender categories:
- Male
- Female

Age group categories:
- 0-14 Children
- 15-29 Young Adults
- 30-64 Middle Age
- 65+ Elderly

Pedestrians were placed into these groups purely by observation so a degree of variability within the data was to be expected. The reason that pedestrians were placed into broad categories was that this specific type of count provides data into who is using public open spaces. Data from this can then be used to design spaces that accommodate the specific uses of groups such as women, children and the elderly as these groups are often overlooked in the planning and design of public open spaces (Gehl & Svarre, 2013).

4.4 Tracing

The tracing method involved drawing lines of pedestrian movement on a plan of open space. This technique gave an indication of how pedestrians moved through the space, what entrances were used most and choice of direction. This method, combined with the behavioural mapping method, allowed analysis of areas of public open space that showed little use. This analysis can lead to recommendations on how to improve these areas. This technique is useful when suggesting interventions to enhance pedestrian movement patterns (Gehl & Svarre, 2013).

4.5 Behavioural Mapping

The mapping technique involved mapping what was happening within the public open space: where people sat, stood, waited and congregated. This method gave a frozen snapshot of public open space and how pedestrians were using it (Gehl & Svarre, 2013). Observations included a survey of peoples’ activities. The categories of activities were adapted from Gehl Architects study. However, categories were added to improve the data and include activities essential to the concept of urbanity such as talking, socialising, eating and digital media interaction. The activity categories in the Gehl Architects public life study were:

1. Physical activities
2. Cultural activities
3. Commercial activities
4. Children playing
5. Lying down
6. Sitting on folding chairs
7. Sitting on secondary seating
8. Sitting on café chairs
9. Sitting on benches
10. Waiting for transport
11. Standing
12. Talking (in person)
13. Talking (on phone)
14. Eating and/or drinking
15. Watching

Activities determined occupancy patterns of public open space. Carmona (2014) noted that space occupancy is determined by “situated” and “transient activities”, and devised a table of space occupancy determinants of public open space, placing determinants into two categories: firstly, drawing users in and secondly, encouraging users to linger. This concept of space occupancy determinants is important to note for this research, as drawing users into the space and encouraging them to linger are important design principles for urbanity (Jacobs, 1961; Montgomery, 1998). Carmona’s (2014) table can be adapted when analysing the qualities of Addington POS and activities of people in POS, allowing activities to be placed into a situated activity and transient activity.

The results gave insight into the transient or situated nature of each POS and how the occupancy of spaces in Addington changed throughout the day and night and during different weather conditions. This table can also be adapted when suggesting interventions to enhance urbanity, as after analysis some sites may be heavily transient in use and suggested interventions can encourage users to stay in POS.

4.6 Issues & Constraints

Many challenges were identified when testing the methodology and also when the research methodology was reviewed by the Human Ethics Committee for approval. These issues were identified and resolved, resulting in Human
Ethics approval from Lincoln University. The Human Ethics Committee had concerns surrounding the nature of the observation study and the ethical implications it may have. The concerns stemmed around the fact that the study would not involve the consent of participants and that any pedestrian within the spaces under study would be observed without consent. The method of not ‘recruiting’ participants was consciously decided upon after consideration of the literature, which showed that if participants were aware of the observational study underway, their behaviour would be potentially altered which in turn would alter the data gathered. As McCall (1984) concluded, “the known presence of an observer creates a degree of reactivity in those being observed” and effects on behaviours are common. Known presence of an observer would provide unnatural data for the public open spaces chosen and it was important that pedestrians were left to engage with the spaces under investigation naturally to provide organic data for the research.

The Human Ethics committee also had concerns surrounding the privacy of people in public open space and that some methods of observation can be intrusive to pedestrians. The issue was resolved by seeking evidence in literature that concluded that when people act within public open space they assume their behaviour can be observed and scrutinised by the general public, even without the presence of a social science research observer (Lee, 2000). The methodology developed for this research did however ensure that the observations were as unobtrusive to the public as possible by ensuring the observer was participating in the public open space and became a part of the space as observations were made. Furthermore, observations were also made from a car parked on the street, allowing the observer to keep from becoming too intrusive. Overall, the committee were concerned about the finite detail of the observation study methodology. In reality, this type of methodology was used to gather general data to observe general trends, and any anomalies or personal characteristics of pedestrians were not taken into account as they did not provide any value to the study.

A certain degree of inaccuracy was expected within the data due to the nature of the methods, as assumptions were made on pedestrians’ age group and gender. However, as the aim of the research was to study general trends, a certain degree of inaccuracy was expected. Unique situations may have occurred where a large number of pedestrians moved through a certain study area, resulting in a radical spike in pedestrian numbers and activities for the area. The numbers were recorded to the best of the observer’s ability and notes were taken explaining the reason behind the spike in numbers, and general activities were recorded. Anomalies such as this may have been a regular occurrence (for example when a sports match or theatre production ended) and the data could inform better design responses to accommodate spikes in numbers.

### 4.7 Urban Design Interventions to Enhance Urbanity

Once analysis of the public urban space data was completed, interventions were suggested to answer research question three (how experience of urbanity can be improved in Addington public open spaces through interventions). The Watson & Kessler (2013) table (see Table 4) was used as a framework for analysing interventions and how they would enhance the experience of urbanity, as it identifies qualities that are deemed important in public urban open space and shows open space qualities before and after intervention (Watson & Kessler, 2013).

This table was adapted to show qualities and issues at the heart of the concept of urbanity derived from literature review, the state of each POS study area in Addington and the perceived improvements from urban design interventions recommended following analysis of the observation study.
The table adapted from Watson & Kessler (2013) provides a framework to demonstrate anticipated outcomes for each quality identified as important, for the recommendations of each space. This table however does not indicate if the anticipated outcomes would be deemed a success against a set of criteria derived from the literature review.

The success of public open spaces is difficult to measure due to subjective perception of different people as to what is success in public open spaces. This has resulted in many different sets of principles by urban design theorists. This research methodology attempts to derive common indicators of good quality public open space principles combined with urbanity principles derived from literature. The aim is to distil a set of indicators that are common throughout urban design literature to provide a methodology for the spaces to be assessed against.

The following indicators have been derived as the most common principles of good quality public open space from the literature review this has been compared with Montgomery (1998) principles of urbanity to create a framework to assess the urbanity of public open spaces.

Table 5 Qualities for retrofitting neighbourhoods (Watson & Kessler, 2013).

<table>
<thead>
<tr>
<th>Qualities identified as important</th>
<th>EC1 area before improvements</th>
<th>EC1 area after improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall quality of place – the interaction of the streets and open spaces</td>
<td>Area felt neglected and unsafe; few people were out and about; area was colourless, dominated by hard landscaping and vehicles</td>
<td>A new sense of distinctiveness and identity. The qualities listed below are interlinked; they affect each other and reinforce their impact. Connected interventions ensure seamless integration.</td>
</tr>
</tbody>
</table>
Permeability and walkability relates to the pedestrian environment and the ease in which pedestrians can move through the area via pedestrian routes, these need to have good sight lines, have an attractive aesthetic to improve the perception of walking routes and have good accessibility between streets, buildings and open spaces.

**Quality of Place/Aesthetics**
A sense of identity for public open spaces and surrounding areas, public open spaces design interventions are connected as part of a larger strategy.

**Density/Fine grain development**
The density and fine grain pattern of development adjacent to public open spaces is an important indicator of good quality public open space as Montgomery (1998) concluded that a lively city scene is one consisting of smaller elements that combine together to create diversity. This means that large developments consisting of single businesses should be avoided.

**Vegetation cover/Green Space**
The vegetation cover of public open space links with many other indicators outlined in this chapter. The presence of planting has effects on the micro climate of a public open space through cooling. They also have a positive effect on the perception of an area increasing the attractiveness of areas which have an effect on a pedestrians comfort and relaxation within public open space (Montgomery, 1998).

**Vitality**
Vitality in public open spaces centres on the amount of activity that happens. Urban design interventions can inform how spaces are used. Good quality public open spaces will provide opportunities for pedestrians to engage in a number of transient and situated activities, generating pedestrian flow.

**Passive Engagement**
The passive engagement of pedestrians in public open space is the activity of people watching which provides intrigue to pedestrians as Jacobs (1960) compared the activity of pedestrians on a street to a ballet that never repeats itself. The indicator of passive engagement relates heavily to the vitality indicator and relies on a public open space having a good amount of activity.

**Active Engagement**
Active engagement is the amount of activity that occurs within a public open space, this is a strong indicator on how well public open spaces are planned and designed as some of the more prominent public open spaces in the world are heavily used by pedestrians for example Times Square, New York, and Federation Square, Melbourne.

**Sensory Experience**
Public open spaces can have both negative and positive sensory experiences, a good public open space will have a positive sensory experience through the use of a diverse range of materials, feature lighting, a focus on planting and references to the history of an area. The sensory experience indicator is a strong component of urbanity as the senses can shape a person’s perception of a space.

The final list of indicators of good public open space with a positive experience of urbanity derived from literature that this research will utilise to assess urban design recommendations for Addington is as follows:

1. Safety/Security
2. Comfort/Relaxtion
3. Permeability/Walkability
4. Quality of pedestrian space
5. Density/Fine Grain development
6. Vegetation cover/green space
7. Vitality
8. Passive Engagement
9. Active engagement
10. Sensory Experience
4.8 Methodology Summary

In summary, this chapter has highlighted the public life study approach to the research and its importance to urban design and the concept of urbanity. The qualitative data gathered from this approach informed design responses that enhance the experience of urbanity for pedestrians in Addington. The design responses will have a set of anticipated outcomes for each public open space and each outcome can be assessed against good quality public open space indicators outlined in the chapter.
5.0 Urban Design Analysis

Figure 32. The Court Theatre, Addington.
5.1 Urban Design Site Analysis

The previous chapter outlined a methodology for the research to follow to answer the research questions. This chapter will explore the first research question: What are the qualities of Addington’s public open space? Presenting an urban design analysis of each individual site that will show what does and does not work at each site. This will form the basis for recommending interventions to enhance the experience of urbanity.
5.2 Section A Qualities

Vehicle Traffic/Parking
This space has heavy vehicle traffic and as a consequence little priority is placed on the pedestrian's experience. Parking consists of on-street parking, reducing the amount of space for pedestrians on the footpath.

Pedestrian Space
Space for pedestrians in this area consists of the footpath and crossings. The footpath is a traditional design consisting of an asphalt surface with little in the way of street furniture or planting, resulting in a lack of attractive areas that could provide places for pedestrians to sit and interact. Footpaths also provide little visual interest.

Permeability
The space has disjointed permeability from the surrounding areas; streets are the main connection and these have poor pedestrian environments. The accessibility of the streetscape from surrounding neighbourhoods is poor and more connections need to be created to enhance the space.

Active Engagement
There is a certain degree of active engagement in this POS. Buildings have active street frontages and are generally busy. However, the dominating activity is transient-based and the space lacks areas for people to sit, wait, eat and drink.
Safety
Section A has heavy vehicle traffic as it is a major intersection (Whiteleigh Avenue and Lincoln Road). Combined with a narrow pedestrian footpath on either side of the road, this creates an unsafe perception of the area. Vehicles dominate the area, both while moving and parked on the street. Cyclists have a narrow cycle lane and are in constant competition with vehicles. There is a perception of anti-social behaviour, possibly because it is a lower socio-economic area.

Comfort/Relaxation
Pedestrian areas are dominated by hard surfaces that offer very little in terms of seating or planting that can provide psychological benefits. The proximity of heavy traffic to these pedestrian areas increases the feeling of anxiety in the user. There are no attractive areas for informal meetings between pedestrians that add to the sense of neighbourliness.

