



LIVING IN THE HEART OF THE CITY

The Future of Living in the Christchurch City
Centre

Geography 402

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Living in the heart of the city: the future of living in the
Christchurch city centre.

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Executive Summary

Housing in central Christchurch following the Canterbury earthquake sequence of 2010 and 2011 has been a contentious issue in the rebuild and regeneration phases. A number of development agencies following the earthquakes have undertaken residential development projects, which predominantly consist of 1 and 2-bedroom apartments (Fletcher Living, 2018).

This research explores the feasibility and desirability for families to live in central Christchurch. Past literature has explored the potential of central city living (*Testing Successful Central City Living in Christchurch: What will it take for people to live there?* Ivory, Burton, and Harding, 2013) and mixed-use development in the central city (*Mixed-use development in Christchurch, New Zealand: Do you want to live there?* Kusumastuti and Nicholson, 2017). However, this is a significant research gap in focusing on families and young children as a potential market for living in the central city.

A range of methods were undertaken in this research including face-to-face surveys, an online survey, an interview with a real estate agent, and GIS network analysis mapping. The results concluded that there was a willingness for people, and their families to move to the central city, with a range of recommended changes.

This report highlights our findings, reinforced by a literature review, and provides a range of recommendations for creating a viable and attractive central city living environment for families. This research focuses on the necessary and desired amenities and facilities families require for central city living, and accessibility to and from these. Key themes identified in our survey as important to residents included access to green space, school zones and affordability. Therefore, our recommendations to councils and decision-making authorities is to account for these three attributes when planning for successful city living for families.

1.0 Introduction

Christchurch's rebuild and regeneration following the Canterbury Earthquake Sequence of 2010 and 2011 has been a contentious issue for the past eight years.

The Canterbury Earthquake Sequence of 2010 and 2011 was devastating to the city of Christchurch and its residents and had significant impact on Christchurch's housing stock and rental market. In the period of June 2010 and June 2012 Christchurch's population declined 3.6% and the total housing stock was reduced by 6.2% (MBIE, 2013). The rental market plummeted as there was a 45% decrease in rentals in the central city between 2010-2012 (MBIE, 2013). The Christchurch Central Recovery Plan plans for 20,000 residents

living in the central city (CCC, 2017), a target set by the Crown and reinforced by Christchurch mayor Lianne Dalziel. The Christchurch Central Recovery Plan uses international standards for a thriving city and requires 3-6% of the city's total population to live centrally (CCC, 2017) equating to approximately 20,000 residents living within the central city, defined as the four avenues.

The shortage of housing in Christchurch following the earthquakes has been addressed with many housing developments quickly being completed. In addition to this, the potential of the central city in Christchurch to be a vibrant urban neighbourhood has been recognised. However, minimal thought and research has been undertaken to explore who wants to live in the central city, how to attract and retain residents in the central city, and how to create and design a liveable urban environment for these residents.

This report explores the feasibility and desirability for residents, with a focus on families and young children, to reside in the central city. The first section of this report is a literature review which explores the definitions and meanings of liveability, and what constitutes an urban environment which is liveable. Global case studies and literature have been analysed to see how other countries have successfully designed and created towns, neighbourhoods, and cities for young children and families. An online survey was made available to Christchurch residents which provided an understanding of what community expectations for amenities and services, housing typology, an urban design would be feasible in attracting residents to the central city. In the final section of the report, recommendations are made outlining what is required for residential family living in the central city, and whether it is feasible or not.

1.1 Research Aims / Questions

The aim of this research is to provide recommendations to decision-makers regarding the feasibility and desirability for family residential living the Christchurch city centre. Our focus for residential living of families in the central city fills a research gap, as the opinions and values of families and young children have not currently been addressed in the central city rebuild regarding residential living. Previous research conducted by Opus consultants produced a report published in 2013 titled "Testing Successful Central City Living in Christchurch: What will it take for people to live there". This research report contained similar research aims to our study, however was based upon the general residential population, with no specific focus on a particular demographic, such as families.

Our main focus for this research is establishing what amenities and services families require to encourage central city living, and also how accessible these amenities need to be. Our recommendations hope to address the following research questions:

- What residential and neighbourhood features, amenities and services are important to families for successful city living?
- How do we attract and maintain central city residents (families) and enhance successful city living?
- How accessible does the central city (including residential location to amenities and services) need to be? What amenities need to be within walking, biking, or driving distance?

2.0 Literature Review

Research into central city living is vast and diverse. This literature review and following research is going to explore the validity and feasibility of families and young children living in the central city of Christchurch. Urban liveability is a key term defined, and what constitutes a liveable urban environment, particularly for families and children is explored. A substantial connection between liveability, public green spaces and child friendly cities is identified, and recommended in the latter section of this report.

Liveability has been defined as “elements that contribute to quality of life and wellbeing” (Ley and Newton, 2014) and development and growth compatible and harmonious with civil society, the environment, cultural and social groups, and improvements in the quality of life (Polese and Stren, 2000 cited in Davies, 2015). Characteristics identified as important for child friendly cities, are also excellent characteristics for liveable cities. This reinforces the idea that by designing a city for children, you are designing a city that is sustainable and liveable for everyone (Malone 2001).

At a local level, the Christchurch Central Recovery Plan, published by the Canterbury Earthquake Recovery Authority (CERA) in 2015 includes a residential chapter titled “A Liveable City”. The focus of this chapter is purely residential and predominantly focuses on higher density housing and a range of housing types (CERA, 2015). It is recognised that open, green space was identified by residents in the Share an Idea campaign, and planning for urban parks, such as the Margret Mahy Playground, and East Frame central park is included (CERA, 2015).

Child friendly cities have been explored in recent literature, and the connection between liveability, urban design and child friendly cities is clear. A child friendly city expands the vision of a city as a place where everyday business is conducted, to include children, play

and wellbeing (Kingston et al, 2007). In recent years, research and literature has been published as academics, policy makers, and city planners recognize the importance and benefits of child friendly cities for all residents (Derr et al, 2015). The benefits of child participation in city planning are extensive as not only does it benefit the children, but also allows the city to become more sustainable and liveable due to characteristics such as safety, green spaces, pedestrian walkways, low speed areas, lights around parks and streets and grocery stores in walkable distance (Chawla et al, 2013). The holistic benefits of planning a city for children are clear, as the sustainability of a city improve the health and wellbeing of all individuals. These characteristics of a city may seem simple, but in many cities around the world they are not being met as cities are continuously being planned for business, not children, wellbeing and liveability.

There have been various initiatives regarding child friendly cities, including policies such as the UNICEF Children's rights (Riggio, 2002). However, there is still a significant research gap when it comes to the physical attributes of cities as they continue to develop for the worse (Corsi, 2002). Boulder City, Nevada, has recently conducted research into children's participation in the city, and also exploring what amenities and facilities should be in the city for children's enjoyment and safety (Chawala, et al, 2013). The research, carried out in 2012, looked at the integration of youth in planning of the Civic Area. A diverse population was interviewed, and participants took photos of what they liked and disliked in their neighborhoods. Results concluded that the common features that children liked in their cities were playground and greenspaces. In contrast to this, dislikes included homelessness, trash and traffic. Another key conclusion from the research was that the youth did not enjoy the Civic Area, as there was nothing for them to do there (Chawla et al, 2013).

There is substantial research on the benefits of urban parks and green space, a key feature identified in child friendly cities. Common features of urban parks and green space includes vegetated land, water, parks, gardens, playing fields, green corridors, urban forests (Belfast Healthy Cities, 2015 and Zhou et al, 2012). The provision of temporary green spaces has also been noted in the literature. This was illustrated in ARUP's research with the pop-up park initiative that Leeds City Council introduced in 2016 and 2017 (ARUP, 2017). This demonstrates that the planning and design of urban green space can be strategic and long-term, but can also take the form of temporary initiatives, and still have similar benefits.

Urban green space provides many social, psychological and community benefits. The enrichment of human lives, and increase in overall wellbeing is the underlying benefit identified in the literature (Chiesura, 2004; Kabisch et al, 2014; ARUP, 2017; Belfast Healthy Cities, 2015). The reduction of stress and improvements to mental health provided for by

green space and green infrastructure are evident throughout the literature (Ulrich, 1981 cited in Chiesura, 2004; Reeve et al, 2015; ARUP, 2017). It has been argued that urban green space and green infrastructure encourages the use of outdoor spaces (Kabisch et al, 2014), which in turn increases levels of social integration and interaction (Coley, Sullivan and Kuo, 1997; Kabisch et al, 2014; Belfast Healthy Cities, 2015). It has also been found that urban green spaces provide particular benefit to the young and the elderly, which tackles age-related inequality (ARUP, 2017). There is also research to demonstrate that a sense of community is created when residents frequently use outdoor urban green spaces (Kearney, 2006 cited in Zhou et al, 2012). Urban green spaces have been recognised as reducing social gaps (Chen and Jim, 2008 cited in Zhou et al, 2012) because they are recognised as a free, public resource facilitating equal access for all (Zhou et al, 2012).

There are also many natural benefits of urban green space that contribute to enhancing and protecting the natural environment in an urban setting. Green infrastructure benefits include regulating the urban environment and enhancing ecosystem services are associated with heat stress, creating cleaner air, improving water quality and microclimate stabilization (ARUP, 2017; Kabisch et al, 2014; Chiesura, 2004). Chiesura (2004) also outlined secondary benefits from green infrastructure, such as the addition of trees contributes to air purification, and has secondary benefits as it also reduces the costs of pollution reduction and prevention.

ARUP's 2017 study "Cities Alive: Designing for Urban Childhoods" is a specific report detailing urban design explicitly for children. Expanding from the general benefits received by all residents in green urban environments, there are benefits that are particularly relevant to children and their development. It is known that access to green space encourages recreation and play (Belfast Healthy Cities, 2015) which can help develop physical coordination, teamwork skills, and risk assessment skills (ARUP, 2017). By designing urban spaces and cities for children, it can generate a substantial range of benefits for all urban citizens (ARUP, 2017). ARUP recommend the 14 interventions for designing a child friendly city, 8 of which involve the creation of public space and enhancement of the natural environment (ARUP, 2017). These include; pedestrian priority, community gardens, play streets, playable spaces, multifunctional green infrastructure, playful encounters, wild spaces and multi-use community spaces (ARUP, 2017).