Positive Sensory Experience
The poor street design and monotony of materials provide little in the way of sensory richness. Limited street elements provide little visual interest and the noise from vehicle traffic is overwhelming.
5.3 Section B Indicators

Pedestrian Space
The pedestrian space in this section of Lincoln Road consists primarily of footpath. It has building setbacks and a footpath build-out at the pedestrian crossing, which increases the overall pedestrian space. Some cafés and restaurants in the area have outdoor seating areas. The pedestrian space consists of brick pavers, which increase the aesthetic appeal of the space. However, there is a lack of street elements such as planters and benches, resulting in a lack of attractive spaces for pedestrians to sit. The public transport facilities in the area are also of poor quality.

Vehicle Traffic/Parking
Vehicle parking in this section consists of restricted on-street parking. The area experiences heavy vehicle traffic throughout the day and is gridlocked at peak traffic times between 7 am and 9 am and 5 pm and 6 pm. As a consequence, little priority is placed on pedestrians.

Permeability
This space is connected to the surrounding open spaces and residential neighbourhoods through a permeable street pattern. Most buildings have parking at the rear with driveways accessing the streets.

Active Engagement
This space has a high level of engagement with businesses fronting the street, with cafés and restaurants utilising space on the footpath for outdoor dining (although there is inadequate space, creating a cramped environment). Some buildings have unnecessary setbacks from the street, creating disused spaces and reducing the level of engagement. The site on the corner of Lincoln Road
and Clarence Street South consists of a car park, resulting in a poor building frontage creating a poor relationship with the street.

Safety
Vehicle traffic, both moving and parked, dominates the space. Pedestrian priority is only given at the main pedestrian crossing in the centre of the space. The active engagement of building frontages during increased activity at night (associated with bars and restaurants) allows for passive surveillance, creating a safer environment on the street than other sections of Lincoln Road at night.

Comfort/Relaxation
The pedestrian spaces in this area are dominated by hard surfaces and lack of spaces for people to sit and wait or interact with others. The area has a severe lack of planting to enhance psychological wellbeing in pedestrians. Adding to this is an overbearing presence of vehicle traffic.

Positive Sensory Experience
The change in surface material from asphalt to brick pavers provides an interesting sensory experience for pedestrians due to the change in texture at the pedestrian’s feet. The change in pavers also creates a visual pattern on the footpath, stimulating visual interest. However, noise from vehicle traffic detracts from this and the lack of attractive areas for pedestrians to utilise gives an overall negative sensory experience for pedestrians.
Figure 58 Section C location

Figure 59 Section C Figure Ground Diagram

Figure 60 Section C Zoning Map

Figure 61 Section C Car Parking

Figure 62 Section C Pedestrian Space

Figure 63 Section C Shade Diagram

Summer 8:00am - 5:00pm
5.4 Section C Indicators

Pedestrian Space
The pedestrian space in this area is much like that of Section A, Lincoln Road consisting mainly of a traditionally designed narrow footpath with asphalt as the main material. There is very little in the way of attractive space for pedestrians to use and the pedestrian spaces are devoid of any street furniture to provide visual interest or the opportunity to reside within the space, rather than merely transition through it.

Vehicle Traffic/Parking
Vehicle traffic in this area is heavy at peak times throughout the day, from 7 am to 9 am and 5 pm to 6 pm, as it is close to the central city and a number of offices and businesses are located in this area. Parking consists of mainly on-street parallel parking. However, many businesses have their own car parking facilities.

Permeability
This area has a good level of permeability as it is connected to the surrounding suburbs using a network of streets. There is also a pedestrian walkway from Lincoln Road connecting the street to the Jailhouse Accommodation and further into the residential area of Addington.

Active Engagement
This section has poor engagement as the majority of the buildings are set back from the street, with car parking dominating the street frontage.
Safety
Vehicle traffic dominates the space, creating a conflict between users and an unsafe environment for pedestrians. The large buildings with large setbacks raise CPTED concerns about concealment. Also, the large Hazledean development is deserted outside of working hours and has the potential to provide opportunities for anti-social behaviour.

Comfort/Relaxation
Similar to Section A, pedestrian areas are dominated by hard surfaces and provide very little in the way of seating and planting. The heavy vehicle traffic that this area experiences and the proximity between the road and pedestrian spaces can increase anxiety in users of the space. The area provides no attractive spaces for pedestrian interaction, increasing the disconnection between the space and the user.

Positive Sensory Experience
The poor design of the pedestrian space provides no changes in material or any attractive elements to enrich the user’s sensory experience.
5.5 Addington Mall Indicators

Pedestrian Space
This space lacks any usable or meaningful pedestrian space as the area consists mainly of a car park. As a result, pedestrians are constantly competing with vehicles. Pedestrian areas consist of small paths on the fronting of buildings in the area. A small outdoor eating area in front of one restaurant receives good sun at all times of the day and is well used.

Vehicle Traffic/Parking
The site is heavily dominated by car parking (approximately 90% of ground cover) and as a result sees a very high number of traffic movements throughout the day. This area has 39 car parks which are full at the site’s peak pedestrian flow times.

Permeability
This area has a reasonable amount of permeability with a good connection to the residential area that backs onto the space. However, this connection is mainly used by cars and is quite narrow, reducing sight lines. The site has good connections to Lincoln Road, but these lack priority for pedestrians and are main vehicle access ways. The location of these access ways also creates an unsafe environment for pedestrians as they cross footpaths.

Active Engagement
This site has a good level of active engagement with business facing the public open space. However, car parking detracts from this engagement and the amount of setback from the street that some of the businesses receive make them less engaged by pedestrians. People were observed walking through the space, some standing, sitting, watching and eating outside restaurants.
Safety
The conflict between vehicles and pedestrians in the space gives the perception of an unsafe area for pedestrians. The layout of the site creates some CPTED concerns with the opportunity for concealment around corners. The location of public toilets at the back of the mall provides an opportunity for anti-social behaviour and the lack of suitable lighting in the area increases the perception that it is an unsafe area.

Comfort/Relaxation
The pedestrian areas in this POS are dominated by hard surfaces and attractive areas for pedestrians to sit, stand and watch are lacking. There are some areas for secondary seating, consisting of a raised lawn fronting Lincoln Road. However, these are rarely used. The space has a severe lack of planting and is dominated by vehicle traffic, resulting in a psychologically stressful space.

Positive Sensory Experience
The large car park and continuous hard surface provide little in terms of sensory experience. The service areas to the rear of the central restaurant detract from a positive experience. Groups of people congregating outside restaurants provide a visual stimulation and the restaurants provide a pleasant smell in the area. However, this is impacted by the amount of vehicles in the area.
5.6 Three35 Plaza Indicators

Pedestrian Space
The pedestrian space consists of a plaza with varying paving materials, scattered deciduous trees and a centrally-located raised lawn with concrete steps surrounding it. The space is well-designed with opportunities for pedestrians to sit and interact on the raised lawn.

Vehicle Traffic/Parking
The plaza is set back from the heavy traffic on Lincoln Road but still quite visible. Car parking to the adjacent office buildings is to the rear of the plaza, with bollards separating the pedestrian space and car park area. The space is purely designed for pedestrians.

Permeability
The site has a good level of permeability from the adjacent streets and businesses, allowing pedestrians to move through the space to access the office buildings and car park.

Active Engagement
The space has a high level of engagement from the surrounding businesses. Ground floor businesses face both Lincoln Road and the plaza, encouraging a high level of use of the plaza. Having the car park set back to the rear of the space encourages pedestrian priority.

Safety
The plaza has a high level of pedestrian safety due to the separation of the car park through the use of bollards. Each business has windows that look onto the space, providing passive surveillance, and the space is not screened from Lin-
coln Road, providing additional passive surveillance from the street.

**Comfort/Relaxation**
This space provides an attractive area for pedestrians to sit and relax, the site receiving good sun throughout the day. Deciduous trees provide shade during summer and the raised lawn provides different seating options for pedestrians. The site is set back from the street, minimising disturbance from vehicle traffic.

**Positive Sensory Experience**
The site provides a positive sensory experience, having attractive spaces for pedestrians to sit and interact. Changes in material and interesting building design provide visual interest for pedestrians. However, more planting could be incorporated into the design to further increase the sensory richness. It is important to note that this space has been developed post-earthquake, whilst the other public open spaces studied here were developed pre-earthquake. This contemporary design completed an optional urban design review as part of the resource consent process and as a result has a high level of amenity when compared with other public open spaces studied.

### 5.7 Chapter Summary

This chapter has analysed each public open space within Addington chosen as study areas for this research. The chapter has answered the first research question: What are the qualities of public open space (POS) in Addington? through thorough urban design analysis of each space revealing the unique qualities of public open space in Addington. This leads to analysis of public life study data which will combine to give a greater understanding of the processes taking place in Addington’s public open spaces.
6.0 Public Life Study - Results

Figure 93. Lincoln Road pedestrian crossing.
6.1 Introduction

The public life study data informed how public open space is utilised in Addington. The data helps answer the second research question: How is the existing public open space in Addington utilised? The study generated a wealth of raw data on the way public open spaces are utilised in Addington, this chapter will focus on the main points of interest of the data that help answer the research questions.

6.2 Section A Data Analysis

Section A saw an average number of pedestrian numbers through the site on both weekdays and weekends when compared with the four other public open space sites studied. As Figure 79 shows, the average numbers of pedestrians on the weekend were higher than on weekdays, especially between 5 pm and 9 pm. This is due to the level of evening activity associated with restaurants and bars (as the previous chapter has outlined). The general trend for weekday pedestrian numbers sees an increase throughout the morning, hitting a peak at lunchtime with a sharp drop immediately after lunch and peaking again at 5 pm, aligning with the day’s close of business as people commute home. This was different in the weekend, as pedestrian numbers climbed to a peak between 1 pm and 2 pm, with a sharp drop at 4 pm then a sharp rise in numbers between 6 pm and 7 pm as people made their way to bars and restaurants. A general trend for both weekdays and weekend days was a decline from 7 pm onwards through to midnight.

Figure 79 Average number of pedestrians on weekdays and weekend days

A key idea behind the concept of urbanity is the concept of stationary activities. Public open spaces that are vibrant and full of life are deemed to have a high number of stationary activities as people enjoy the space by staying (Carmona &
Wunderlich, 2013; Gehl & Svarre, 2013). It is necessary then to survey both the stationary and transitional activities of the space as pedestrian numbers alone do not give a full picture of how the space is utilised, and allows analysis of how people like to use public open space. This analysis can then inform designs of POS to enhance the stationary activities of a POS. Since this study focuses on the concept of urbanity, social interaction activities were also surveyed as this is key to the idea of vitality and vibrancy of POS, both important indicators of urbanity.

Section A saw a variety of stationary activities throughout both the weekdays and the weekend, as shown in figures 95 and 96. The major activity observed was walking, indicating that the area is primarily used as a transient space that people move through to get to another destination. The area has a few takeaway restaurants fronting Lincoln Road, resulting in a number of people eating and drinking in the space. However, the lack of people sitting indicates that people do not like to stay in this location. This could be due to the lack of seating and attractive areas for pedestrians to utilise. When compared with the weekend averages, walking is still a major activity, reinforcing the argument that Section A is a transitional space where people move through to other spaces. The level of activity also drops, with the major stationary activity being standing as people wait to cross the road, wait for others or for public transport. These graphs show that Section A is a transitional space throughout both weekdays and the weekend. To enhance the vitality and vibrancy (and thus the experience of urbanity), intervention is needed to enhance the stationary activities of the site, encouraging more people to interact within the space.