It is evident from conducting a literature review, that there are significant connections between liveability, urban green spaces and child friendly cities. There are many recognised benefits green space and green infrastructure can have on urban environments, creating an excellent basis of argument for increasing the amount of green space and green

infrastructure in urban environments, and in particular in the rebuild for Christchurch. The idea that cities should become child friendly has been a focus of much research and concludes that if a city is child friendly, then it is a city for all to use. Current city planning and development is focused on business and work, which have growing negative impacts on the environment. Therefore, designing and planning a child friendly city will improve the city in many aspects (Corsi, 2002).

In conclusion, previous research has made a clear connection between liveability, urban design into public places and parks, and the involvement of children and their needs in city planning. Research into children's involvement in city planning is still limited, especially families and children living in the central city, which this research report will cover.

3.0 Methodology

For the primary aspect of our research project, we undertook a mixed-methods approach as this gave us a variety of insights and understandings of the current, and future potential of central city living. We conducted face-to-face surveys in the BNZ Centre of Christchurch to enable us to talk to individuals, and ask a number of questions about central city living. However, we only received three responses from the face-to-face surveys, which reflects the population we targeted with our surveys. We were wanting to survey people currently using the central city, to understand their current residential situation and why, and what they would require to consider moving to the central city. However, we were in a predominantly business area during business hours, so many people were too busy to stop and talk to us. We then placed the surveys online on four community Facebook pages to enhance the number of responses, which was successful.

Our second key aspect of our methodology was carrying out GIS mapping analysis. To establish a baseline of what was currently in the central city, in terms of housing, facilities and amenities, we created a current situational GIS map, which also demonstrated facilities within walking distance from housing. Walking distance was defined as a 800m radius from the residential developments as past studies concerning walking distance from residential housing used 804m (McCormack, Cerin, Leslie, Toit, Owen, 2008) and 875m (Lopez, Farina, Gonzalez, Cosic, Colmenero, Casaubon, Ortega, Chillon, 2017) as walking distance parameters for children. Results from our literature review and survey responses highlighted the importance of having public green space within walking distance from residential living, however our current GIS map showed that this was not currently present in the central city. We therefore created another GIS map which, based upon our literature review and survey responses, demonstrates an ideal central city living environment.

3.1 Survey

The research face-to-face survey was conducted on the 27th April 2018 in the BNZ Centre in central Christchurch. Three people were interviewed in a 40-minute time period. The survey was then placed online to four community Facebook pages; Halswell Community Group, We Love Christchurch, Youth Council Christchurch and Christchurch City Page. The survey was available online from 27th of April to the 4th of May where 52 responses were completed to have a total of 55 response of the survey.

The survey was comprised of 22 questions ranging from general questions of age, occupation, and current suburb to understand the demographics of the survey population. Specific questions regarding living attributed in the central city including what makes the central city attractive to families to live there, and whether they would live in the central city. Accessibility was also addressed including current main mode of transport, distance travelled to and from amenities and facilities, as well as future ideals. The data received was analysed through simple statistical analysis, as well as the evaluation of written comments.

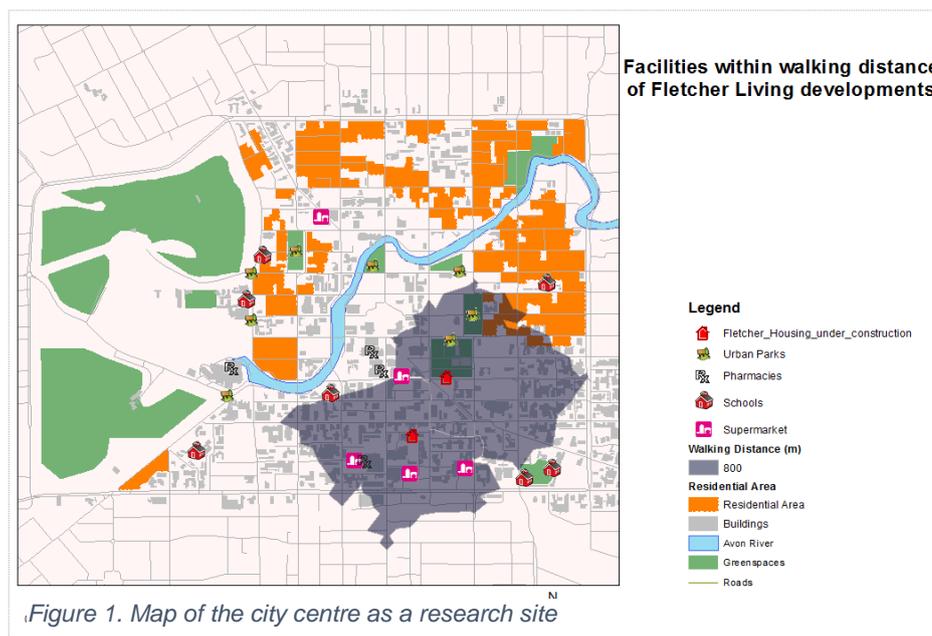
Statistical analysis was completed using Excel to evaluate and create graphs to explain demographics of survey participants, transport and accessibility trends, amenities and facilities and the affordability of housing. This provided comprehensive data to further analyse to understand what local Christchurch residents require to live in the central city, and specifically what is required to attract and retain families in Christchurch.