A second important idea behind the concept of urbanity is social interaction and the amount of people interacting within POS. This was measured both in personal social interactions and digital social interaction via the use of a phone. This
is important as it gives an indication of whether spaces are utilised as formal or informal meeting places for people to talk. Figure 97 shows the average number of social interactions between two or more people in POS and also the average number of people utilising mobile phones in POS. Weekdays and weekends were compared. The graph shows that the average number of social interactions was much higher on the weekend compared with the weekday average. This is consistent with the average pedestrian numbers shown in figure 94.

The tracing map shown in figure 98 and 99 demonstrates the paths used by pedestrians throughout the space for both the weekend and weekdays. Analysis of these maps shows that pedestrians predictably follow the pedestrian footpaths. Crossing the street was not as predictable, as pedestrians crossed depending on their destination, thus resulting in a sporadic pattern of paths crossing the street. This map gives insight into where pedestrians walk, allowing interventions to enhance already utilised walkways and encourage pedestrian activity. Analysis of the activity maps shown in Figure 100 and 101 demonstrate that in Section A activities occur on the footpath (as predicted) but also around businesses with an active frontage, such as bars and restaurants. The comparison between weekday and weekend did not provide a significant difference in activity locations.
Key:

- Pedestrian walking paths
- Physical activities
- Cultural activities
- Commercial activities
- Children playing
- Lying down
- Sitting on folding chairs
- Secondary seating
- Sitting on café chairs
- Sitting on benches
- Waiting for transport
- Standing
- Talking (in person)
- Talking (on phone)
- Eating and/or drinking
- Watching

Figure 98. Section A Tracing Map Week Day
Figure 99. Section A Tracing Map Weekend
Figure 100. Section A Behavioural Map Week Days
Figure 101. Section A Behavioural Map Weekend
6.3 Section B Data Analysis

Section B saw a large number of pedestrians over both the weekdays and weekend. Figure 102 shows that Section B had a large spike in average pedestrians at 12 pm on weekdays. This is due to the activity associated with the buildings fronting Section B: a number of restaurants and cafés are located here which, combined with the number of offices in Addington, produced a large number of people commuting to these food outlets for lunch. Section B saw a similar trend as Section A, with pedestrian numbers increasing in the morning then peaking at lunch and again at 5 pm when pedestrians are commuting home from work. However, Section B did not see a sharp drop between these two peaks. The weekday average saw a gradual decline towards the end of the day. The weekend averages for Section B showed this is the most active space in Addington during the weekend, attracting a range of users throughout different times of the day. Pedestrian numbers peaked on the weekend at 7:30 pm and 10:30 pm, showing that Section B has a night time economy aspect to the space and can attract users at different times of the day.

Section B saw the most diverse variety of stationary activities on both weekdays and the weekend, as shown in Figures 103 and 104. The primary activity was walking. This is consistent with Section A, indicating that the space is used as a transitional space that people move through. However, Section B saw more people staying situated in this POS, especially on the weekend. The number of retail, commercial and hospitality opportunities exceed other areas of Addington; this could explain the high number of people within this POS. Restaurants in the area open up to the street and have outdoor seating which people utilised even during cold weather on both weekdays and the weekend, as seen in Figures 108 and 109. The high number of people utilising seating and eating/drinking was most significant between 12 pm and 1 pm, in line with the high number of
pedestrian numbers this POS saw over both weekdays and the weekend. This 
POS is the most active site in this study, attracting people throughout Addington 
to eat, shop or wait for public transport. Enhancing this area of Lincoln Road as 
the heart of Addington could resonate into the surrounding areas. 

This site also saw many interesting activities that attracted many people to the 
space. The main two included a hairdresser giving free haircuts on the side of 
the street as a form of advertisement, inviting many people to watch, participate 
and take photos. The other activity involved a local Christchurch homeless man 
and his horse Beautifoal who roamed the streets of Christchurch and Addington. 
This man and his horse situated themselves just off the street, with many peo-

ple recognising him and the horse and gathering to take photos and chat. These 
types of unique characters and situation bring life and vibrancy to this POS, so 
providing spaces for these types of activities is essential to enhancing the urban-
ity of Addington’s POS.

The social interaction in Section B showed more people on average interacting 
on weekdays than on weekends. A large number of people socially interact within 
the space at peak times of 12 pm and 7 pm.

The tracing maps shown in Figures 91 and 92 demonstrate the paths pedestrians 
utilise within the space. Analysis of these maps show that pedestrians utilise the 
footpaths and the main pedestrian crossing is heavily utilised to cross the street. 
However, many pedestrians will cross the street at different points. This could 
be due to the traffic lights in place at the crossing slowing vehicle traffic down, 
resulting in a safer perception of the street when cars are stopped.

The activity maps shown in Figures 108 and 109 demonstrate that the centre of 
Section B outside Addington Mall had the highest density of activities through-
out the public life study. When compared with the amount of activity occurring on the street outside areas with larger setbacks from the street, interesting comparisons can be made between the amount of activity and the amount of setback the buildings have from the street. When weekday and weekend maps are compared, no significant changes have been observed.
6.4 Section C Data Analysis

Section C saw an average number of pedestrians over both weekdays and the weekend. Figure 110 shows that Section C experienced relatively consistent numbers of pedestrians each hour over both weekdays and the weekend, with the weekends averaging slightly higher at night. This could be due to people walking through the space to get to bars and restaurants within Section C and towards Section B. Section C has a high number of businesses located in this area, many of which have relocated into new business developments post-earthquake. This could explain the high number of pedestrians utilising the space at 12 pm and 5 pm. Much like Sections A and B, Section C has a number of food outlet opportunities for pedestrians, resulting in a high number of pedestrians utilising the space between 11:50 pm and 12:50 pm and 6:50 pm and 7:50pm.

Section C saw a reasonable amount of diversity in activities performed within the POS on both weekdays and the weekend, as shown in Figures 111 and 112. Once again, walking was a primary activity for the site across both weekdays and the weekend. When both weekdays and weekends are compared, the weekend saw a significant rise in activity levels when compared with the weekday averages. This could be due to the space’s close location to Hagley Park where netball is played on a Saturday morning. This space becomes a point of “park and walk”, where families park and walk to Hagley Park, resulting in a larger number of pedestrians and activity levels. The number of popular Christchurch bars in the area, such as DUX live and Cargo Bar, result in a large amount of foot traffic on the weekend between 5:50 pm and 10:50 pm. When both weekday and weekend averages are compared, the space is less utilised on a weekday than on the weekend and pedestrians tend to use the space as a transitional space and are less situated
in the space, whereas the weekend averages suggest that more people stay in the space. However, walking is still the primary activity on both week days and weekends, giving the impression that the space is still largely transitional.

Figure 113 shows the social interaction averages for Section C. The weekend saw more people on average interacting socially, however the weekday had the highest average, at 20 pedestrians per hour at 12:50 pm and 1:00pm.

The analysis of the tracing maps in Figures 114 and 115 establish the paths utilised by pedestrians. Footpaths are utilised heavily as is the main pedestrian crossing at the intersection of Lincoln Road and Dickens Street. Interventions that enhance these pathways will contribute to a greater experience of urbanity. Analysis of the activity maps shown in Figures 116 and 117 demonstrate that activity occurs on the street outside food outlets. Activity also occurs heavily at the pedestrian crossing. Enhancing the areas popular for activities will give pedestrians performing activities in the area a more positive experience of urbanity. It is also important to enhance areas that lack activity to try and encourage pedestrians to engage in these spaces.

This site and its close proximity to Hagley Park and the central city makes it an important space that connects these three sites. Enhancing the public open space here will further improve the connection between Addington, Hagley Park and the central city.
6.5 Addington Mall Data Analysis

Addington Mall saw a range of pedestrians per hour over both weekends and week days. Figure 118 shows that the weekend saw a higher average of pedestrians per hour which peaked at both 1:10 pm and 6:10 pm. This could be due to the number of restaurants located within this POS. Both weekdays and the weekend saw a similar trend to peaks at lunch and dinner times slowly declining to the end of the day. Both the weekdays and the weekend saw a sharp decline after lunch that resulted in a low average at 4:10 pm. This could be explained by the fact that people have gone back to work after lunch and are not yet commuting home; also, school has finished by this time, meaning parents and children may already be at home after school, resulting in the low average.

Addington Mall saw a low amount of activities and low diversity within activities. Figures 119 and 120 show that the primary activity over both the weekend and weekdays was walking, reinforcing the space as a transitional space where people park and walk to other parts of Addington. Restaurants in the area provide opportunities for people to eat and drink, but only one of the restaurants provides outdoor seating utilised during the day and resulting in a number of people staying in the space to eat, drink and socialise. Addington Mall also had a high number of pedestrians standing outside one of the restaurants in the space. These pedestrians would normally stand, talk and sometimes smoke in larger groups. These people could be accommodated better with secondary seating. The space struggled to encourage people to stay and most would utilise the car park and walk to other parts of Addington with better amenities than Addington Mall.
Figure 106 shows the social interaction averages for Addington Mall. Social interaction peaked at 12:10 pm and 6:10 pm, in line with lunch and dinner time. Outside of these hours, social interaction averages were low as people were not staying in the space. Redesigning of the space to encourage people to stay may increase the levels of social interaction within the space.

The tracing map shown in Figure 122 and 123 provides an insight into the problems surrounding the space. Pedestrians do not have enough marked pedestrian areas and as a result their movements are sporadic, unpredictable and centred on where cars are parked. Many people cut across the car park instead of using the pedestrian walkway around the space.

The activity map shown in Figure 124 and 125 demonstrates where the majority of activities occur and as a result shows that many of the activities are associated with the food outlets in the space. Many people stand and wait in this space and lack of seating is evident.

Figure 120. Addington Mall weekend average stationary activities vs. transient activities per hour

Figure 121. Addington Mall social interaction averages per hour weekday vs. week
Figure 122. Addington Mall Tracing Map Weekday

Figure 123. Addington Mall Tracing Map Weekend

Figure 124. Addington Mall Behaviour Map Weekday

Figure 125. Addington Mall Behaviour Map Weekend
6.6 Three35 Plaza Data Analysis

Three35 Plaza saw the lowest average number of pedestrians over both the weekdays and the weekend. Figure 126 shows that pedestrians barely utilised the plaza over the weekend, with the lowest numbers recorded across all five sites. The weekday average saw a peak at 1:30 pm which could be explained by the number of businesses adjoining the plaza, resulting in a large number of pedestrians leaving the office for lunch. There is also a sushi restaurant on the ground floor of one of the buildings, inviting additional pedestrians into the space at lunchtime. The weekday average saw a sharp decline after lunch which continued through to the end of the day. During the weekend the space was almost deserted, resulting in a dead space with no activity. This was also the case for both weekdays and the weekend after 5:30 pm, resulting in a deserted space at night time with the potential for CPTED issues. These issues could be mitigated in not only the design of the space but also through policy to encourage better ground floor building uses that have night time economy and activity during the weekend.

Three35 Plaza saw a relatively low amount of activities and a lack of diversity within activities. Figure 127 and 128 shows that the site was most active on a week day at 1:30 pm, in line with the average pedestrian numbers, with a reasonably diverse range of activities as families and business people utilised the site to eat lunch and interact socially. The primary activity for both weekdays and the weekend was walking; however, weekdays saw a number of people utilising secondary seating, eating and drinking. Figure 129 shows the social interaction averages for the Three35 plaza and support the activities during the day time. Social interaction into the night and on the weekend was low.
The tracing maps reveal that pedestrian movement patterns were heavily associated with the entrances of buildings. Figure 130 and 131 shows that pedestrians utilise the plaza to get to a building entrance and sometimes utilise the plaza space for another activity on their way through the space. Pedestrian paths are also centred on the car park, as people park their cars and walk through the space to get to the street or a building entrance. An interesting observation made in this space was that pedestrians walking past the plaza on the footpath seem to be drawn to walk on the texture paving of the plaza space, moving back onto the footpath once past the plaza.

The activity maps shown in Figure 132 and 133 demonstrate that the majority of activities occur in the frontages of the office buildings as people engage in conversation. Heavy activity also occurred around the central raised lawn of the plaza as pedestrians utilised the steps to sit, eat, lie down and interact with other pedestrians.

Overall the results show that the space is sparsely utilised during the day on weekdays but lacks night time economy and activity on the weekend.
Key:

- Pedestrian walking paths

Figure 130. Three35 Plaza Tracing Map Weekday

Figure 131. Three35 Plaza Tracing Map Weekend

Figure 132. Three35 Plaza Behaviour Map Weekday

Figure 133. Three35 Plaza Behaviour Map Weekend

Key:

- Physical activities
- Cultural activities
- Commercial activities
- Children playing
- Lying down
- Sitting on folding chairs
- Secondary seating
- Sitting on café chairs
- Sitting on benches
- Waiting for transport
- Standing
- Talking (in person)
- Talking (on phone)
- Eating and/or drinking
- Watching
6.7 Public Life Data Summary

The public life data analysis has provided a breakdown of the data for each individual public open space. This chapter showed that some spaces are utilised more than others both during the week and on the weekend, at night and during the day. This revealed that no space is utilised the same and the design of public open space needs to be dynamic and adaptive to cater for different needs. This chapter also showed the activities for each public open space, revealing that some spaces are more transient than others and that these spaces need to provide more opportunities for pedestrians to situate themselves within the space.
7.0 Design Recommendations
7.1 Introduction

The aim of research was to present urban design recommendations that could enhance the experience of urbanity. The previous chapter has provided a strong set of urban design qualities and public life study data for each individual study site chosen within Addington that can achieve this. This chapter explores design recommendations for a low budget scenario and a high budget scenario to provide a point of comparison for discussion. The chapter begins with a summary of the results of each study areas quality of place and observation study, which allows conclusions to be drawn on each sites strengths and weaknesses. These conclusions allow design recommendations to be made to capitalise sites strengths and mitigate and remedy its weaknesses. The final part of the chapter explores an implementation plan that demonstrates how each scenario can be implemented through appropriate staging to create an Addington with an enhanced experience of urbanity.

7.2 Summary of results

Section A quality of place
Section A overall has heavy vehicle traffic with little pedestrian space that is disjointed from the surrounding areas. Businesses activate the street frontage. However, the pedestrian space does not complement the businesses as it is narrow and dominated by hard surfaces. The POS has no attractive spaces for pedestrians to sit and interact and there is a perception that the space is unsafe.

Section A observation study
The observation study revealed that pedestrians utilise the space more on a weekend day than on a weekday and peaked between 12:00pm - 1:00pm and 5:00pm-6:00pm. The primary activity for Section A is walking and the space struggled to retain pedestrians and it was utilised as a transitional space.

Section B quality of place
Section B overall had largest amount of pedestrian space throughout Lincoln Road, there are footpath build outs that give the space some width. However, there are a lack of street elements in the POS resulting in a space with low amenity and a lack of attractive spaces for pedestrians to interact. The area is connected to the surrounding areas through streets and walkways. However, these have a low amenity and could be designed better. The buildings have a high level of active engagement with the street and have a night time economy. This area is perceived as being safer due to the level activity. However, some people believe that the new night time economy of this space could have a negative effect on the POS.

Section B observation study
The observation study revealed that Section B saw the highest number of pedestrians over all five sites both on week days and the weekend. The week day peak was at 12:30pm and the weekend peak was at 8:30pm. The primary activity was walking however, more people were situated in the POS and the space attracted a range of various activities, the space was the most popular across all five sites for people to socially interact.

Section C Quality of place
Section C overall had limited pedestrian space similar to Section A, the pedestrian space consisted of the footpath with a lack of street elements and dominated by hard surfaces, resulting in a lack of attractive space for pedestrians to interact. There is heavy vehicle traffic in the area which creates a tension between pedestrians and drivers this can affect the perception of safety in the area. The developments in this area have large setbacks from the street creating a disconnection and disjointed perception of the public open space. These setbacks can also raise CPTED issues with the potential for anti-social behaviour.

Section C Observation Study
The observation study revealed that when compared to the other four POS’ section C saw average number of pedestrians on both weekdays and weekends. Section C saw a sharp peak in pedestrian numbers at 12:00pm due to the high number of office developments in the area. The POS had a range of diverse activities that pedestrians participated in throughout the site. There were a higher number of activity levels on the weekend and this could be explained by the activities associated with the nearby Hagley netball courts which see a large amount of activity on the weekend. The site also has a significant night time economy due to the number of bars in the area.

**Addington Mall Quality of place**

Addington Mall overall had very little pedestrian space and was dominated by a car park, there is very little attractive spaces for pedestrians and the space has potential for anti-social behaviour due to the lack of lighting and opportunities for concealment. The space has connections to the surrounding areas. However, these are not attractive connections and thus are rarely used.

**Addington Mall observation study**

Addington mall saw an average number of pedestrians when compared to the other four POS’. The space had a significant higher number of pedestrians on a week day than on the weekend this could be due to shops closing on the weekend. Pedestrian numbers peaked at 1:00pm and 6:00pm on both week days and the weekend due to the number of restaurants in the space. Overall Addington mall had a low number of activities and little diversity in activities. The primary activity is walking and people utilise the car park to park their cars and walk to other parts of Addington.

**Three35 Plaza Quality of place**

Three35 Plaza overall had high quality pedestrian space with attractive areas for pedestrians to sit, stand and interact. The plaza was setback from the street with car parking at the rear and businesses opened up to the space. The area was perceived as being safe for pedestrians with businesses being able to view the space and with plenty of lighting.

**Three35 Plaza observation study**

Three35 Plaza saw the lowest average number of pedestrians over both week days and the weekend when compared with the four other POS’. This could be explained by the activity of the buildings surrounding the space as these are office buildings the site was essentially empty from 5:00pm onwards and was completely deserted on the weekends. Pedestrian numbers peaked at lunch time and declined as the day went on. Three35 plaza saw a low number of activities with little diversity, most people utilised the space as just a walkway to get to a business and few people actually engaged with the space besides a few business people utilising the space to eat lunch and meet informally.

**7.3 Conclusions based on research results**

Based on the results a table was drawn to show what works and what doesn’t in each site in terms of contributing towards a positive experience of urbanity. This table helps inform design recommendations for each site to enhance the experience of urbanity for pedestrians. Each site has a number of issues that are having a negative impact on the experience of urbanity and the recommendations will attempt to mitigate these issues through design and policy interventions.
Table 6 Addington Public Open Space What Works and What Doesn’t Work

<table>
<thead>
<tr>
<th>Site</th>
<th>What Works</th>
<th>What Doesn’t Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section A</td>
<td>- Businesses active frontage towards the street</td>
<td>- Minimal space for pedestrians</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Lack of attractive areas for pedestrians</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Heavy vehicle traffic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Lack of safety for cyclists</td>
</tr>
<tr>
<td>Section B</td>
<td>- Businesses active frontage towards the street</td>
<td>- Heavy vehicle traffic</td>
</tr>
<tr>
<td></td>
<td>- Larger footpath areas for pedestrians</td>
<td>- Lack of attractive areas for pedestrians</td>
</tr>
<tr>
<td></td>
<td>- Pedestrian crossing</td>
<td>- Lack of safety for cyclists</td>
</tr>
<tr>
<td></td>
<td>- Outdoor dining areas</td>
<td>- Some large building setbacks</td>
</tr>
<tr>
<td></td>
<td>- Night time economy</td>
<td>- Low amenity walkways</td>
</tr>
<tr>
<td></td>
<td>- Permeability to surrounding spaces</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Fine grain development</td>
<td></td>
</tr>
<tr>
<td>Section C</td>
<td>- Night time activity</td>
<td>- Large building setbacks</td>
</tr>
<tr>
<td></td>
<td>- Business developments provide activity and pedestrian numbers</td>
<td>- Minimal space for pedestrians</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Lack of attractive spaces for pedestrians</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Lack of safety for cyclists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Heavy vehicle traffic</td>
</tr>
<tr>
<td>Addington Mall</td>
<td>- Connections to surrounding areas</td>
<td>- Lack of attractive areas for pedestrians</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Minimal space for pedestrians</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Open space dominated by car park</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Low amenity walkways</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Lack of planting</td>
</tr>
<tr>
<td>Three35 Plaza</td>
<td>- Car parking at rear</td>
<td>- Connection to streetscape</td>
</tr>
<tr>
<td></td>
<td>- Central plaza location</td>
<td>- No weekend or night time economy</td>
</tr>
<tr>
<td></td>
<td>- Raised lawn provides attractive area for pedestrians</td>
<td>- Lack of planting</td>
</tr>
<tr>
<td></td>
<td>- Large amount of pedestrian space</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Business active frontage towards POS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Well lit</td>
<td></td>
</tr>
</tbody>
</table>
7.4 Strategic options to facilitate positive change to the experience of urbanity

To facilitate a positive change in the experience of urbanity for Addington, two scenarios were devised: a low budget scenario and a high budget scenario. These scenarios show that a positive change in the experience of urbanity can happen despite budget constraints.

Each scenario expands upon the conclusions made from the research results and tries to reinforce elements of public open space that work and to suggest recommendations that mitigate and remedy elements of Addington’s public open spaces that don’t work.

**Low Budget Scenario Overall Strategy**

The low budget scenario (figure 134) attempted to facilitate change by utilising existing infrastructure with enhancements to the design of the streetscape. The strategy aims to enhance existing positive design interventions and mitigate negative effects of the current POS, the use of existing infrastructure such as the curb and channel drainage of the street in an attempt to keep the strategy within a low budget. Temporary streetscape enhancements such as planter boxes with street trees planted allow them to be moved if needed for underground service repairs. These planter boxes delineate the segregated cycleway providing safety for cyclists and providing a contrast to the hard materials of the streetscape. The segregated cycleway resulted in the loss of parallel on street car parking in places, this does not have an effect on traffic flows and is necessary to facilitate a more positive experience for pedestrians of the POS' current on street parking down streets adjacent to Lincoln Road would be retained to facilitate cars. A street furniture strategy would be implemented to enhance pedestrian spaces.
91 Design Recommendations

Figure 118. Low Budget Scenario Plan

Figure 134. Low Budget Scenario Strategic Plan

Removable Planters

Segregated Cycleway

Bus Stop Upgrades
Section A

Section A interventions would consist of a segregated cycleway on both sides of the street until where the road widens to allow for extra turning lanes. Due to the unnecessary large width of the road, temporary median planting is suggested to not only slow traffic but also enhance the streetscape. The bus stop at the northern end of street is upgraded to provide facilities for pedestrians to sit under cover.
Section B

Section B recommendations include a segregated cycleway on both sides of the road at particular points on the road by the use of removal planters, planted with street trees. The central space surrounding the pedestrian crossing would be upgraded via paving upgrades. Public transport facilities at the southern end of the site would be upgraded to provide seating and cover for pedestrians. The footpath outside the Three35 development would also be upgraded via paving upgrades to further integrate Three35 plaza with the streetscape.
Section C

Section C recommendations include a segregated cycleway on both sides of the road at particular points by the use of removable planters. The main crossing in this POS would be upgraded via a change in paving or road painting to help identify the space to drivers as a pedestrian area. The public transport facility at the southern end of the site would be upgraded to provide seating and cover for pedestrians. There is also opportunity for median planting in the middle of the road at sections throughout the POS to help reduce traffic speed.
Addington Mall

Addington Mall recommendations include an enhanced walkway connecting the mall and Lincoln Road to the surrounding areas. An increase in planting and seating areas, to provide areas for pedestrians to sit and interact and, the removal of some car parks to provide for outdoor eating to the restaurants.
Three35 Plaza

Three35 plaza’s recommendations consist of a continuation of the paving material onto the adjacent footpath to allow greater integration to the street, and an enhancement of the current planting scheme in the area. Policy interventions such as development incentives to the current business zone would encourage ground floor hospitality to increase night-time and weekend economy. These businesses could also provide outdoor eating opportunities within the plaza.
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High Budget Scenario Overall Strategy

The high budget scenario (figure 145) attempts to facilitate a more permanent change when compared with the low budget scenario. The strategy aims to make comprehensive changes to the streetscape of Lincoln Road including changes to the hardscape, soft scape and street furniture, a permanent segregated cycleway and changes to the zoning rules encouraging fine grain development to replace some of the larger setback car yards in the area.
99 Design Recommendations

- Segregated Cycleway
- Pedestrian Crossing Upgrade
- Bus Stop Upgrades
- Footpath Paving Upgrades
- Addington Mall Redevelopment
Section A

Section A recommendations would consist of a pedestrian footpath curb extensions that increase the overall area for pedestrians. This space would have an integrated cycleway that is separated from the road and footpath via permanent planting. These pedestrian areas can incorporate street furniture and public transport facilities with a difference in paving treatments to create attractive areas for pedestrians to utilise.