3.2 Interviewing

In addition to face-to-face interviews another qualitative research method was through interviews. One interview was conducted with a Christchurch real estate agent to understand their professional opinion of the current Christchurch housing market, where families are currently residing, and what they believe the central city requires to be an attractive residential location for families. Real estate agents were contacted based on their current residential listings in the central city of Christchurch.

3.3 GIS/Mapping

The last method for this research is GIS mapping. GIS (Geographic Information System) is a system that is designed to capture, store, manipulate, analyse and present all types of geographical data. In this case, GIS mapping was used in order to find which area in the central city has the most suitable access to the facilities for families. Most of the mapping were used in a program called ArcGIS. This is where all the tools, extensions and data gathering are provided to do GIS analysis (ESRI & Redlands, 2004). Sometimes, ArcGIS can be problematic in its performance, especially if there is too much data gathered or, data that are not recognisable to perform an analysis. It is important that the geodatabases are filed correctly with an appropriate folder location. Multiple methods were used to analyse, mainly using the network analysis to observe whether how many facilities can be accessed by families and other people. By linking this in the survey, urban parks were used as the main facility points to analyse because many people that were surveyed considered parks as the most important for residential living in the central city. Also, by linking GIS with interviewing, many Christchurch real estate agents considered that the central city is within the four avenues; Deans Avenue, Fitzgerald Avenue, Moorhouse Avenue and Bealey Avenue. Therefore, the research site of the map will be focused within four avenues as shown in Figure 1. The facilities that were included in the map were the townhouses from two major residential developments in the central city by Fletcher Living, supermarkets, schools and pharmacies. 800m was the chosen network radius as this is the approximate walking distance to neighbourhood facilities (Witten et al, 2011). The townhouses were chosen as the main facility points for network analysis. The overall purpose of GIS mapping is to show the 'creative' site of the city of how the results would look like based on oriented interviewing and surveying (Brennan-Horley & Gibson, 2009).



4.0 Results

The results show that the demographics of the sample population were consistent with other central city residential studies. There were no respondents under the age of 18, 29.1% of respondents were aged 45-54 years and of these respondents 87.5% had school aged children. The second largest population demographic was 25-34 years with 27.3% of respondents falling in this age bracket, however only 23% had school aged children.

The respondents identified with 18 residential suburbs, however the majority of the respondents (52%) were from the suburb of Halswell. Just over half of respondents (51.9%) have school-aged children. On average, respondents had 0.87 children, and 14 respondents (25%) had two school-aged children.

The affordability of housing presented 25.5% of respondents classified \$400,000 - \$500,000 to be considered an affordable housing price. In contrast to this, 10.9% considered less than \$300,000 affordable, and 7.3% considered \$800,000 affordable. Car use was significantly the main mode of transport, with 90% of respondents using a private car to travel.

22% of respondents would move to the central city in their current situation, however in future years, once the rebuild was complete, 54% of people commented that yes or maybe they would move to the central city.

As seen in Figure 2, the top three attributes identified as most important to successful residential living in the central city was, parks/green space, affordable housing, and a sense of community.

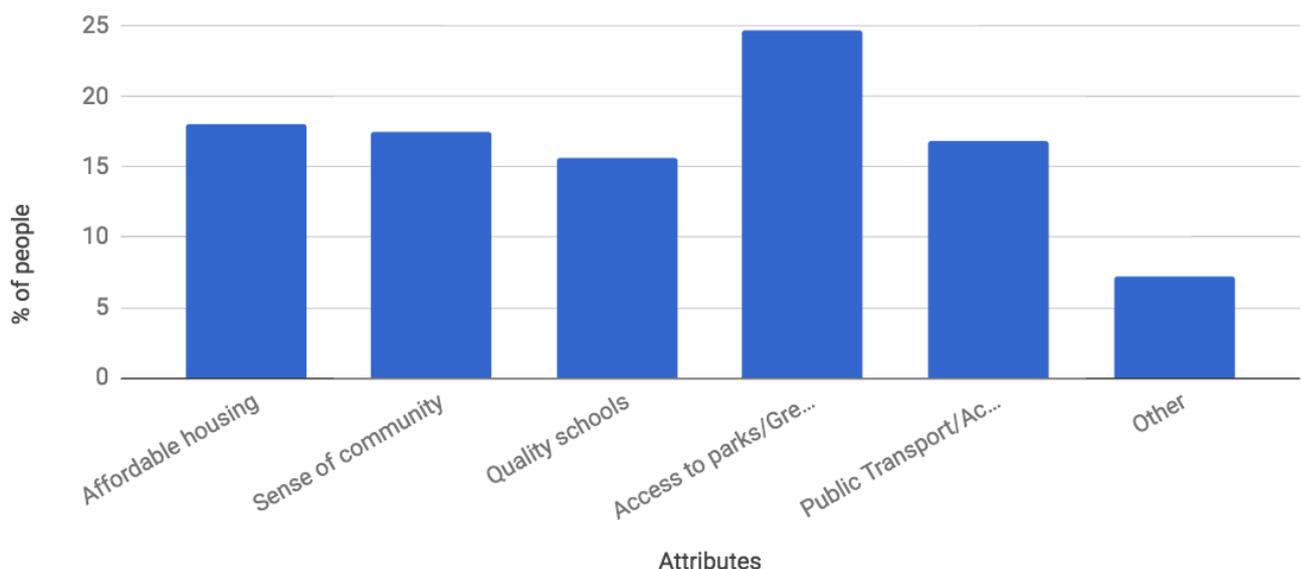


Figure 2: Attributes respondents want in central city living.