Figure 146 Section A High Budget Strategic plan

Figure 147 Section A perspective
Section B

Section B recommendations would consist of similar pedestrian footpath curb extensions to increase the overall area for pedestrians, this would also be utilised at the main pedestrian crossing which would be slightly enlarged creating a pedestrian safe zone. The crossing would also be the same height as the footpaths creating a slight speed bump which will slow traffic creating a safer area for pedestrians. Policy interventions include changing zoning rules to avoid large setbacks on properties in the area creating a denser neighbourhood that addresses the streetscape.
Section C

Section C recommendations would consist of pedestrian footpath curb extensions at certain points to increase the area for pedestrians. This would include the segregated cycle way that would be segregated via planting. Policy interventions would address some of the larger business park style developments occurring and some of the large setbacks associated with these developments. The main pedestrian crossing at the intersection of Lincoln Road and Dickens Street can be further enhanced to prioritise pedestrians over vehicles through the use of road painting or a difference in material such as concrete pavers.

Figure 150 Section C High Budget Strategic plan

Figure 151 Section C perspective
Addington Mall

Addington Mall recommendations would consist of a full revamp for the mall including outdoor eating areas for both Simos and North and South Restaurant with planting and a change in material from the asphalt car park. The southern entrance to the mall would be closed to vehicle traffic and utilised as a walkway with a concrete pavers with planting separating the car park from the walkway. Vehicle access to the mall is retained as the space requires car parking to provide activity to the area. Service areas to the rear of the North and South restaurant could be screened through the use of planting.
Three35 Plaza

The recommendations for the Three35 Plaza would consist of a better connection to the streetscape of sections B and C through an integration of the paving materials of the plaza onto the pedestrian footpath space. Policy interventions would consist of incentives to encourage hospitality businesses on the floor facing the plaza to activate the night time and weekend economy.
7.5 Implementation and staging

The implementation of each intervention scenario would be completed through the staging of interventions across the five public open spaces. The stages would set out to achieve incremental interventions at specific stages over a 5 year period. This is to set realistic targets for the implementation of the design recommendations throughout Addington.

Low Budget Scenario implementation

Stage 1:
The experience for pedestrians is a key principle for enhancing the experience of urbanity in Addington. Thus Stage one would involve the development of Section B with planters beginning to separate the potential cycle lane from the road and painting the main central pedestrian crossing to designate a vehicle slow zone, this is to place more priority for pedestrians. Stage 1 implementation allows the POS with the most pedestrian numbers to benefit first from intervention.

Stage 2:
Stage two would focus on connecting Section B to Section C as section C is an important connection to the central city. Planters creating the cycle lane would be implemented as well as an upgrade to the bus stop facilities in this section

Stage 3:
Stage three focuses on Section A which would complete the upgrades to Lincoln Road connecting this whole section of the street at the heart of Addington. Removal planters will connect the segregated cycleway, street furniture and public transport facilities will be upgraded in this stage.

Stage 4:
Stage four focuses on Addington Mall where removal planters will designate the pedestrian walkway connecting Lincoln Road, and Addington Mall with Fielding Street. Removal planters will also be implemented to designate an outdoor dining area for North and South Restaurant and also enhance the existing outdoor dining space.

Stage 5:
Stage five focuses on the contemporary Three35 Plaza which will involve policy interventions that would provide incentives for developers to create ground floors with a night time and weekend economy such as restaurants and bars.

High Budget Scenario implementation

Stage One
Stage one implementation for the high budget scenario would be centred on interventions recommended for Section B as this area has the highest average number of pedestrians and activities. Stage one involves the construction of the curb build outs to extend the pedestrian space, involving paving and planting to denote a dedicated cycle lane and pedestrian space. This also allows the cafés and restaurants in section B to provide generous outdoor dining space. The street furniture and public transport upgrades would also be implemented in this stage to Section B. Policy interventions would also be implemented in stage one to ensure that future development, involves fine grain buildings with smaller setbacks from the streetscape. This will ensure that the streetscape has an active frontage contributing to the vibrancy of the space.
Stage Two
Stage two is centred on Section C following a similar strategy for the low budget scenario by strengthening the connection to the central city and enhances the potential for the space to act as a gateway to the central city. Stage two will involve curb build outs to with planting and paving changes to widen the amount of pedestrian space and also denote a dedicated cycle lane. Paving changes to the intersection of Lincoln Road help reduce vehicle speed.

Stage Three
Stage three involves the implementation of Section A to further enhance the connection to the sports and cultural facilities such as Horncastle Arena, Addington Raceway and AMI stadium. This involves the curb build outs to increase pedestrian space and denote a designated cycle lane. Section A was decided to be implemented at stage three as this intersection of Clarence St and Lincoln Road has a high volume of traffic and implementing changes to the road would take a complex traffic management plan as well as enough time for planning. The timing would also allow section B and Section C to test the design recommendations and the implementation strategy allowing amendments to be made before the final design interventions are carried out.

Stage Four
Stage four would involve implementing the recommendation for Addington Mall which would involve changes to the hard surface treatment with the removal of the asphalt in place and replaced with pavers. A planting strategy which would screen rear service areas in the space with more vegetation throughout the space, outdoor dining spaces would be integrated within the planting and hardscape treatment strategies. A dedicated walkway would be constructed through the use of hardscape treatments and planting, this would also have new lighting installed to give a safer perception of the space.

Stage Five
Stage five would involve implementing the recommendations for Three35 plaza, as this is the most contemporary space that went through an urban design peer reviewed process. It was deemed that the four other public open spaces required attention before this space. This stage would see the implantation of policy interventions to increase mixed use of the buildings to promote more ground floor activity such as restaurants, this could lead to the plaza being utilised for outdoor dining. Planting would be enhanced through the use of deciduous trees and low grass planting to complement the existing planting scheme. The recommendations would be anticipated to happen at the end of the five year implementation programme this is important as CERA’s central city blueprint is scheduled to be completed by 2019 (CCDU, 2012), the resulting development of the central city could lead to businesses leaving suburban areas to be located in the CBD, this could have an effect on the recent office developments in Addington as they might lose businesses who are currently leasing office space.

7.6 Chapter Summary
The results demonstrate the different qualities and uses of each public open space in Addington and show the strengths and weaknesses of each site through analysis of the urban design qualities and public life study data. This allowed concept plans to be drawn up for the study areas to demonstrate potential urban design recommendations for a low budget scenario and a high budget scenario. The results attempt to show the recommendations can enhance the experience of urbanity for Addington’s public open spaces. The chapter then outlines an implementation and staging plan for each scenario to demonstrate how the recommendations could potentially be implemented in Addington, through this discussion can be raised surrounding how both the low budget scenario and high
budget scenario are not mutually exclusive and can be potentially be utilised together.
8.0 Discussion

Figure 156. Hazledean Business Park development.
8.1 Introduction

The aim of this research was to investigate the experience of urbanity in Addington. The focus of the research centred around three research questions – What are the qualities of Addington’s public open space? How Addington’s public open spaces areas used? And what urban design interventions will improve the experience of urbanity in Addington’s public open spaces? In response to the first question and urban design analysis of each study area was performed to outline the important qualities of each space that were derived from literature. The results section outlines the data gathered from the public life study and analysis showed how each site was used. This method allowed weaknesses in Addington’s public open space to be identified. The results chapter outlined the analysis of the qualities of each public open space and the data gathered from the public life study, this provided a breakdown of what works and what doesn’t in each space. Following this analysis the recommendations chapter presented a low budget scenario and high budget scenario of urban design recommendations to show interventions that would enhance the experience of urbanity.

The discussion chapter attempts to answer upon the third research question by theorising potential anticipated outcomes in relation to the experience of urbanity for both the low budget scenario and high budget scenario for each site. The discussion will then lead into how the anticipated outcomes relate to urbanity and successful urban design principles literature. The discussion also provides insight into lessons learnt from the research alongside the potential negative effects that the recommended design interventions could cause for Addington as well potential future research.
### 8.2 Anticipated outcomes

Table 7 Section A Anticipated outcomes

<table>
<thead>
<tr>
<th>Qualities Identified as important from Literature</th>
<th>Section A before recommendations</th>
<th>Section A anticipated outcomes in relation to urbanity (low budget scenario)</th>
<th>Section A anticipated outcomes in relation to urbanity (high budget scenario)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Space</td>
<td>Space consisted of just footpaths and crossings, asphalt surface, minimal street furniture, planting and no attractive pedestrian spaces</td>
<td>Attractive and appropriate street furniture and planting scheme providing attractive spaces for pedestrians.</td>
<td>In addition to the elements from the low budget scenario the high budget scenario will include attractive hardscape increasing overall street amenity. This will improve the sensory experience of the space.</td>
</tr>
<tr>
<td>Vehicle Traffic/Parking</td>
<td>High volume vehicle traffic, no priority for pedestrians or cyclists. On street parking.</td>
<td>High volume of traffic however with a greater priority for pedestrians and cyclists due to the increased amount of footpath space and designated cycle lane. Retention of some on street parking.</td>
<td>High volume of traffic. Greater priority on pedestrians and cyclists experience through segregated cycleway with extensive planting as a buffer. Retention of some on street parking.</td>
</tr>
<tr>
<td>Permeability</td>
<td>Disjointed permeability from the surrounding areas.</td>
<td>Amenity of existing connections.</td>
<td>Enhanced amenity of existing connections, through curb build outs and planting connecting character of street to residential areas.</td>
</tr>
<tr>
<td>Active Engagement</td>
<td>Buildings have active street frontage but activity is transient in nature.</td>
<td>With more attractive spaces for pedestrians, people are anticipated to stay in these spaces longer creating a higher level of active engagement with the street.</td>
<td>Buildings can address the street frontage more due to increased space for pedestrians. The retention of on street car parking outside shops still provides space for people to park.</td>
</tr>
<tr>
<td>Qualities Identified as important from Literature</td>
<td>Section A before recommendations</td>
<td>Section A anticipated outcomes in relation to urbanity (low budget scenario)</td>
<td>Section A anticipated outcomes in relation to urbanity (high budget scenario)</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>----------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Safety</td>
<td>Perception of an unsafe area due to high volume of traffic, and narrow cycle lane.</td>
<td>Designated cycleway and increased pedestrian space give a perception of a safer area.</td>
<td>Segregated cycleway with planting buffer provides from moving and stationary traffic, giving pedestrians a increased perception of safety.</td>
</tr>
<tr>
<td>Comfort/Relaxation</td>
<td>Pedestrian areas are dominated by hard surfaces that offer very little in seating and planting, the proximity of vehicle traffic can be overwhelming.</td>
<td>Increased use of attractive street furniture and planting will soften the streetscape providing attractive areas for pedestrians to relax</td>
<td>In addition to the low scenario outcomes, the buffer planting from segregating vehicle traffic from pedestrian space will enhance pedestrians comfort.</td>
</tr>
<tr>
<td>Sensory Experience</td>
<td>Poor street design and monotony of materials provide little the way of sensory richness. The limited street elements provide little visual interest and vehicle traffic is overwhelming.</td>
<td>Planting and interesting street furniture provide a break from the repetitive hardscape creating visually interesting areas.</td>
<td>Interesting hardscape provides a change in texture for pedestrians, planting will soften and break up the monotony of hardscape and provide a soft screen from vehicle traffic, providing a positive sensory experience</td>
</tr>
<tr>
<td>Passive Engagement</td>
<td>Space lacks attractive areas for pedestrians to sit and people watch.</td>
<td>Enhanced streetscape with street furniture and planting provide attractive areas for pedestrians</td>
<td>Enhanced streetscape with street furniture and planting provide attractive areas for pedestrians</td>
</tr>
</tbody>
</table>
## Table 8 Section B Anticipated outcomes