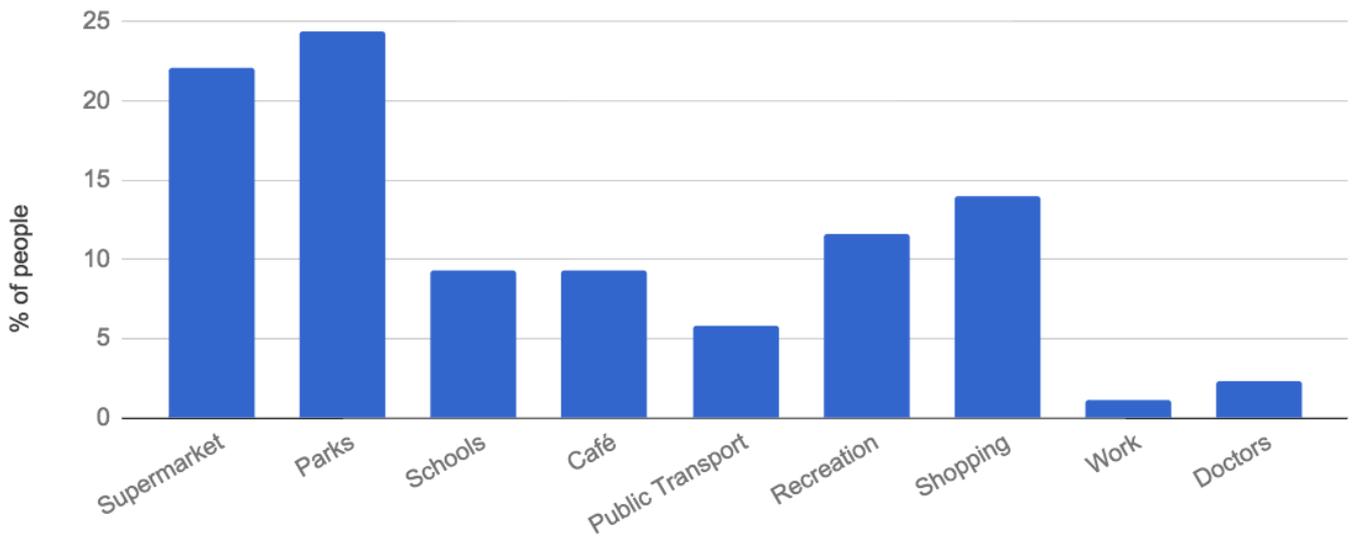


Figure 3: Amenities respondents want within walking distance of their home.

Respondents commented that parks (24%) and supermarkets (22%) were required within walking distance, however they were willing to travel further afield for work and the doctors (Figure 3).

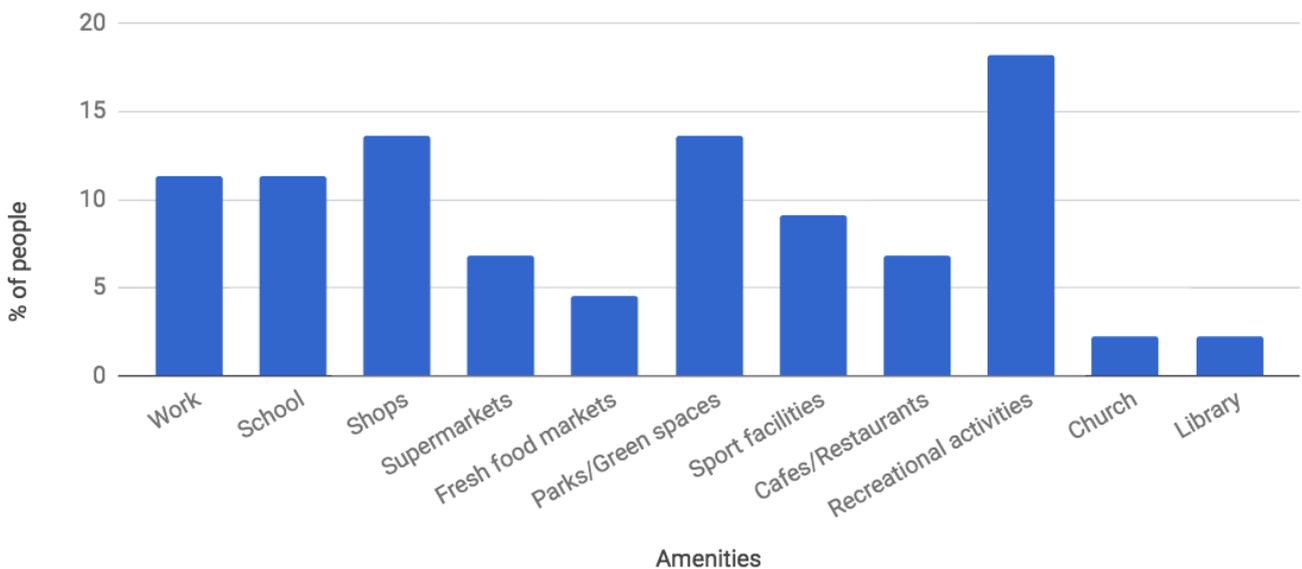


Figure 4: Amenities respondents want within biking distance of their home.

Respondents also showed they would want to see recreational activities within biking distance of their living area as well as shops and parks being other amenities being of high

values. Compared to walking distance though work and school showed a rise in percentage seeing being able to bike to everyday amenities is important.

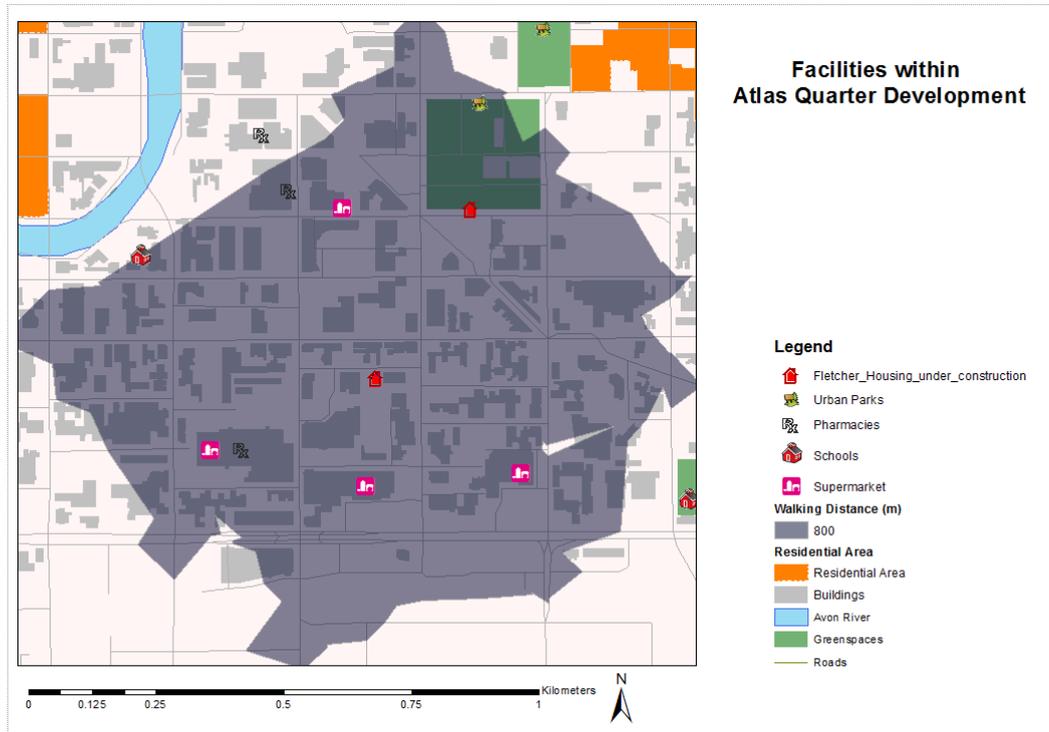


Figure 5: Facilities within 800m of Atlas Quarter.

Atlas quarter shows a dominant retail area with four supermarkets, one pharmacy, and one school on the boundary within the 800m area. There is only one green space, Rauora Park located on the boundary of the 800m radius as part of One Central. (Figure 6)

The One Central map shows there are two green spaces, Latimer Square and Rauora Park