<table>
<thead>
<tr>
<th>Qualities Identified as important from Literature</th>
<th>Section B before recommendations</th>
<th>Section B anticipated outcomes (Low budget scenario)</th>
<th>Section B anticipated outcomes (High budget scenario)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Space</td>
<td>Pedestrian space consists of a wide footpath space, with cafes and restaurants utilising this for outdoor dining. Space lacks attractive street furniture and planting. Poor public transport facilities.</td>
<td>Increased pedestrian space with more opportunities for outdoor dining. Attractive street furniture and planting with improved public transport facilities.</td>
<td>In addition to the low budget scenario hardscape improvements complement and provide visual interest for pedestrians</td>
</tr>
<tr>
<td>Vehicle Traffic/Parking</td>
<td>The space experiences a high volume of traffic throughout the day and has time restricted on street parking.</td>
<td>A high volume traffic capacity but with greater priority placed on the pedestrians.</td>
<td>In addition to the low budget scenario, on street parking retained in places.</td>
</tr>
<tr>
<td>Permeability</td>
<td>Permeable street pattern with walkways to surrounding areas.</td>
<td>Existing walkways to surrounding areas.</td>
<td>Enhanced walkways to surrounding areas.</td>
</tr>
<tr>
<td>Active Engagement</td>
<td>Space has a high level of active engagement when compared with the four other sites in Addington.</td>
<td>Improved engagement through the use of enhanced streetscape and opportunities for buildings to further engage with the street.</td>
<td>In addition to the low budget outcomes, hardscape upgrades will increase streetscape amenity.</td>
</tr>
<tr>
<td>Safety</td>
<td>Space is dominated by vehicle traffic. Active engagement of buildings to the street and a night time economy allows for passive surveillance.</td>
<td>Increased amenity of streetscape enhances the night time economy and engagement of buildings providing a safer street.</td>
<td>Increased level of active engagement from buildings compared to low budget scenario.</td>
</tr>
<tr>
<td>Comfort/Relaxation</td>
<td>Pedestrian spaces are dominated by hard surfaces and lack of attractive spaces for pedestrians to interact with. A severe lack of planting and an overbearing presence of vehicles.</td>
<td>Attractive spaces for pedestrians with planting that softly screen vehicle traffic and street furniture to provide comfortable places for pedestrians to sit.</td>
<td>In addition to low budget scenario, further enhancement of the streetscape and planting provide comfort for pedestrians.</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sensory Experience</td>
<td>Brick pavers provide visual interest to pedestrians. However vehicle noise and lack of attractive areas for pedestrians give a negative sensory experience for pedestrians.</td>
<td>Street trees will soften the visual and audible experience of vehicle traffic and provide a visually attractive space for pedestrians. Street furniture will provide opportunity for pedestrians to sit and relax, providing a positive sensory experience.</td>
<td>Low budget scenario interventions are enhanced further through extensive planting and hardscape changes.</td>
</tr>
<tr>
<td>Active Engagement</td>
<td>Good level of activity as this space could be considered the heart.</td>
<td>Enhanced streetscape amenity further improves active engagement of the space by people</td>
<td>Enhanced streetscape amenity further improves active engagement of the space by people</td>
</tr>
<tr>
<td>Passive Engagement</td>
<td>Lack of spaces for people to sit and people watch.</td>
<td>Enhanced streetscape with street furniture and planting encourage people to sit and stay in the space.</td>
<td>Enhanced streetscape with street furniture and planting encourage people to sit and stay in the space.</td>
</tr>
<tr>
<td>Qualities Identified as important from Literature</td>
<td>Section C before recommendations</td>
<td>Section C anticipated outcomes (Low Budget Scenario)</td>
<td>Section C anticipated outcomes (High Budget Scenario)</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Pedestrian Space</td>
<td>Pedestrian space consisting of footpath with very little in the way of street furniture or on street planting to create attractive spaces for pedestrians. Poor public transport facilities.</td>
<td>Enhanced streetscape through street furniture and planting providing attractive spaces for pedestrians. Improved public transport facilities.</td>
<td>In addition to the low budget scenario, hardscape upgrades such as concrete pavers will increase the amenity of the pedestrian space.</td>
</tr>
<tr>
<td>Vehicle Traffic/Parking</td>
<td>High volume traffic at peak times (7:00am – 9:00am and 5:00pm – 6:00pm). Many business have on site car parking and very little on street car parking is provided.</td>
<td>Retain high volume traffic. Segregated cycleway provides safety for cyclists.</td>
<td>In addition to the low budget scenario. Interventions will slow vehicle traffic at the major pedestrian crossing at the intersection of Lincoln Road and Harman Street.</td>
</tr>
<tr>
<td>Permeability</td>
<td>Good level of permeability to the surrounding neighbourhoods through connecting streets and a pedestrian walkway connecting accommodation with Lincoln Road and the surrounding areas.</td>
<td>No anticipated outcomes</td>
<td>Enhanced existing connections to surrounding areas</td>
</tr>
<tr>
<td>Active Engagement</td>
<td>Poor level of engagement due to the setback of buildings from the streetscape, with most developments utilising the setback for car parking providing week engagement to the street.</td>
<td>Policy interventions to refrain future development from large setbacks</td>
<td>Policy interventions to refrain future development from large setbacks</td>
</tr>
</tbody>
</table>

Table 9 Section C Anticipated outcomes
<table>
<thead>
<tr>
<th>Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle traffic dominates space creating a conflict between pedestrians and cyclists. Large office buildings provide little night time and weekend economy creating potential areas for anti-social behaviour.</td>
</tr>
<tr>
<td>Off street designated cycleway will provide safer options for cyclists.</td>
</tr>
<tr>
<td>In addition to the low scenario budget, the increased planting buffer of the high budget scenario will increase the perception of safety.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comfort/Relaxation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space dominated by hard surfaces however businesses in this area have well landscaped frontages. There is a lack of on street planting and street furniture.</td>
</tr>
<tr>
<td>Street trees will separate cycle lane and pedestrian space from vehicle traffic this will provide a safer environment for pedestrians. The increase in street furniture and planting will provide attractive areas for pedestrians.</td>
</tr>
<tr>
<td>In addition to the low budget scenario, the high budget scenario’s extensive planting buffer will provide a comfortable environment to pedestrians.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sensory Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>The monotony of material, lack of attractive spaces and high volume vehicle traffic provide a negative sensory experience for pedestrians.</td>
</tr>
<tr>
<td>Street trees will provide a soft screen from vehicle traffic for both the cycle way and pedestrian space. The street furniture will provide pedestrians with a place to sit and relax providing a positive sensory experience.</td>
</tr>
<tr>
<td>In addition to the low budget scenario outcomes, hardscape interventions change texture for pedestrians creating a point of interest for the senses.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Active Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A range of activities were present in this space. However space lacked opportunities for people to stay.</td>
</tr>
<tr>
<td>Enhanced streetscape encouraged activity throughout the space.</td>
</tr>
<tr>
<td>Enhanced streetscape encouraged activity throughout the space.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Passive Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space lacked opportunities for people to people watch.</td>
</tr>
<tr>
<td>Interactive street furniture and attractive spaces encourage people watching.</td>
</tr>
<tr>
<td>Interactive street furniture and attractive spaces encourage people watching.</td>
</tr>
</tbody>
</table>
Table 10 Addington Mall Anticipated outcomes

<table>
<thead>
<tr>
<th>Qualities Identified as important from Literature</th>
<th>Addington Mall before recommendations</th>
<th>Addington Mall anticipated outcomes (Low Budget Scenario)</th>
<th>Addington Mall anticipated outcomes (High Budget Scenario)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Space</td>
<td>Space lacks any meaningful pedestrian space and consists primarily of a car park.</td>
<td>Dedicated walkway through the mall connecting surrounding areas to the mall and Lincoln Road.</td>
<td>Dedicated walkway amenity is enhanced through hardscape interventions in. Replacement of asphalt surface with pavers creates a shared surface placing more priority on pedestrians.</td>
</tr>
<tr>
<td>Vehicle Traffic/Parking</td>
<td>Heavily dominated by car parking, 120 minute parking limit sees a high turn around in traffic.</td>
<td>Reconfiguration of car parking on site decreases number of car parks by few but increases pedestrian space.</td>
<td>Reconfiguration of car parking on site decreases number of car parks by few but increases pedestrian space.</td>
</tr>
<tr>
<td>Permeability</td>
<td>Good connection to surrounding areas and Lincoln Road. However connections are vehicle dominated.</td>
<td>Dedicated walkway through the use of planting and bollards to denote pedestrian only walkway.</td>
<td>Enhanced dedicated walkway.</td>
</tr>
<tr>
<td>Active Engagement</td>
<td>Good level of engagement with all businesses addressing the mall. However the car parking that these businesses front onto detracts from this engagement.</td>
<td>Higher quality public open space that should attract more foot traffic through the space helping increase business success.</td>
<td>Reconfiguration of car parking on site decreases number of car parks by few but increases pedestrian space.</td>
</tr>
<tr>
<td>Safety</td>
<td>Lack of pedestrian space creates conflict between vehicles and pedestrians. Layout of site creates CPTED concerns due to concealment.</td>
<td>Increased planting and lit dedicated walkway will enhance the perception of safety.</td>
<td>Marked shared space to increase awareness for vehicles. Increased lighting and amenity to increase safety perception.</td>
</tr>
<tr>
<td><strong>Comfort/Relaxation</strong></td>
<td>Hard surface dominate the space and there is a lack of spaces for pedestrians to sit and interact.</td>
<td>Increased level of planting and seating to provide areas for pedestrians to interact.</td>
<td>Increased level of planting and seating to provide areas for pedestrians to interact.</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Sensory Experience</strong></td>
<td>Large monotonous asphalt surface of the mall and the service areas facing the space provide a negative sensory experience.</td>
<td>Increased levels of planting will break up the monotonity of hard surfaces and will be utilised to screen service areas providing a more positive sensory experience.</td>
<td>In addition to the low budget outcomes, complete replacement of asphalt surface with pavers will enhance the sensory experience of pedestrians through the change in texture.</td>
</tr>
<tr>
<td><strong>Active Engagement</strong></td>
<td>Site is primarily transient in its activity with few spaces to encourage activity. Space dominated by vehicle traffic</td>
<td>Dedicated walkway separates space from car park.</td>
<td>In addition to the low budget scenario, hardscape changes place less priority on vehicle traffic. Parking space are retained however as they provide foot traffic to shops in the area increasing their use.</td>
</tr>
<tr>
<td><strong>Passive Engagement</strong></td>
<td>No attractive spaces for people to sit and people watch.</td>
<td>Increased outdoor dining areas to allow people to sit, eat and people watch.</td>
<td>Increased outdoor dining areas to allow people to sit, eat and people watch.</td>
</tr>
</tbody>
</table>
Table 11 Three35 Plaza Anticipated Outcomes