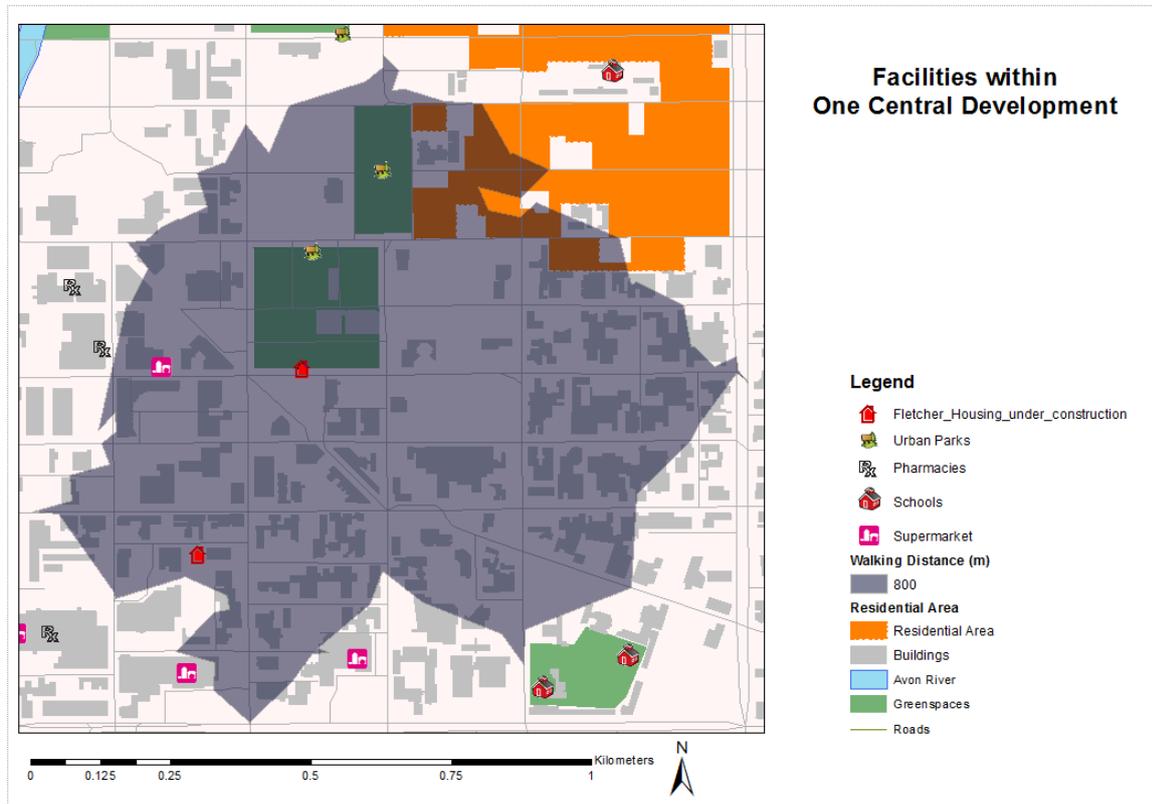


Figure 6: Facilities within 800m of One Central.

within 800m walking distance. Rauora Park is part of the one central development and runs parallel through it. There is one supermarket within walking distance, however no schools.

5.0 Discussion

Our primary research demonstrates that there is a current willingness for local Christchurch residents to reside in the central city, and for families to move to the central city, however there needs to be significant planning and design changes. The survey identified key features and amenities that individuals and families value in their current residential locations, and would like to see in the central city to consider living there. Three key interest areas can be drawn from these responses and recommendations for these have been made. These include; school zones, amenities within walking distance, and affordable housing.

5.1 School Zones

Schools zones have proven to be a key influencer of current residential location for families, and is valued as important for considering moving to the central city. Within our case study of two major residential developments, there is only one school on the boundary of the 800m

walking distance (another key theme discussed later on in this report). Our interview with the real estate agent revealed that popular high schools in Christchurch included Cashmere High School, Christchurch Boys and Christchurch Girls High school, making the suburbs located within these school zones extremely competitive and popular. The two major residential developments are not within school zones of either of these competitive and popular schools (Christchurch Girls High School, 2014; Christchurch Boys High School, 2017, Cashmere High School, 2011), therefore making the central city a less attractive and viable place for families to live.

To overcome the issue of school zoning we recommend that Christchurch City Council impose a school zone initiative for the first ten years which allows any new families moving into the central city to attend any school of their choice. This will overcome a major barrier that school zoning currently imposes on central city living for families. Collaboration between major schools, such as Christchurch Boys and Girls High Schools will be needed, and a potential allocation of central city residents could be made.

For a long-term solution we recommend that Christchurch City Council and the Ministry of Education would work with primary schools and high schools to expand their school zones to include future residential developments, thus making them more attractive to families. We understand that this will involve collaboration between local high schools, CCC, and the Ministry of Education to ensure that this transition is successful. This is a long-term future solution to overcoming the school zoning barrier, which will be assisted in the short-term by the school zone initiative as previously recommended.

5.2 Affordability

The issue of affordability was a topic mentioned in the majority of our survey responses, both in direct answer to our affordability question, and in the comments section, which proves the importance of affordable housing to creating a feasible residential environment for families. The majority of respondents (25.5%) commented that \$400,000-\$500,000 was an affordable housing price. In comparison to the affordable price as identified in our survey, Atlas Quarter has properties for sale in the range of \$365,577 and \$459,000 which is identified as affordable. However, what becomes an apparent issue with families living in the central city is the typology of housing types, and the prices for these properties are only for 1 and 2-bedroom apartments, which arguably may not be suitable for families and young children.

Housing typologies for central city residents, and for families and young children were outside the scope of this report and require further research. However, based on survey comments we can identify that the need for a diverse range of housing will be required to suit all family types. Respondent comments included needing a lawn for their children, space

between neighbours and more space for families. One respondent identified the need for three-bedroom homes, rather than one or two-bedroom places, as these are more practical and suited to families. The Atlas Quarter development consists of 95 one and two-bedroom apartments and 14 townhouses, therefore making it a less attractive family residence due to the restrictions in housing typologies. One Central development will include a diverse mix of townhouses, with the first 20 townhouses completed being three-bedroom townhouses, however prices for these townhouses have not yet been released.

Our recommendation is for further research into housing typologies, affordability, and residential space for families and young children. This research could be used to inform local property developers, such as Fletcher Living, to have mixed housing types to cater for all family sizes at affordable costs.

5.3 Accessibility

Central city accessibility was the third key theme identified through the literature review and survey responses as highly important for central city residents. More compact and walkable cities are becoming increasingly popular and discussed in the literature with particular recognition for children's independence and walkability within a city (Chawla et al, 2013). Our network analysis of the GIS maps and two development case studies enables us to assess the accessibility of current residential developments in the central city and draw conclusions from this analysis to make future recommendations.

Both Atlas Quarter and One Central have attributes and facilities within walking distance that make the desirable potential places of residence for families. However, neither of the developments has all of the identified facilities within walking distance, meaning that the surrounding environment can be improved to enhance family living. In Figure 5 the network analysis of Atlas Quarter showed that there was one school, four supermarkets, one pharmacy and one green space on the edge of the walking distance boundary. This residential development does contain the top three facilities identified in the survey, as required within walking distance of residential living.

However, the sense of community around these facilities and the concept of creating neighbourhood and identity for these residents can be enhanced. Atlas Quarter is located close to South City Mall, which contains a range of amenities, however these are mostly generic, chain stores that are familiar with all residents, workers and tourists. The amenities available within walking distance of Atlas Quarter demonstrate no identity or creation of neighbourhood for the surrounding local residents. Developing a sense of community is highly important in creating successful city living, and was a theme widely identified in the survey.

In our other case study, as seen in Figure 6, One Central has a large urban park running through the course of the development, meaning that there is a vast landscape of green space in immediate location of the houses, creating an attractive environment. However, there is only one supermarket within walking distance and a lack of shopping, cafes and no school.

To improve the sense of community and building neighbourhood within the Atlas Quarter, and even the One Central development, local amenities such as cafes, restaurants and shopping need to be created and developed. By improving local amenities, with and for the residents, it will create a greater sense of neighbourhood, local identity and belonging for the residents.

As demonstrated in our literature review, the importance and role that parks and green space play in an urban environment is extremely beneficial, not only to the local residents, but also to wider community, and the natural environment (Chiesura, 2004; Kabisch et al, 2014; ARUP, 2017; Belfast Healthy Cities, 2015). Local Christchurch residents value green space and parks within walking distance. Atlas Quarter has one green space located within 800m of the development, however is on the very edge of the walking boundary, meaning that a network of closer and more compact green spaces could enhance the natural setting in the urban environment for local residents. As demonstrated in the literature, green spaces do not have to be large, or even permanent features as there have been many successful temporary pop-up parks overseas.

The concept of creating a local urban network is highly important in creating a liveable and sustainable neighbourhood. Therefore, we recommend increasing the number of parks and green spaces within Atlas Quarter development as this is more attractive to families and children. Creating a network of pop-up parks, local cafes and local shops will improve the neighbourhood amenity and sense of identity and belonging for local residents.

6.0 Limitations

6.1 GIS Mapping

Limitations of GIS mapping including lack of data, particularly greenspace data that should have included every greenspace area in the central city. Also, some of the geodatabases are out of date that might affect our results. Lastly, there was a lack of townhouses in our data that otherwise, may have conducted a better analysis and result.

6.2 Surveying

Despite having a total of 56 responses for our survey, there were only three responses while giving out survey handouts in the BNZ centre. The lack of face-to-face interviews hinders us for receiving more responses and also the personal touch of flowing conversation and

emotions responders showed in the 3 face to face showed significant understanding of what people actually think, alongside online survey where people though can write anything but with no understanding of how much they feel for their opinion. The 0-4 category in the survey were non-factors despite it is applied to school aged children. Lastly, the lack of youth participation did not create much ideas of what the children want in their communities.

6.3 Interviewing

Limitations of interviewing included time constraints and lack of responses from real estate agents. We had made contact with Fletcher Living and unfortunately, none of them did not have a response back. Overall, we only had one interview with a real estate agent from Ray White, in which it was enough for us to help our research project. Another limitation was the recording and transcribing of the interview. It had led us to transcribe the interview for a long period due to the quality of the audio, in which some are difficult to hear the voice.

7.0 Future Research

This research into the feasibility of families living in the central city of Christchurch is just one piece of work in a much wider network of research and literature required. This report provides a base understanding into local resident's attitudes towards central city living, and the amenities they consider to be essential to successful city living.

Our survey questions and results had limitations, which can be improved for next time this study or one similar is completed. In our survey we asked participants the number of school aged children they had. By classifying school aged children, we missed the participants that has babies, toddlers, or young adults out of school living at home, which is a large demographic of families. To improve upon this, next time the survey could ask the number of children at home, and then provide an age range of the children to ensure we include all demographics of families.

More time could be spent on face-to-face interviews as these provided valuable in the conversations, discussion and ideas they generated, however were lacking in participation. A larger proportion of respondents of face-to-face interviews would provide greater insight in to the views and influences of local Christchurch residents and their attitude towards central city living.

Next time this study is researched, a thorough site analysis should be undertaken of the central city to establish exact developments, amenities, places and spaces. Due to time constraints, we were unable to do this, and therefore used GIS mapping of which the data was not the latest, so may be out of date.

8.0 Conclusion

The aim of the research was to establish if central city living for families was feasible, allowing the city centre to be a diverse growing population. The main findings through the use of variety of methods backed up by literature showed the three areas of concern were schools, accessibility around green space and affordability creating a general perception that with change in these areas the city would be feasible and attractive for families to live there. The importance of change in mindsets another aspect to consider, from the locals, councils, house developers and key stakeholders to work collaboratively together with a culture change in aspects of living and economical benefit over diversity impacts feasibility. Culture change, physical change and collaboration are aspects to occur to drive the future of city central living a place to be loved for families instead of a place of inconvenience.

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