<table>
<thead>
<tr>
<th>Qualities Identified as important from Literature</th>
<th>Three35 Plaza before recommendations</th>
<th>Three35 Plaza anticipated outcomes (Low Budget Scenario)</th>
<th>Three35 Plaza anticipated outcomes (High Budget Scenario)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Space</td>
<td>Pedestrian space consists of a plaza space with varying types of hardscape, a raised lawn and scattered deciduous trees. Space is purely designed for pedestrians and is utilised by people as an informal meeting place. Lack of night time and weekend economy.</td>
<td>Policy interventions that provide incentives for businesses to provide night time and weekend economy.</td>
<td>Policy interventions that provide incentives for businesses to provide night time and weekend economy.</td>
</tr>
<tr>
<td>Vehicle Traffic/Parking</td>
<td>Plaza is setback from Lincoln Road so provides good distance from vehicle traffic. Parking is to the rear of the plaza.</td>
<td>No intervention is required</td>
<td>No intervention is required</td>
</tr>
<tr>
<td>Permeability</td>
<td>The site has a good level of permeability connecting to adjacent streets and buildings.</td>
<td>No intervention is required</td>
<td>No intervention required</td>
</tr>
<tr>
<td>Active Engagement</td>
<td>High level of active engagement as all businesses faces the plaza encouraging pedestrian use of the plaza.</td>
<td>Policy intervention to create incentives for developers to encourage ground floor use with night time and weekend economy such as restaurants</td>
<td>Policy intervention to create incentives for developers to encourage ground floor use with night time and weekend economy such as restaurants</td>
</tr>
<tr>
<td>Safety</td>
<td>High level of safety due to the visibility of the plaza to the street and the adequate lighting at night.</td>
<td>Policy interventions that provide incentives for businesses to provide night time and weekend economy</td>
<td>Policy interventions that provide incentives for businesses to provide night time and weekend economy</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td>Intervention Needed</td>
<td>Policy Intervention</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Comfort/Relaxation</td>
<td>Space has a visually attractive lawn that provides different seating options. Trees provide shade in the summer.</td>
<td>No intervention required</td>
<td>No intervention required</td>
</tr>
<tr>
<td>Sensory Experience</td>
<td>Attractive space with foot traffic during the week provides a positive sensory experience.</td>
<td>No intervention required</td>
<td>No intervention required</td>
</tr>
<tr>
<td>Active Engagement</td>
<td>Good level of activity within site on weekdays was neglected during the evening and weekend.</td>
<td>Policy intervention to encourage businesses to activate plaza during the evening and weekend e.g. restaurants and bars</td>
<td>Policy intervention to encourage businesses to activate plaza during the evening and weekend e.g. restaurants and bars</td>
</tr>
<tr>
<td>Passive Engagement</td>
<td>Provided opportunities for people to sit and people watch.</td>
<td>No intervention required</td>
<td>No intervention required</td>
</tr>
</tbody>
</table>
8.3 Anticipated Outcomes and the experience of urbanity

The anticipated outcomes outlined in Tables 7-11 show how they have changed the qualities of the each individual public open space. When each site is assessed against the set of good public open space and urbanity indicators outlined in the methodology. Conclusions can be drawn on the how well the recommendations will create good public open spaces with a positive experience of urbanity correlations can be made between principles that make up an experience of urbanity, successful public open spaces and the anticipated outcomes of the urban design recommendations.

Overall many of the urban design recommendations are not exclusive to one particular site and run through the five sites studied, an overall streetscape upgrade is implemented across Sections A,B and C, this streetscape upgrade consisting of segregated cycleway, planting strategy, street furniture strategy and hardscape interventions reinforce many of the urbanity and successful public space principles outlined in the literature review. Montgomery (1998) principles to achieve urbanity are reinforced as the interventions are anticipated to generate pedestrian flows, promote street life, and increase the legibility, permeability, and movement of the suburb through enhanced connections. These overall design recommendations also enhance the principles of comfort,
121 Discussion
safety, vegetation cover, and social interaction through the use of vegetation to segregate the cycleway and footpath from vehicle traffic creating a safer environment and the planting creates an attractive space. Enhanced seating and planting create a comfortable environment and encourage social interaction. Section B recommendations include a policy intervention to stop large setbacks happening on developments this recommendation has a direct correlation to Montgomery (1998) principle of developing a higher density pattern of development, building of fine grain buildings and encouraging developments with an appropriate scale.

Addington Mall recommendations attempted to create a space that felt less like a car park and more like a pedestrian shared space. The interventions included increased planting, areas for outdoor dining and a dedicated walkway through the mall. These interventions support Montgomery (1998) principles: generating pedestrian flows, seeding people attractors, varying opening hours, and permeability. The recommendations also reinforce comfort, safety, vegetation cover through seating, planting and a dedicated walkway.

Three35 Plaza was an interesting case study as it is a post-earthquake development that went through a process of urban design review resulting in a space that is based on good urban design principles such as permeability, activity,
and solar gain. As a result, interventions to enhance this space were minimal. Urban design analysis and public life study found many things that worked with this space and few things that didn’t, the public life study revealed that the site had little to no evening or weekend economy. One intervention that was recommended that would enhance the urbanity of the space is to provide incentives to the developer and tenants to encourage a more mixed use building. Currently, the building is primarily used as an office space with a small sushi restaurant on the ground floor. If the ground floor facing the plaza was utilised as primarily hospitality tenants, the site would have an increased amount of weekend and evening economy which would reinforce Montgomery’s (1998) principles of urbanity and the principles of good public open space set out by (Matthew Carmona, 2014; Francis, 1987; J. Gehl, 2010; Jan Gehl, 2011; Watson & Kessler, 2013).

8.4 Potential Negative Effects

The aim of the research was to attempt to provide recommendations that would have a positive effect on the experience of urbanity for the public open spaces of Addington. However, there is potential for negative effects to materialise after urban design interventions. The potential for gentrification to occur as a result of the improvement of the public open space amenities in Addington is quite significant in post-earthquake Christchurch. As Smith & Williams (2013), theory of production side gentrification explains that gentrification can be caused by the economic process as a result of the relationship between capital investments and the production of urban space. Smith’s theory of production side gentrification summarises five causes of gentrification: suburbanisation and rent gap, deindustrialisation, spatial centralisation, and decentralisation of capital (Smith & Williams, 2013). When Addington is analysed against Smith’s production theory of gentrification it can be argued that Addington is already in the process of gentrification. As outlined in previous chapters, Addington was an industrial hub of Christchurch that entered a state of decline as a result of the decline of the demand for railway, green field development of surrounding suburbs, and rise in land prices. These causes of Addington’s decline align with the cause’s deindustrialisation, suburbanisation and the rent gap theory outlined by Smith & Williams, (2013). This combined with the amount of modern development of office buildings and hospitality businesses shows that Addington has the potential to be in a process of gentrification today. The recommendations outlined in the previous chapter could exacerbate the effects of gentrification as they improve public open space amenity encouraging people to move to the suburb as it has attractive amenities. However as table 4 shows there are both positive and negative effects to gentrification and in the case of Addington which is already in a seemingly unstoppable process of being gentrified the improvement of Addington’s public open spaces will have a positive effect on the experience of urbanity for the people.

There is potential long term negative effect of gentrification and that is displacement of people through rent and house prices rises, this is significant in post-earthquake Christchurch as the drop in housing stock post-earthquake raises concerns about the amount of housing available for less affluent households.

8.5 Lessons for urban designers and landscape architects

**Public Life Study**

The research provided an insight into the value behind a public life study methodology and made it easy to identify issues with public open spaces by making...
it easier to understand the dynamic relationship between people and place. An example of this is the difference between situated and transient activities, as according to (Matthew Carmona & Wunderlich, 2013; Jan Gehl & Svarre, 2013) theory behind the success of public open spaces. They identified that a successful urban space is one that people will want to stay in, which contributes to the experience of urbanity. The methodology identified that the primary activity over all five of the study areas was walking – a transient activity, and that the spaces weren’t used for situated activities, it seemed as if the people of Addington were always on their way to somewhere else. With this issue identified, design recommendations were conceived to attempt to create spaces that encourage people to stay and utilise as opposed to the transient behaviour revealed in the public life study. This methodology shows the value of a public life study when considering design interventions not only in relation to the experience of urbanity but also in when considering general design interventions for public open space by landscape architects and urban designers. The feasibility of the public life study required one researcher to study five sites over a week. As a result, the public life study for this research took a total of 80 hours over five days, for urban design and landscape architect practitioners this is an extreme amount of time to spend on a project and the money needed to fund this may outweigh the value behind the study. However, there is an opportunity for the study to be split over a number of weeks and be split between a number of researchers, reducing the hours required by the study for each researcher. There is an opportunity that the public sector, consultancies and private companies form partnerships with local architecture, planning, urban design and landscape architecture schools that can hire students to perform under supervision parts of the public life study and in return institutions can incorporate the data from a public life study into student projects. This is beneficial to the institutions and students as they receive experience in public life studies and also provide a connection between theory and a real life project. This form of partnership benefits the public sector, consultancy or private company as don’t have to rely on own staff to perform the public life study. An example of such a partnership in a public life study was during Jan Gehl’s public space, public life study in 2009 which hired landscape architecture and architecture students to collect public life data as part of Jan Gehl’s report on Christchurch (Jan Gehl, 2009). This approach could be replicated on a smaller scale to influence the designs such as suburban master plans.

### Positive Changes on a Limited Budget

The research attempted to provide recommendations at both a low and high budget scenario, the decision to include two separate scenarios was made to show the differences between the anticipated outcomes of each scenario. An example of this is the low budget scenario for Addington Mall which would implement temporary planters to delineate a pedestrian walkway through the site. When this is compared to the high budget scenario for Addington Mall the recommendations are of a similar design but are however more permanent with paving changes and permanent planting of trees. Analysis of these anticipated outcomes shows that although there are some differences between the outcomes of the high budget scenario when compared with the low budget scenario. The high budget scenario showed that its outcomes in most cases only enhanced the positive changes anticipated by the low budget scenario. This demonstrates that positive outcomes to the experience of urbanity can be achieved through a low budget solution although a best case scenario would require a bigger budget.

### Testing Ideas and Successional Urban Design

The use of a low and high budget scenario in the recommendations chapter provided an interesting discussion point about testing urban design ideas and
successional urban design as both the low and high budget scenarios are not mutually exclusive. The low budget scenario recommendations consisted of removal elements of a temporary nature that could be shifted, the reasoning behind this was the fact that it required less money to install and no infrastructure changes were needed. This decision revealed some interesting ideas surrounding temporary structures and interventions. The use of temporary elements could be used to test urban design ideas by placing removal elements that in the future could become permanent features. For example the low budget scenario utilised removal street tree planters in place to designate a segregated cycle lane. In the high budget scenario a permanent street tree and planting scheme was utilised to designate the same segregated cycleway, in this example the low budget scenario could be implemented to test this idea surrounding a segregated cycleway for Lincoln Road.

This gives a chance to test the idea at a low cost, if the idea worked and was deemed a success, the high budget scenario with a more permanent solution could be implemented this creates a successional urban design scheme that evolves through the testing of ideas via transitional elements that can evolve into more permanent solutions if they are deemed a success. The benefits behind this idea of succession is that if an intervention at a low budget level is deemed not to work, the cost of installation and the subsequent removal is of minimal cost than compared to the installation and removal of permanent solutions.

8.6 Limitations of the study

During the study and the results from the public life study, some limitations became apparent. As visited in the methodology chapter, there were limitations surrounding the accuracy of the public life study data and a degree of inaccuracy was to be expected within the results.

The discussion surrounding anticipated outcomes carries with it limitations in the fact that they are only anticipated outcomes. To get solid accurate real life results on the outcomes of the recommendations from this research would require the actual implementation of the scenarios with a following public life study performed post scenario implementation to provide a before and after comparison discussion. This would require a significant increase in budget, timeframe and approval from the Christchurch City Council to proceed and as such was outside the boundaries of this research.

8.7 Future Research

The potential for future research building from this study is positive. There is an opportunity that the methodology of the public life study be applied to other suburbs in Christchurch that are in different states of decline or development to provide comparison points between the public life study data, this could show the potential social effects of post-earthquake development in Christchurch. As discussed in Chapter Three regarding Addington and its future. There is potential to utilise the raw data gathered here as the beginning of a longitudinal study that could potentially show how the suburb evolves socially. This could also lead to an evaluation of the suburb post CERA and show how the suburb changes socially as it moves through its current state of development towards how the suburb looks once the Central City Recovery Plan has been implemented. This amount of raw data would also provide interesting insight into the management allowing a deep understanding of the social problems and issues that exist, potentially increasing the effectiveness of the management of Addington. There is an opportunity for both the low and high budget scenarios to be tested by the Space Syntax software to analyse the

2 Space syntax is a science-based, human-focused approach that investigates relationships between spatial layout and a range of social, economic and environmental phenomena
potential social effects on pedestrians. Utilising this software could potentially show evidence that the interventions enhance the experience of urbanity for pedestrians. If the scenarios were implemented there is the potential to undertake public life study and comprehensive survey of the residents in the area to comprehensively assess the interventions effect on the experience of urbanity for the people of Addington.

8.8 Chapter Summary

This discussion has indicated that the experience of urbanity can be enhanced through urban design interventions and not only with a high budget but also a low budget. This demonstrates that although in today’s economy, positive changes can be made through the use of low budget interventions, this is an encouraging outcome for urban designers and landscape architects as often restrictive budgets can be discouraging and coming up with meaningful designs can be harder. The discussion also indicates the value of a public life study which can help a designer understand the complex nature of public open space allowing designers to create more meaningful spaces that connect with the people that use it. The research evolved into a discussion surrounding future research into Addington as a case study which is going through a process of gentrification post-earthquake, these unique circumstances that surround Addington make it an intriguing case study for inner city post-disaster recovery to uncover the changes in public life and public space as the suburb evolves and changes as Christchurch as a city recovers.
Figure 175. Addington Mall.

9.0 Conclusion
9.0 Conclusion

This research aimed to explore the public open spaces of Addington, evaluate them against a set of urban design and urbanity success indicators derived from literature, and investigate potential urban design recommendations that could enhance the experience of urbanity for the public open spaces of Addington. Conclusions were drawn by answering three research questions: What are the qualities of public open space in Addington? How do users interact with the existing public open space in Addington? What urban design interventions could improve the sense of urbanity in Addington’s public open space?

Chapter one introduced the importance of the design of public open space and urbanity in a contemporary society that is shifting from a predominantly rural population to an urban population. The definition of urbanity throughout literature is constantly debated; to effectively respond to all three research questions a definition for this research was needed. The literature review chapter concluded with a personal definition of urbanity for the research:

“Urbanity is an aesthetic experience of a place, created by variety and frequency of activity, a sense of memory and legibility of space, vibrant streetscape with landmarks and visual stimulation with spontaneous social interaction with both friends and strangers.”

The suburb of Addington was chosen as a case study for the research as it is an area with a unique history and a number of issues. It is a suburb undergoing a post-earthquake transformation as developers take advantage of the suburb’s close location to the central city of Christchurch. The design of the public open spaces of Addington as it develops and the effect contemporary development has on the existing public open spaces is an important aspect of urbanity that people experience as Addington develops. Five public open spaces were chosen as study areas.

In response to the first research question (What are the qualities of public open space in Addington?), a set of indicators were needed to effectively evaluate Addington’s public open spaces urban design qualities and experience of urbanity. The literature review revealed a set of indicators of successful public open spaces and indicators of the experience of urbanity. These indicators were combined to create a set that were used to evaluate the public open spaces’ urban design qualities and experience of urbanity.

A public life study was the centre of the methodology used for this research. This allowed an effective response to the second and third research questions: How do users interact with the existing public open space in Addington? and What urban design interventions could improve the sense of urbanity in Addington’s public open space? The public life study involved methods previously used by Jan Gehl on various projects around the world (Gehl & Svarre, 2013). These studies were on a larger scale than Addington, however this approach provides valuable data on public open spaces that is essential in understanding the complex dynamics of public open space. Field work provided qualitative data for each public open space studied in Addington and was essential when producing design recommendations to improve the experience of urbanity of each site. The public life data revealed that each space was utilised differently on weekdays, weekends, during the day and during the night. The results showed that each space had unique paths that pedestrians followed and areas where pedestrians performed activities. This demonstrated the issues and opportunities of each public open space that design recommendations could mitigate and enhance.

Following the results, design recommendations were made through the development of concept plans of each public open space studied. These attempted to show that design recommendations can enhance the experience of urbanity for each public open space. Recommendations were developed
for both a low and high budget scenario to provide a comparison. Each public open space recommendation was evaluated against the set of indicators outlined in the literature review and anticipated outcomes were devised. This provided an interesting discussion between low and high budget recommendations. The research demonstrated that at a theoretical level, design recommendations can enhance the experience of urbanity for individual public open spaces. The research revealed that positive changes can be made despite budget constraints and that public open space can be enhanced through low budget interventions. This highlights the possibilities for urban design schemes with low budgets. The comparison of the low and high budget scenarios showed that both are not mutually exclusive and that many of the design ideas transfer between both budget scenarios (notwithstanding the low budget scenario featured temporary elements). This revealed that the low budget scenario could be utilised to test ideas for urban design schemes, demonstrating if they work or not. The high budget scenario could then be implemented, creating a successional urban design scheme that transitions from temporary to permanent. The benefit of this is that money can be saved if interventions do not work as intended, as they can be made up of temporary elements that can be moved and relocated elsewhere at a relatively low cost.

Through the course of this study, limitations were exposed and the research acknowledges the limitations of public life study, which has a predominantly observational approach. The method does not take into account public perceptions of each public open space and the research does not utilise public input in devising design recommendations for each site, which is an integral part of contemporary urban planning. The research acknowledges that the design recommendations are theoretical and have not been tested in the field, resulting in anticipated outcomes. However, this provides opportunity for further research into utilising a public life study approach to assess public open spaces before and after intervention. The implications of this study on future research is positive. There is an opportunity that the methodology can be applied to other suburbs within Christchurch to provide a point of comparison between suburbs. The public life data can provide interesting insight into the social effects of post-earthquake development and the success of public open space in post-earthquake Christchurch. There is potential to utilise the raw data gathered in this research to conduct longitudinal research of the same spaces as they evolve alongside the transition of the city of Christchurch, showcasing how successfully these spaces and Addington as a suburb have developed. The raw public life data also gives an understanding of the deeper social issues that may exist, allowing more effective management of suburbs and their public open spaces. The case of Addington and its unique circumstances as it transforms in post-earthquake Christchurch make it an interesting case study for future research into inner city, post-disaster recovery.
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10.0 References


May, J. (1996). *The architectural heritage of Christchurch. 9, Wood’s Mill.* Christchurch Environmental Policy and Planning Unit, Christchurch City Council


11.0 Appendix

Figure 177. Addington Coffee Co-op.
“An Evaluation of Urban Design Interventions in Addington, Christchurch and their effect on the experience of urbanity”

The aim of this project is:
The aim of this project is to evaluate public open space (parks, streets, squares, greenways etc) to reveal their qualities and how they are utilised by people to inform design responses that improve users’ experience of public open space, using Addington, Christchurch as an exploratory case study.

Your participation in this project will involve:
As I am only observing how public space is used in Addington, participation will involve going about your everyday routine in Addington, this will allow me to analyse how public space in Addington is being utilised.

As a follow-up to this activity, you will be asked to:
No follow up activity is required in this study as I am only observing people in public open space and recording pedestrian numbers, activities and patterns as they occur on the day the research observations are undertaken.

In the performance of the tasks and application of the procedures, there are risks of:
No risks are foreseen to any participants of the study, however if you wish to not be a part of the study you can request to do so and your request will be honoured.

The results of the project may be published, but you may be assured of your anonymity in this investigation: the identity of any participant will not be made public, or made known to any person other than the researcher, his or her supervisors and the Human Ethics Committee, without the participant’s consent. To ensure anonymity the following steps will be taken:
Every attempt will be made to ensure the anonymity of anyone involved in this study. No personal details of individuals will
be recorded. Every attempt will also be made to ensure the anonymity regarding people in photographs, and the following strategy will be followed, photos taken will primarily focus on long range recording, with the aim to not capture photos that will show identifiable characteristics of individuals. Any photo that will be included for publication will be selected in conjunction with my supervisory team. All photographs will be kept securely.

The project is being carried out by:
Dale Harrop

Contact details dale.harrop@lincolnuni.ac.nz

He will be pleased to discuss any concerns you have about participation in the project.

Name of Supervisor/Head of Department/Faculty Dean or Director
Supervisors: Andreas Wesener and Shannon Davis

Contact Details andreas.wesener@lincoln.ac.nz Shannon.davis@lincoln.ac.nz

The project has been reviewed and approved by the Lincoln University Human Ethics Committee.
Public Life Study Sheet

Observation Study Form

Site: Time:
Weather: Temperature:
Wind: Date:

<table>
<thead>
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<th>Pedestrian Counts:</th>
<th>Age Groups</th>
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</tr>
<tr>
<td></td>
<td>15-29:</td>
</tr>
<tr>
<td>Female:</td>
<td>30-64:</td>
</tr>
<tr>
<td></td>
<td>65+:</td>
</tr>
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Activities Survey:

<table>
<thead>
<tr>
<th>Physical activities:</th>
<th>Cultural activities:</th>
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</thead>
<tbody>
<tr>
<td>Commercial activities:</td>
<td>Children playing:</td>
</tr>
<tr>
<td>Lying down:</td>
<td>Sitting on folding chairs:</td>
</tr>
<tr>
<td>Sitting on secondary seating:</td>
<td>Sitting on cafe chairs:</td>
</tr>
<tr>
<td>Waiting for transport:</td>
<td>Sitting on benches:</td>
</tr>
<tr>
<td>Standing:</td>
<td>Talking (on phone):</td>
</tr>
<tr>
<td>Talking (in person):</td>
<td>Eating and/or drinking:</td>
</tr>
<tr>
<td>Watching:</td>
<td>Walking:</td>
</tr>
</tbody>
</table>

Notes: