

# An Analysis of the North Colombo Transitional Streetscape Project



**Calum Buckmaster, Astoria Delaney, Laura Gruschow,  
Ashleigh Hamilton and Tjalve Mollison-Sjöberg**

# **Table of Contents**

## **1. Executive Summary**

## **2. Introduction**

- 2.1 North Colombo Background
- 2.2 Research Question

## **3. Literature and Key Concepts**

- 3.1 Accessibility and Active Transport
- 3.2 Adaptive Urbanism and Public Spaces
- 3.3 Community Environment

## **4. Methods**

- 4.1 Methodological Framework
- 4.2 Literature Review
- 4.3 Observational Data Collection
- 4.4 Community Sampling
- 4.5 Collation and Interpretation of Primary Data

## **5. Results and Discussion**

- 5.1 Demographics
- 5.2 Modes of Transport
- 5.3 Cycle Lanes
- 5.4 Raised Crossings
- 5.5 Most Beneficial Aspects
- 5.6 Additional Beneficial Ideas
- 5.7 Limitations

## **6. Conclusions**

## **7. Acknowledgements**

## **8. References**

## **9. Appendices**

# **1. Executive Summary**

## **Research Question**

*How will the North Colombo Transitional Streetscape Project foster a sense of community in North Colombo?*

## **Aims**

- Understand how a sense of community can be fostered in North Colombo
- Understand the characteristics of visitors to the area
- Gather opinions of street visitors
- Gather opinions and concerns of business owners

## **Brief Context**

Peterborough Village is an incorporated society of residents, businesses and property owners with shared interests in Christchurch City. They have designed a streetscape project consisting of temporary elements aiming to transition the existing streetscape over the next 5-10 years, before the Christchurch Central Recovery Plan is implemented. The society wished to recreate the community that existed prior to the 2010 and 2011 Canterbury Earthquakes. Temporary elements as well as more permanent fixtures outlined in the project plan aim to provide an accessible environment and encourage business developments with the support of the local community.

## **Method Summary**

- Consultation with community partner.
- Review of relevant literature review and relation of this to North Col Project plan.
- The creation of an observational dataset, collected at two key sites in Peterborough Village.
- Primary data collection consisting of random convenience and snowball sampling methods employed to reach visitors to the area.
- Gathering opinions of business owners and industry professionals through email interviews.
- Collation of 56 paper and 44 online surveys using Excel spreadsheets.

## **Key Findings**

- Average age of participants was 31-40.
- Cars were the most common form of transport to the area.
- Positive views toward cycle lanes from a range of age groups and transport users.
- Mixed views on raised crossings from a range of age groups and transport users.
- Respondents generally displayed a positive attitude toward the project, with strong support for active transport initiatives and infrastructure which creates an accessible, pedestrian-friendly city.
- Popular proposed aspects to the project include social spaces, plantings and cycle lanes.
- Least popular proposed aspects of the project included art and cycle lane buffers.
- Popular additional community suggestions included public events, hospitality options and public spaces.

## **Major Limitations of Research**

- Limited time to complete survey distribution due to weather conditions and holidays.
- SurveyMonkey only allowed 10 survey questions to be asked; meaning one question from the paper survey had to be removed.
- A large portion of online respondents were from the Central City.
- A limited research time frame.
- There were only a small number of businesses that completed interviews.

## **Suggestions for Future Research**

- Further in depth surveying of street use.
- Investigate how established businesses change or develop the community.
- Analysis on how the project changes or develops the area after implementation.
- Types of businesses that establish themselves in the area and impacts on local economy and social capital.

## **2. Introduction**

### **2.1 North Colombo Background**

The 2010 and 2011 Canterbury Earthquakes caused widespread damage throughout the central city of Christchurch. Many buildings were destroyed by the earthquakes, with many more demolished in the following years. The northern stretch of Colombo Street was once full of unique, locally owned businesses, whose shop awnings sheltered the many residents and visitors to the street. The earthquakes left only one existing building in this street section, and due to the slow process of rebuilding, it still holds mostly empty lots. No plans to introduce streetscape upgrades are currently stated in the Christchurch Central Recovery Plan in the next 5-10 years. Due to this, the Peterborough Village Society has designed a streetscape project consisting of temporary elements to transition the existing streetscape over the recovery period. Peterborough Village is an incorporated society of residents, businesses and property owners with shared interests in Christchurch City, specifically the area bordered by Colombo Street, Salisbury Street, Barbadoes Street and the Avon River. The society wishes to focus the streetscape plan on Colombo Street, primarily the stretch between Salisbury and Kilmore Streets.

This section of Colombo Street is located within the Central City Mixed Use Zone, with a strong frame of living to the north and conservation to the south. This combined with the Cultural and Performing Arts Precincts proposed by the Christchurch Central Recovery Plan, gives North Colombo a unique community setting. (An Accessible City, 2013).

The initiatives in the project can be classified into relocatable site elements and permanent infrastructural fixtures. Elements such as cycle racks, seating, planter boxes and rubbish facilities can be moved around the area as rebuild occurs. More permanent fixtures include cycle lanes and a raised level crossing, which remain in place as the surrounding streetscape transitions.

The North Colombo Transitional Streetscape Project (North Col) aims to “create vibrancy and cohesion throughout the North Colombo Area by enhancing the pedestrian experience and providing a platform for local business to trade efficiently and confidently whilst the area continues to redevelop with the support of its community” (Peterborough Village

Incorporated, 2015). The sense of community in North Colombo is still strong, despite the setbacks the area has faced. The identity of North Colombo therefore has potential to be fostered by and grow from the developments in the North Col Project.

## **2.2 Research Question**

*“How will initiatives in the North Colombo Transitional Streetscape Project foster a sense of community in North Colombo?”*

In order to investigate this question, a number of objectives needed to be identified. These were to:

- Understand how a sense of community can be fostered in North Colombo
- Understand the visitor demographics
- Gather opinions and perspectives of street visitors
- Gather opinions and concerns of business owners

Our research aims to achieve these objectives using the methods of literature review, area observation, surveying street visitors and interviewing business owners. We will then present the results of these findings, discussing their relevance and limitations, followed by a conclusion of our research outcomes.

## **3. Theory and Concepts**

### **3.1 Active Transport and Accessibility**

The Christchurch Central Recovery Plan outlines that North Colombo Street has cycle and pedestrian priority, and is in the outer speed limit zone of 50 km/h. It is identified as a key walking link and a key cycle route into the city, and is not a main thoroughfare for public transport. The combination of these factors provides North Colombo with opportunities to implement active transport. Initiatives in the North Col Project are aimed to enhance pedestrian safety and promote cycling. Encouraging active transport provides an opportunity for the community to experience lower congestion, less pollution, increased traffic safety, as well as the physical and mental health benefits associated with physical activity (Cavill, 2003).

A study of consumer behaviour and travel choices in Portland found that cyclists and pedestrians spend more money on average than those who travelled by car, due to their tendency to frequent shopping areas more often (Clifton, 2013). These spending habits would be beneficial for North Colombo, as our community partner wishes to encourage local and unique retail options to the area. These types of lower turnover businesses will be incentivised by this consumer behaviour.

Research has shown that in order to create a balance between modes of transport, an integrated network of transport routes is needed (Wittink, 2003). The North Col project plan addresses this, with coloured lanes for cyclists, and planting strips and buffer zones to provide safety for all commuters. This article also supports the notion of speed reduction in mixed mode street designs; however this idea has been rejected by the Christchurch City Council. The project works around this limitation by proposing infrastructure that works towards naturally slowing down motor vehicles through traffic calming techniques. These are seen in raised crossings, changes in texture and colour of the road and pinch points for crossings. This infrastructure raises subtle awareness to drivers to reduce speed in order to increase safety.

### **3.2 Adaptive Urbanism and Public Spaces**

Gehl and Gemzoe explain how new types of public life are seen in the 21<sup>st</sup> century (2003). Many societal aspects now tend to occur in the private sphere, providing an opportunity for new types of public spaces. The 2010 and 2011 Canterbury earthquakes have left much of the area empty, providing a unique chance for modern urban design to occur. This, combined with the area's mixed land use zoning, allows new developments to bring new meaning to the city as a public space.

'People places' are places which are characterised by spontaneous, informal and everyday use (Carmona et al., 2011). An area with the opportunities for business and residential development encourages the creation of these people places. Active street frontages such as café seating areas create spaces which can offer use to all members of the community. Including seating and street furniture, like in the North Col Project plan, provides people with places to sit, therefore a chance to stop and spend time on the street.

### **3.3 Community Environment**

The contributions that walkable neighbourhood designs can bring to a community are explored by Leyden (2003). Pedestrian friendly infrastructure encourages involvement and interaction between members of the community, increasing connections and social ties. The process fosters the production of social capital. Social capital can be attributed to improved health and crime prevention, as well as developing trust and reciprocity among citizens.

The building of social capital also establishes a stable community economy (Westwood, 2009). Ideally in community oriented areas such as North Colombo, income will circulate and will be spent within the community. This would greatly benefit the local, unique businesses that our community partner wishes to bring and encourage back to North Colombo. Johnson's grocery store was once located on Colombo Street, but was forced to relocate due to the earthquakes. This exemplifies one of many businesses that would benefit and be encouraged to come back to the area as a result of creating a community environment.



## **4. Methods**

### **4.1 Methodological Framework**

The development of research methods remained fluid throughout the course of the project, with key reflection points providing an opportunity to optimise research processes set at the outset of the project. In line with current human geography practice the research focused on creating a dataset drawn directly from the opinions and interactions of Peterborough Village residents, with academics acknowledging the wealth of information which can be gathered from the 'interesting knowledge about the interplay of city life and form' (Gehl & Svarre, 2013).

### **4.2 Literature Review**

The literature reviews involved developing an understanding of the wider context of adaptive urbanism and its relevance to the initiatives in the North Col Project. This was a key first step in the formation of our research framework, following initial meetings with members of the Peterborough Village Society. Fifteen articles were identified from within the literature, each article was critically analysed by a group member, followed by reflection and discussion of key findings, with reference to the North Col Project. This research helped to frame our understanding of the project and guide the development of our data gathering approach.

### **4.3 Observational Data Collection**

The observational dataset provided a baseline measurement of key indicators relevant to our research. In order to understand the patterns of street use in North Colombo, street use data was required. To compare street use patterns we observed two separate locations: on the corner of Colombo Street and Peterborough Street, and the corner of Kilmore Street and Durham Street North in a transitional space called "The Commons". The Commons is a frequently visited social space while Colombo Street is a popular transport route linking the

central city to the north of Christchurch. The contrast between these two locations has allowed us to develop an understanding of street use across the village, analyse these patterns and reflect on their implications for our research.

An empirical dataset was created which measured the number of cars, bikes and pedestrians travelling along key streets, their direction of travel and interaction with street features such as parking, cafes, transitional spaces and entering buildings. The benefits of this technique were two fold. Firstly, observational data allowed us to develop an understanding of the day to day flows of people into, and through, the village, allowing us to measure the success of current adaptive urbanism initiatives and create a more informed community survey. Additionally these observations provide the Peterborough Village a dataset which can be used in the future to gauge the progress of the North Col project.

The dataset was collated on an excel spreadsheet and analysis was kept separate to the community survey data. These observations provide an invaluable snapshot of the community.

#### **4.4 Community Sampling**

Community sampling was carried out over a period of four weeks in August and September with the aim of creating a usable dataset which would provide a basis for interpretation and discussion in line with the project goals.

A five point survey was drafted by the group for distribution in the village. Each point contained a small number of multi-choice questions based on the Likert scale, as well as questions requiring written response. Multi-choice questions were selected to gain an understanding of the key features and opinions of the sample population while questions requiring written response allowed respondents the ability to further express their opinion and cover topics not stated in the five key points.

The survey was piloted before distribution at community events in Peterborough Village. By focusing our efforts on the distribution of paper surveys at community events in the village we aimed to gain an understanding of the demographic of Peterborough Village, visitor numbers and community trends.

An electronic survey was distributed using SurveyMonkey software in collaboration with our community partner. Due to a strict question limit the survey had to be refined, forcing the removal of one question. The propagation of this survey was rapid with email links distributed and responses gathered in a form of snowball sampling.

The final tally reached 100 returned surveys across paper and electronic formats.

To identify the key concerns of key industry professionals and business owners in Peterborough Village interviews were conducted via email, the focus of this aspect of the research was to gain relevant opinions and ideas from a key group within the village. All questions required written responses, allowing in depth discussion and reflection.

#### **4.5 Primary Data Collation and Interpretation**

The primary data from all sources was collated on an Excel spreadsheet. Digitising the returned paper copies before combining them with the SurveyMonkey surveys allowed us to create a usable dataset. Due to the limitations of the SurveyMonkey program, one question was removed from the collated paper dataset to ensure the consistency of our analysis, while the 'cleaning' of the other two datasets simply involved summarising written response during the collation stage, before numerically coding the responses. All graphs and tables were created using the complete dataset.

## 5. Results and Discussion

### 5.1 Demographics

Table 1: Mean and Mode of Main Questions.

Category	Mean	Mode
Area	2.21	3
Age	3.56	2

At the beginning of the questionnaire, respondents were asked two basic demographic questions about their age and where they live. Both questions provided an 'other' option, so if people felt uncomfortable in answering either of them, they were not obliged to. The questionnaire avoided questions that were personal, only asking something if it would benefit the research project.

On average, most residents resided in the inner suburbs of Christchurch with a mean of 2.21, as shown in Table 1. The average age of respondents was 31 - 40 year olds, shown by a mean response of 3.56 (Table 1). This provides a general overview of the demographic that visit the North Colombo regularly.

### 5.2 Modes of Transport

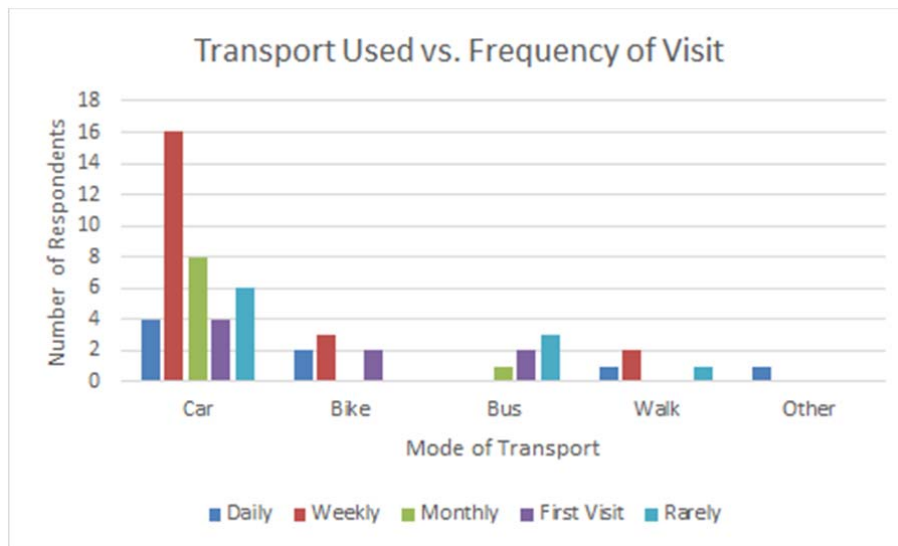


Figure 1: Mode of transport used compared to frequency of visit.

Figure 1 shows that the most popular form of transport used by people to get to North Colombo was by car, with a total of 38 people stating it as their mode of transport. Cycling, busing, and walking had similar results, ranging between 7 and 4 people using sustainable methods of transport to the Commons market. A food truck was identified as being the 'other' form of transport, which only one respondent opted for.

Figure 1 also shows that the most popular mode of transportation is car, with respondents who visit North Colombo weekly being the highest users. There could be a number of reasons for this, such as; people do not feel confident about cycling into North Colombo due to the lack of cycle lanes, as the survey was conducted on a Sunday, buses run at different times to what they do on other days of the week, making them a less convenient choice of transport. It also may not have been convenient for people to walk to the market as their main mode of transport. An important point to note is that there is a large availability of car parking spaces currently, due to empty lots where buildings were prior to the earthquakes. This makes driving into the city an easy and convenient option for the large majority of people (Figure 1). As part of the North Colombo Transitional Streetscape Project some parking lots will be removed and replaced with transitional projects and/ or buildings, which will assist in reducing motorists.

Raymond King, a local business owner, stated that he believes there needs to be increased access for cyclists and walkers while maintaining vehicle access, as not doing so would cut off a large portion of the population from visiting the area. Mike McCormick, a local business owner, states that he wants North Colombo to be "an attractive place to pass through or visit as opposed to being dominated by cars." He also acknowledges that they "still need car access, but a safe mix of car and cycle would be great".

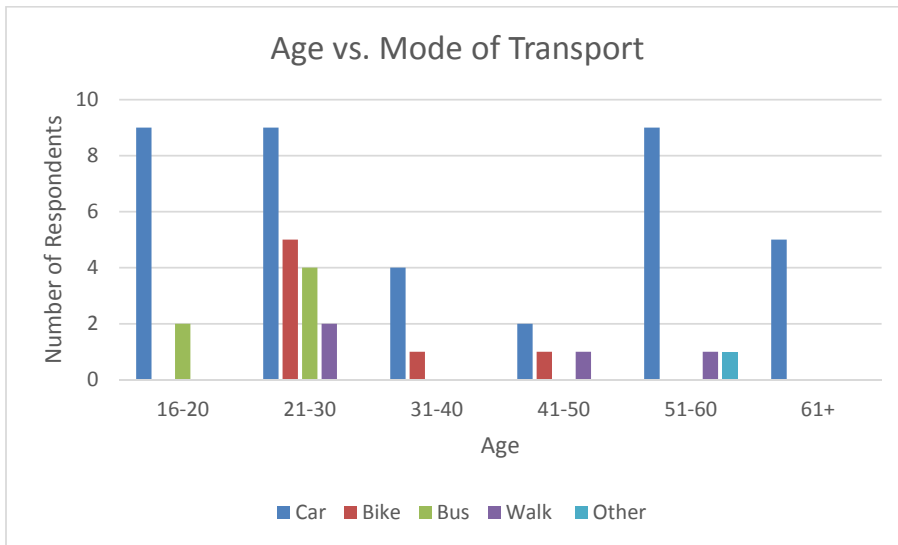


Figure 2: Age compared to mode of transport.

Figure 2 shows that the majority for all age groups travelled by car to get to North Colombo, and the least amount of people travel by walking. Bus commuters were predominantly in the 16-20 and 21-30 age group. Cycling was the second highest mode of transportation for age categories 21-30, 31-40 and 41-50.

### 5.3 Cycle Lanes

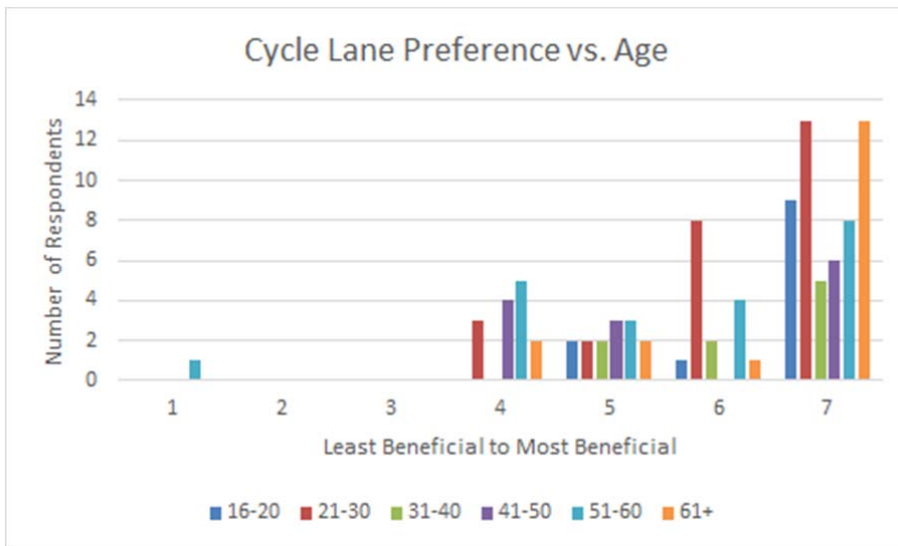


Figure 3: Responses to cycle lanes categorised by age.

A key finding that resulted from the questionnaire was that people between the ages of 16-20 and 21-30 years generally had the highest rate of preference of cycle lanes. All responses in these age groups were at five or more, with a mean response of 6.04 on a seven-point

Likert scale (Figure 3), with 1 being the least beneficial and 7 being the most beneficial. This may be due to this group of people being the youngest participants who generally do not rely on motor transport as much as the older generations do.

Cycle lanes are believed to assist in creating a more resilient city in terms of increasing active transport for the future, a key point identified by Mike Davidson, Chair of the Shirley-Papanui Community Board. Cycle lanes will encourage people to use active transport safely and the rebuild and transitional projects in the city and along North Colombo will provide an ideal opportunity to implement active transport initiatives. They will also assist in attracting cyclists to the area, providing them with a safe and eco-friendly means of transportation. The findings from the cycle lane data will increase the accessibility to North Colombo, supporting the aims of the project, and attracting people to the area assisting in creating a community and developing the local economy.

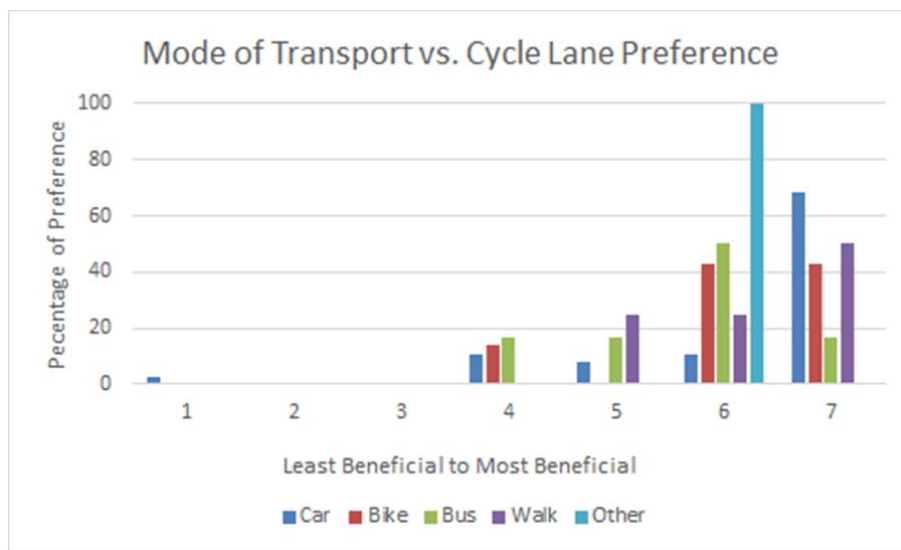


Figure 4: Mode of transport compared to cycle lane preference.

Figure 4 shows that nearly all survey participants were at least neutral in preferring cycle lanes, but the majority were in favour. As expected, cyclists were mostly supportive of cycle lanes, and surprisingly, car users were also supportive. Unexpectedly, 14.3% of cyclists were neutral towards the implementation of cycle lanes. It was expected cyclists would be the most supportive towards cycle lanes as they would be the main users of them.

## 5.4 Raised Crossings

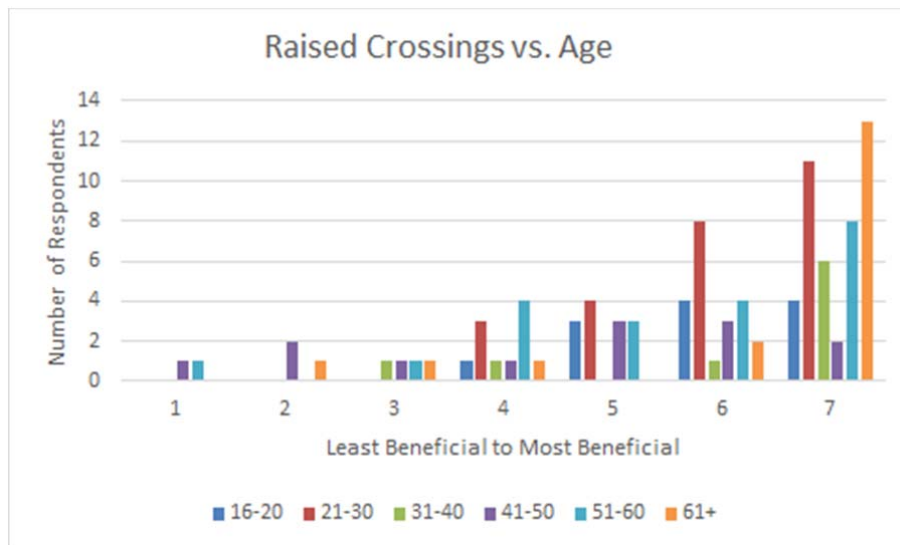


Figure 5: Responses to raised crossings categorised by age.

The responses gathered for how beneficial people believed raised crossings to be, showed that again respondents aged between 16-20, and 21-30 years old, were the most supportive of the initiative (Figure 5). However, unlike the cycle lanes, there was more of a mixed response for raised crossings which can be seen in Figure 5. This may be because the preferred mode of transport is cars and raised crossings slow the speed in which a car can travel. This may make it an unpopular concept for people. Overall, the responses were mainly positive, with a mean response of 5.72 on a seven-point Likert scale; slightly less than the cycle lanes, but nonetheless still positive.

The results from this support the aims of this project, as raised crossings will lower the speed at which motorists can travel, increasing driver awareness, therefore making it safer for pedestrians to cross the road. This walkable design will increase social capital, which comes with an increase of foot traffic, benefiting the community and the local businesses.



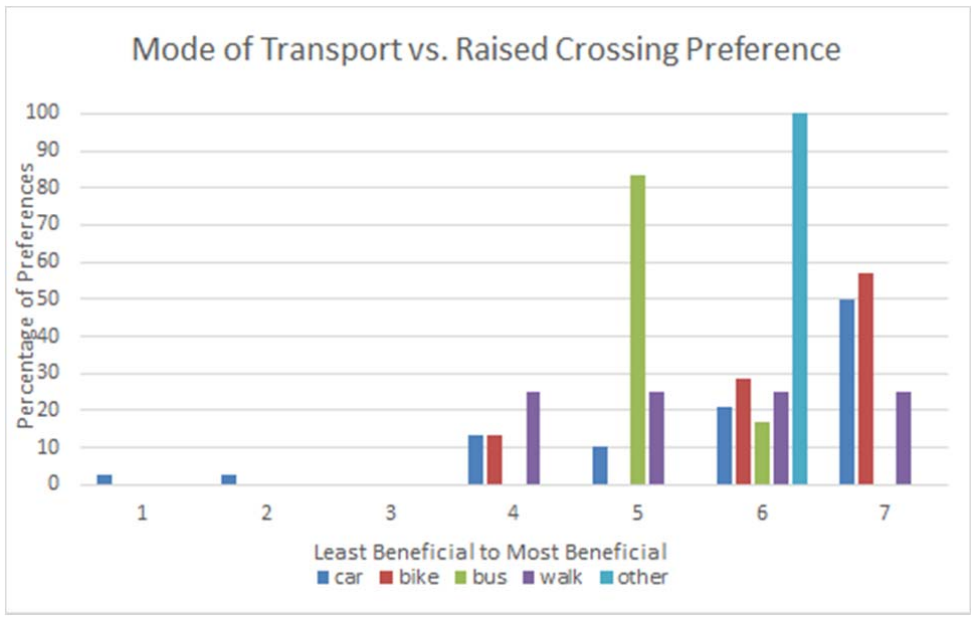


Figure 6: Mode of transport compared to raised crossing preference.

The majority of people, despite their mode of transport, were in support of raised crossings, responding with a 4 or more (Figure 6). Surprisingly, 25% of pedestrians were neutral to the idea of raised crossings, which was not expected, as it was thought that pedestrians would be the most supportive as raised crossings would be most beneficial to them.

### 5.5 Most Beneficial Aspects

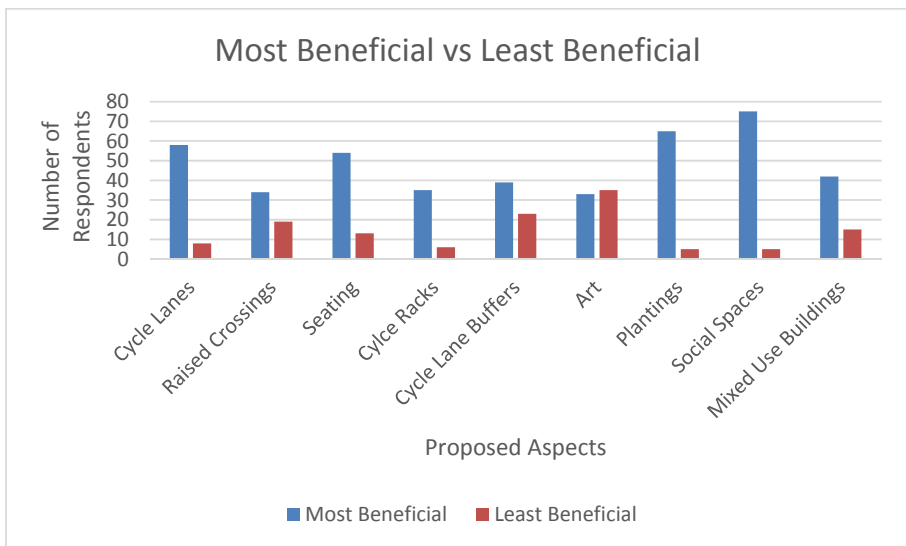


Figure 7: Responses to proposed aspects as to how beneficial participants believed the aspects to be.

Respondents were mostly supportive of social spaces, plantings, cycle lanes and seating's as shown in Figure 7. However, there were mixed responses towards raised crossings, cycle lane buffers and art, which may be due to these initiatives being progressive ideas, meaning that people will have less of an understanding about them as they have not seen how they can be incorporated into a community environment.

### 5.6 Additional Beneficial Ideas

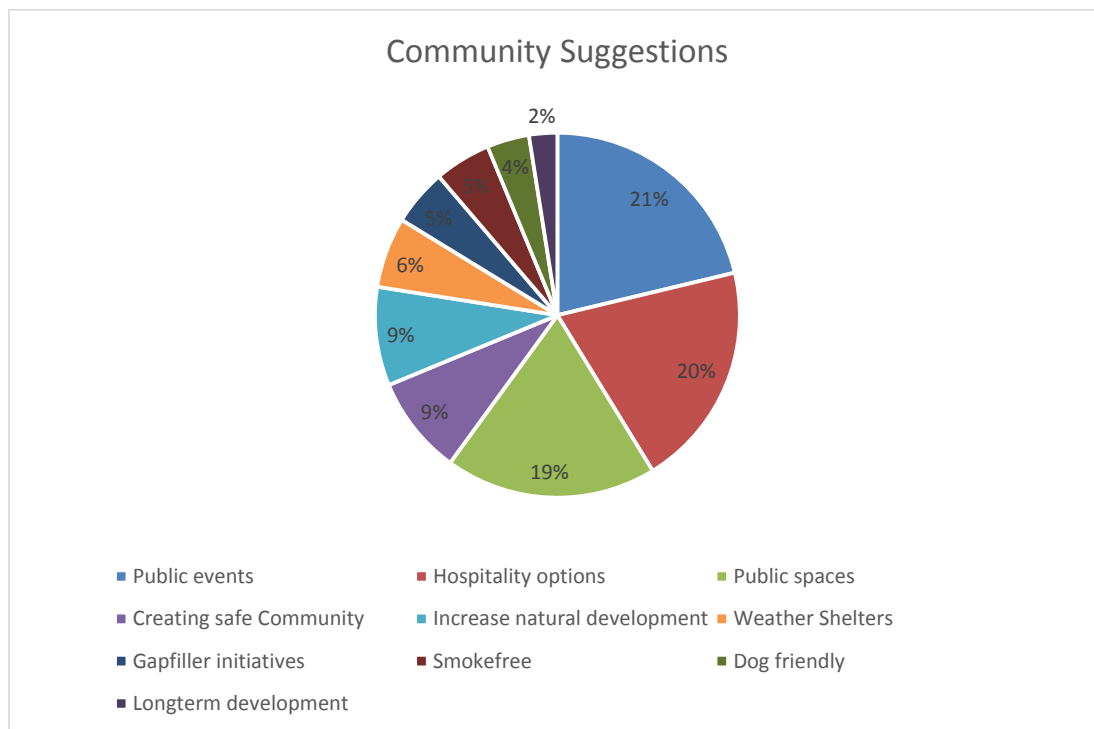


Figure 8: Additional community suggestions for the North Col Project.

The most popular ideas that respondents suggested, included public spaces, hospitality options and public events, as seen in Figure 8. These initiatives that were generated by the public support the project aims, as the suggestions will work to increase community involvement and provide space for people to socialise in a safe environment.

### 5.7 Limitations

There were a number of limitations that we incurred during the research process. Firstly, the day that was chosen to conduct the survey at the market was Father's Day and was

particularly cold. Alastair Goile, the market organiser informed the group that these factors may have caused the poor turnout for the market.

SurveyMonkey was used to distribute surveys among the community for those who were interested in participating. SurveyMonkey limited the survey to 10 questions, meaning the survey questions had to be reduced from 11 questions, down to 10. The problem being that the responses had already been collected from paper copies, meaning that people who filled surveys out at the market answered an extra question than those who completed the survey online. The question that was selected to be eliminated was: "How did you travel here today?" This question was chosen to be eliminated because people who answered the survey online may not have actually travelled to the area on the day of survey completion.

Online survey participants were asked to tick their top three most beneficial options and least beneficial options which was not asked in the paper surveys. Although the online surveys asked for only three boxes to be ticked, it was noticed that a number of people ignored this and ticked more or less than three regardless.

It was also noticed that a majority of surveys conducted online were from people who associated themselves as living in the Central City.

Another limitation was the time allocated to complete this project. Due to this short time frame, ideas were unable to be completed that could have been implemented in order to get better results, such as, being able to talk to more business owners. This would have enhanced the research, giving a broader understanding of the opinions generated by business owners and how these may have differed from community opinions of the project.

## **6. Conclusions**

The North Colombo Transitional Streetscape Project has been successful in developing and building on ideas for the future of the community in North Colombo. The community, businesses and residents all responded to the North Col Project very positively, showing support and enthusiasm for the proposed transitional projects. The respondents provided a clear understanding of which initiatives they would most like to see implemented in the area, along with the proposals they thought would be least beneficial to the area. The large majority of people expressed support towards encouraging sustainable and active modes of transport and for creating a destination in which people can come to relax, meet with friends and reside in a safe environment.

Future research for North Colombo may consider analysing how the project changed or helped develop the community in North Colombo after implementation of the project. One may also wish to research the types of businesses that established themselves in the area, and how this is impacting the local economy.

Overall, based on the findings of this research project, it is concluded that the North Colombo Transitional Streetscape Project will be successful in achieving its goals, attracting people to the area and allowing local businesses to flourish.

## **7. Acknowledgements**

There are a number of people who helped us formulate this project, guiding us through the research steps required, as well as help from in the Peterborough Village Community itself that really aided in gathering primary research and getting an idea of sense of place.

- Di Lucas (Community Leader) was key in giving us contacts and getting us amongst the community. This proved invaluable as we were able to get in contact with and ask open ended questions to business owners who gave us a good insight into their opinions and preferences.
- Rita Dionisio (Academic Advisor) was instrumental in getting us on track and making sure our research was appropriate and suitable for achieving the goals of the project.

We would also like to thank the contributions of Barry Brooker, Mike Davidson, Alistair Goyle, Raymond King, Steffan Kraberger, Mike McCormick and survey participants for their personal responses in relation to our research.

## 8. References

Canterbury Earthquake Recovery Authority. (2013). *An Accessible City – Christchurch Central Recovery Plan: Replacement transport chapter – October 2013*. Christchurch: Canterbury Earthquake Recovery Authority.

Carmona, M., Tiesdell, S., Heath, T. & Oc, T. (2011). The Functional Dimension. In *Public Places – Urban Spaces*. (2<sup>nd</sup> ed.). (pp. 201-240), Hoboken: Taylor and Francis.

Cavill, N. (2003). The potential of non-motorised transport for promoting health. In R. Tolly. (Ed.), *Sustainable Transport*. (pp. 144-158). Woodhead Publishing: NW.

Clifton, K., Currans, K. M., Muhs, C. D., Ritter, C., Morrissey, S., & Roughton, C. (2012). Consumer behavior and travel choices: A focus on cyclists and pedestrians. In *92nd Annual Meeting of the Transportation Research Board*. (pp. 10-10).

Gehl, J & Gemzoe, L. (2003). Winning back public space. In R. Tolly. (Ed.), *Sustainable Transport*. (pp. 97-106). Woodhead Publishing: NW.

Gehl, J., & Svarre, B. (2013) *How to study public life*. Washington, DC: Island Press

Leyden, K. (2003). Social Capital and the Built Environment: The Importance of Walkable Neighbourhoods. *American Journal of Public Health*. 93(9). (pp. 1546-1551).

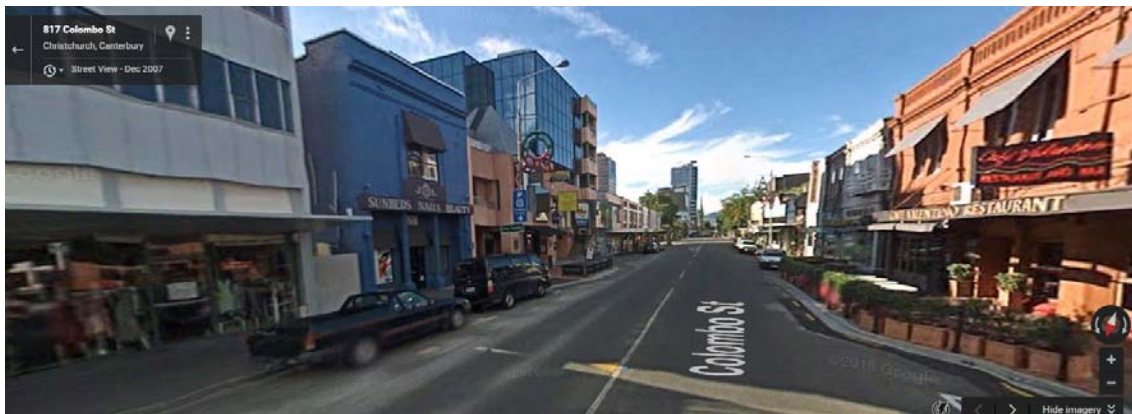
Peterborough Village Incorporated. (2015). *North Colombo Transitional Streetscape Project Plan – May 2015*. Christchurch: Peterborough Village Incorporated.

Westwood, A. (2009). Urbanism and climate change. In N. Antonella, E. Clarence & G. Craige. (Eds.), *Community capacity building: creating a better future together*. (pp. 87-100) OECD Report.

Wittink, R. (2003). Planning for cycling supports road safety. In R. Tolly. (Ed.), *Sustainable Transport*. (pp. 172-189). Woodhead Publishing Ltd: NW.

## 9. Appendices

### Appendix 1: Before and After Images of Colombo Street



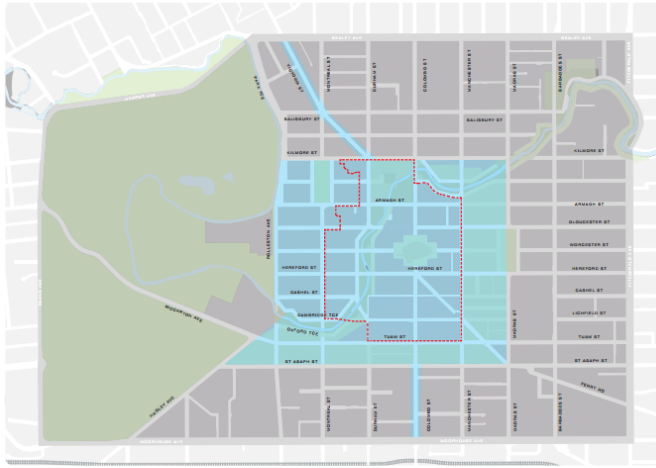
Google Maps, 2007



Google Maps, 2015

## Appendix 2: Accessibility in North Colombo Street

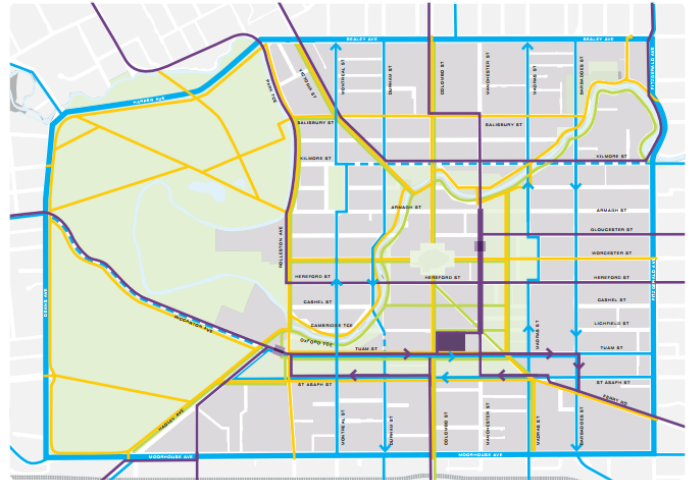
Central Christchurch speed zones



**Maximum speeds**

Inner zone - maximum 30km/hr (including main streets)    Outer zone - maximum 50km/hr    Core

Central city road use hierarchy



Cycling    Car travel    Walking    Public transport    Bus interchange

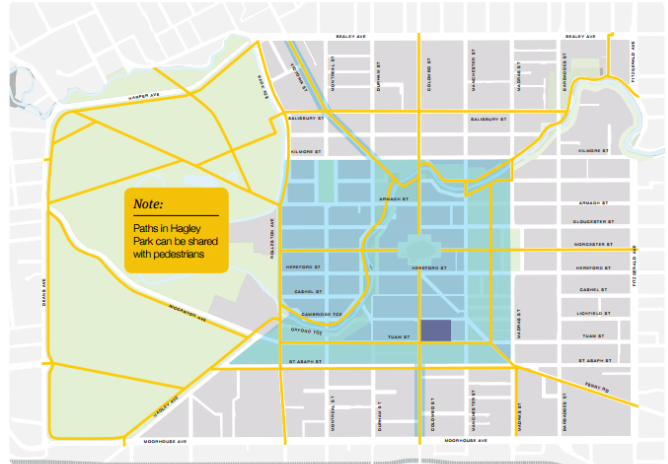
Key walking links in the central city



All streets will have provisions for pedestrians

Bus interchange

Key cycling routes in the central city



Other streets will have cycling facilities as appropriate. Connections beyond the avenues to be aligned with CCC cycle plans.

Bus interchange

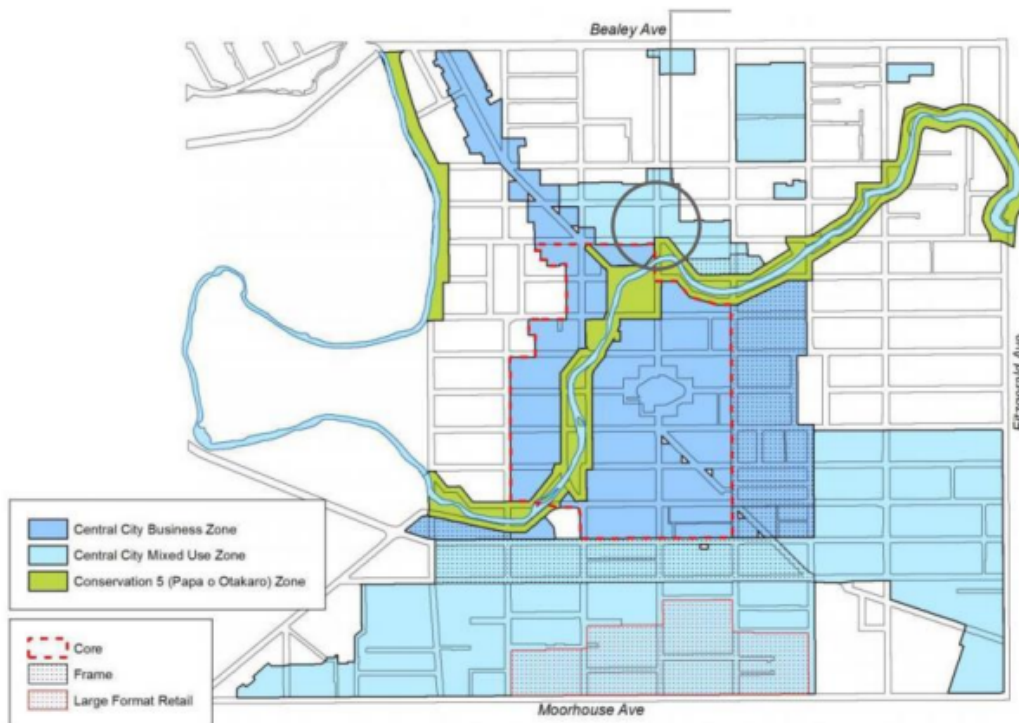
Christchurch Central Recovery Plan, 2013

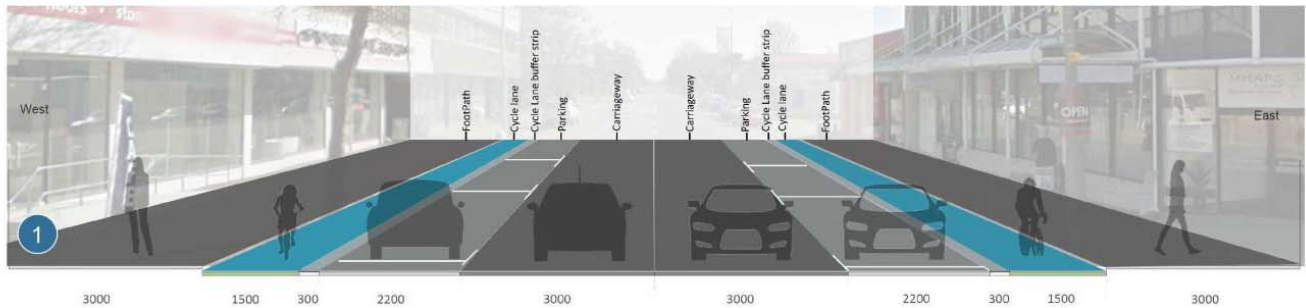
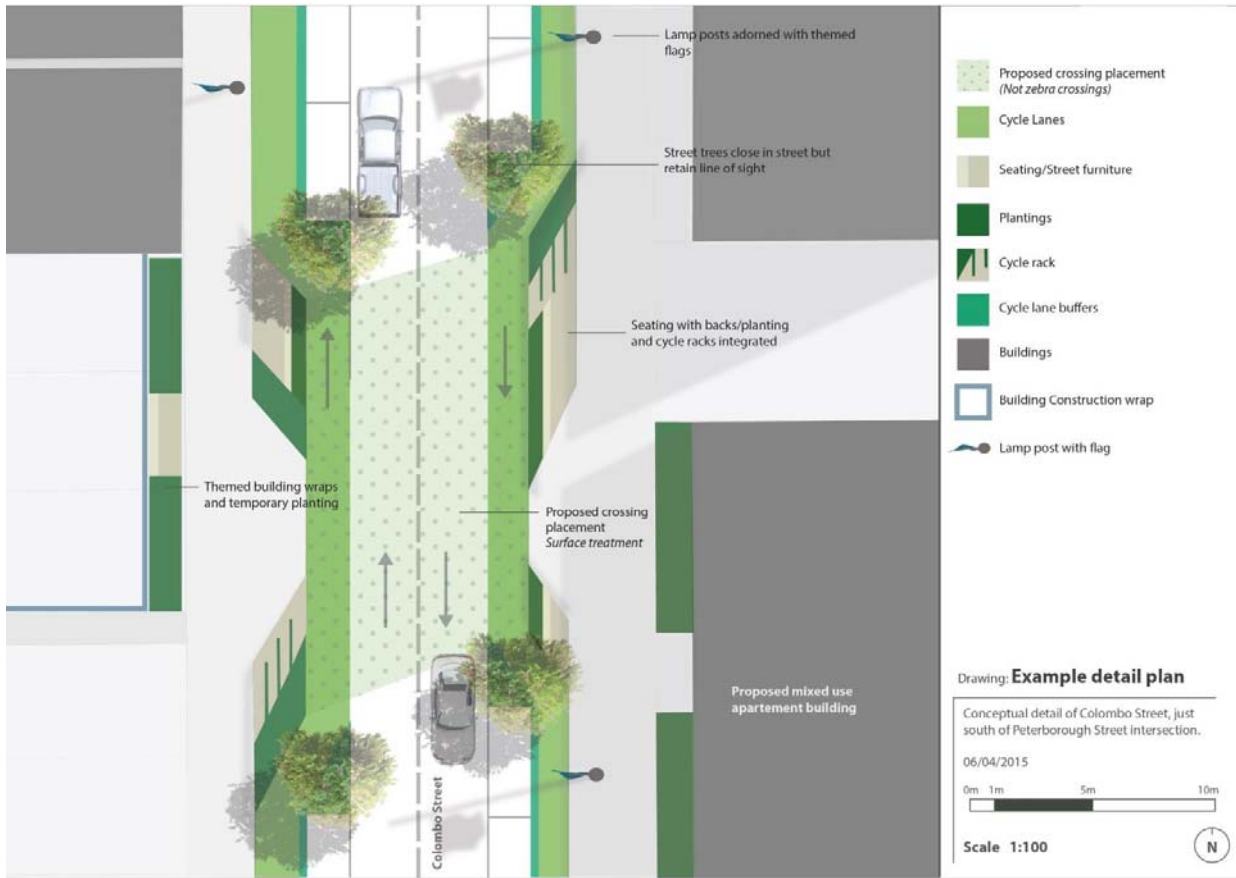


### Appendix 3: North Colombo Transitional Streetscape Project



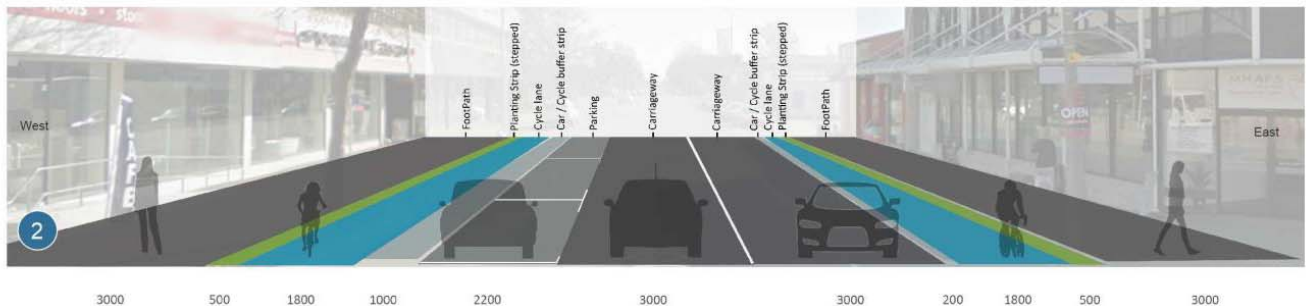
North Colombo Transitional Project Location





COLOMBO STREET - Looking North

**Diagram One** - 1.5m Minimum width cycle lanes with parking on both sides of road does not allow for sufficient buffer zone from car doors opening into cycle lane. This scenario does not provide safe passage for cyclists and should not be an option for a progressive cycle friendly city.



COLOMBO STREET - Looking North

**Diagram Two** - 1.8m wide cycle lanes, lineal street planting with parking on one side of the street. (one meter buffer between parked cars and cycle lane)

Colombo Street will operate a 'Key Cycle Lane' as identified in the Accessible City Document and connect directly into the Salisbury Street 'Priority Cycle Lane'. The above cross sections showcase a sample of options for an alternate street layout that integrates cycle lanes into Colombo Street. The ultimate aim is to provide a safe pedestrian and cycle network that makes North Col an easily accessible destination as well providing a positive user experience whilst enhancing the overall amenity of the area with wider cycle lanes, increased street plantings and calmed traffic.

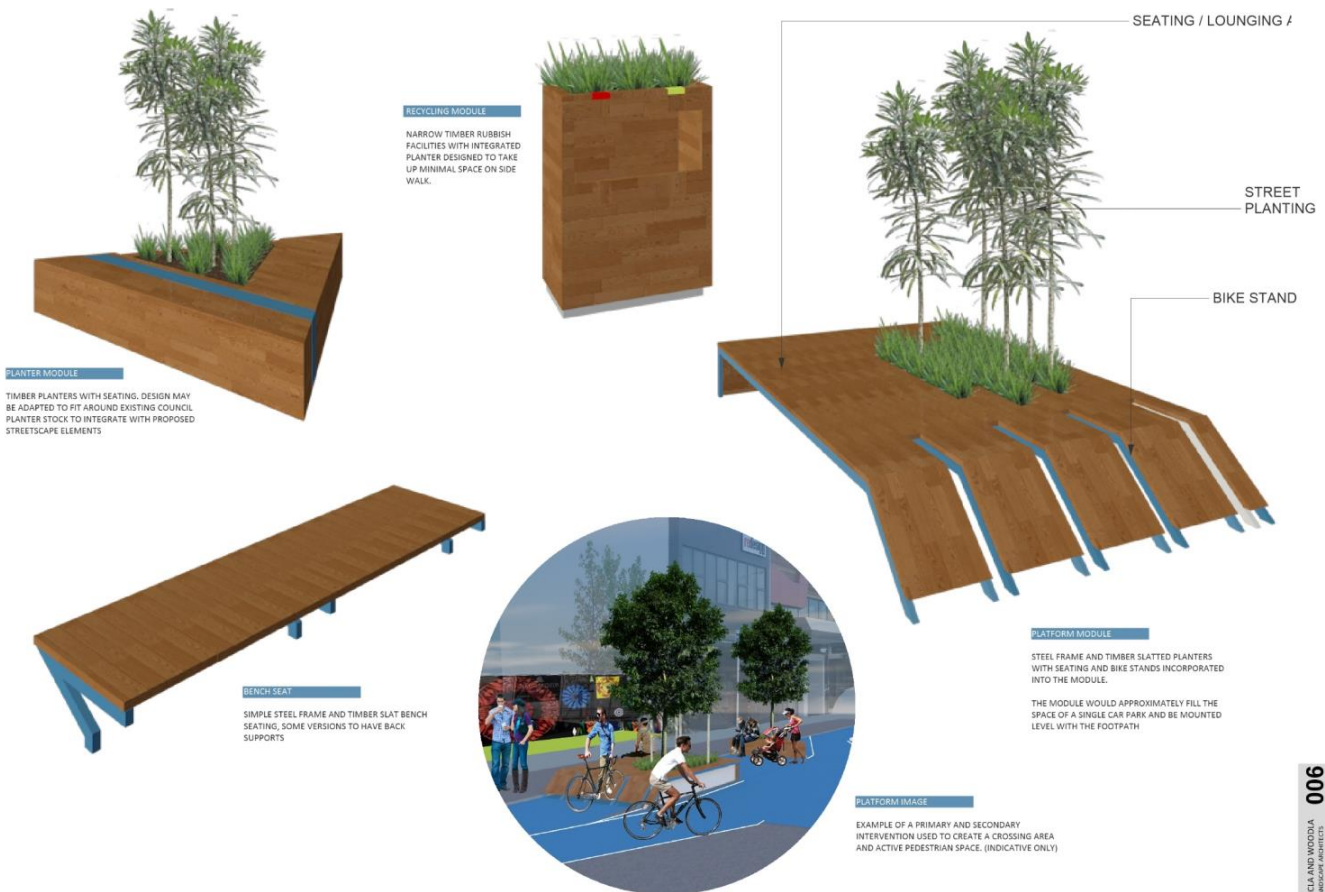




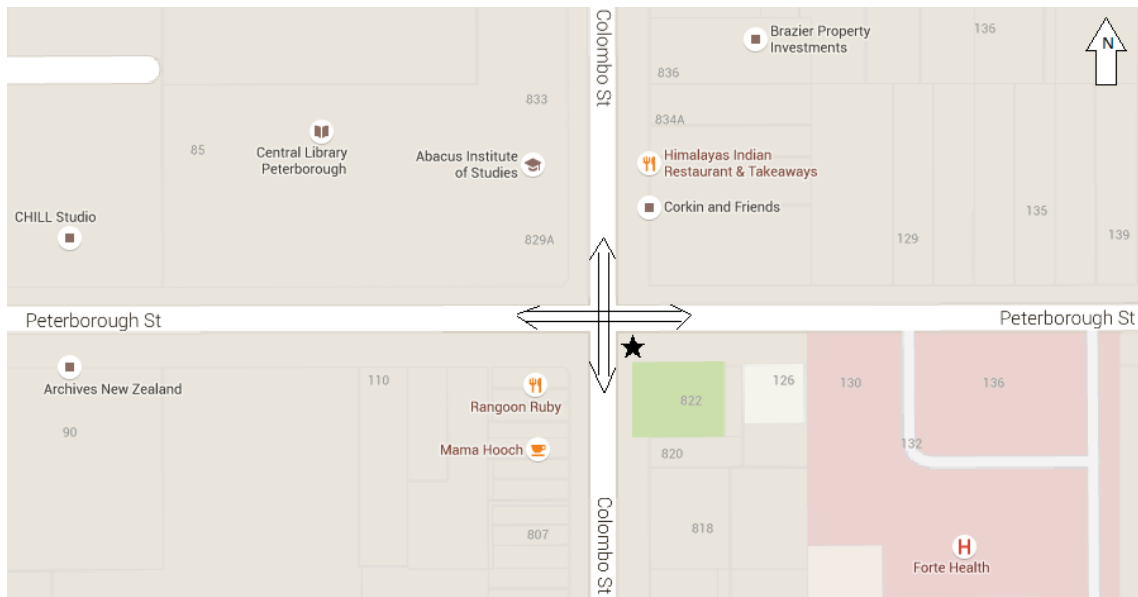
**KEY**

1. Primary intervention seat / planter / bike stand
2. Themed building / site wrap (material dependant upon site)
3. Modified planters from council stock
4. Tertiary Intervention - Cycle lanes that physically and visually connect the area
5. Crossing between active pedestrian spaces
6. Proposed street planting improvements in existing 'kerb outs'
7. Locally themed street flags to enhance community identity
8. Parking outside of Cycle lane
9. primary intervention seat / planter / bike stand

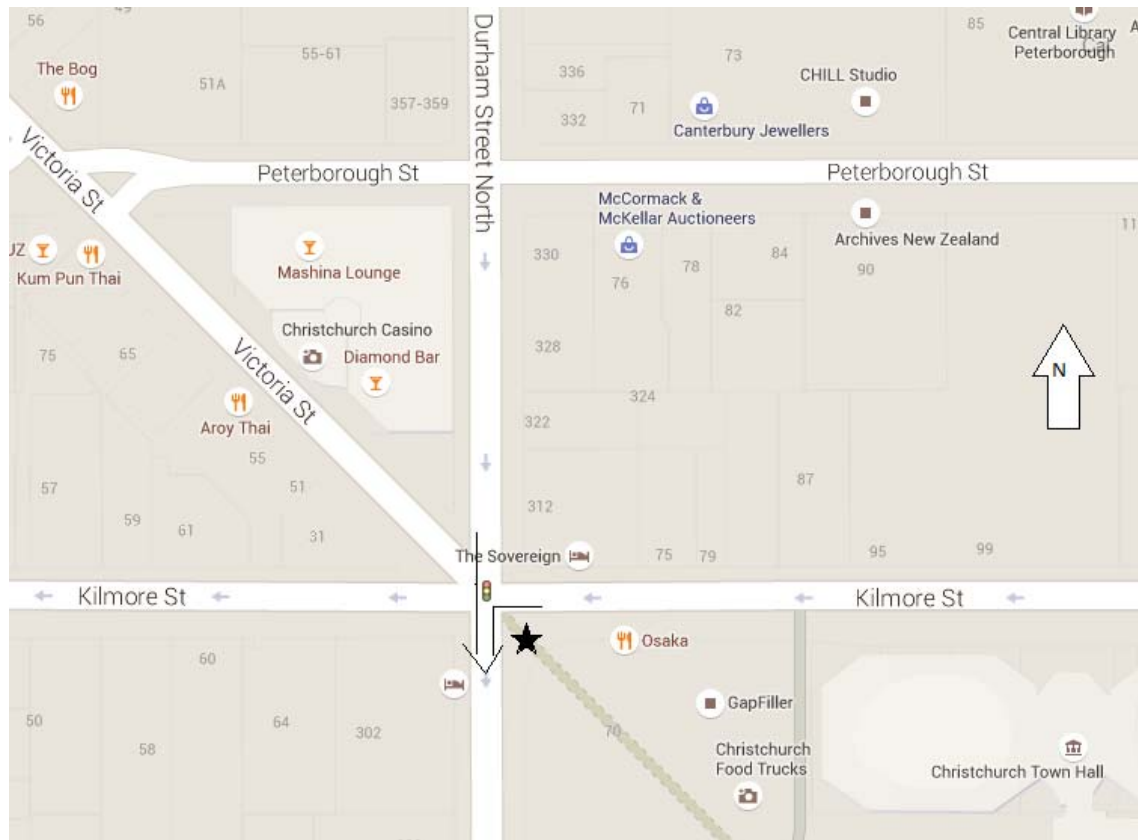
Background image looking north on Colombo street toward Peterborough intersection and beyond



## Appendix 4: Locations of Observational Area Data Collection



Location 1



Location 2

## Appendix 5: Tables of Observational Area Data

### Observational location 1: Colombo Street

Wednesday 2nd September						
12pm - 2pm	Going South Colombo St	Going North Colombo St	Filter from Peterborough street	Total	Going Into/out of Buildings	Using transitional space
Person	79	125	46	250	33	9
Cyclist	7	12	17	36		
Car	209	312	190	711		
4pm - 6pm					Going into/out of Buildings	Using Transitional Space
Person	68	92	66	226	29	4
Cyclist	43	40	32	115		
Car	199	664	155	1018		
Thursday 3rd September						
12pm - 2pm	Going South Colombo St	Going North Colombo St	Filter from Peterborough street	Total	Going into/out of Buildings	Using Transitional Space
Person	92	112	73	277	38	2
Cyclist	9	13	15	37		
Car	196	337	178	711		
4pm - 6pm					Going into/out of Buildings	Using Transitional Space
Person	56	87	41	184	32	5
Cyclist	24	44	23	91		
Car	207	677	151	1035		

### Observational Location 2: "The Commons"

Saturday 5th September						
11:30am – 1pm	Durham St	Kilmore St	Total		11:30am-1pm	
Person	242	192	434		Buying food	Using activity
Cyclist	74	66	140		58	19
Car	446	476	922			81
4pm - 6pm					12pm-1pm	
Person	56	87	143		Buying food	Using activity
Cyclist	52	44	96		55	7
Car	488	389	877			46

## Appendix 6: Information Sheet Distributed with Surveys



### Welcome to North Colombo.

Peterborough Village is an incorporated society of residents, business and property owners with interests in the Christchurch City area. NorthCol represents the association's plan for a transitional streetscape project in the area surrounding the Colombo and Peterborough Street intersection. This project aims to bring a sense of community back to the area following the Canterbury earthquakes, and proposes temporary features to be implemented in the short term before the Christchurch Central Recovery Plan redevelops the area.

We are a group of undergraduate Geography students at the University of Canterbury who are undertaking research to assess the impact this project will have in the local community.

Please take approximately 5 minutes to look over the material provided which describes the plan, and answer some follow-up questions. All information will be made confidential using the submission box, and all surveys destroyed following collation of the information. For any concerns or questions please contact Astoria at [ald92@uclive.ac.nz](mailto:ald92@uclive.ac.nz), or our research supervisor Rita at [rita.dionisio@canterbury.ac.nz](mailto:rita.dionisio@canterbury.ac.nz).

Please return your survey to a member of the research staff or to the submission box at the stall and receive your chocolate fish!

Thank you for your time!

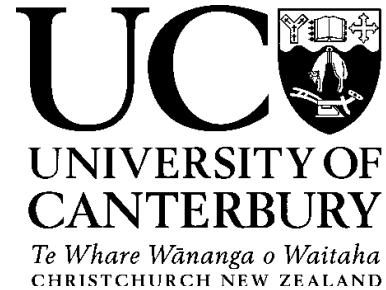
Regards,

Cal Buckmaster, Astoria Delaney, Laura Gruschow, Ashleigh Hamilton and Tjalve Mollison-Sjöberg

North Colombo Research Team  
University of Canterbury

## Appendix 7: Street Visitor Survey

### Interaction with Peterborough Village



1. Do you live in Christchurch?

Yes (1)

No (2)

If yes, which suburb? City (1) Inner suburbs (2) Outer suburbs (3) Satellite towns (4)

\_\_\_\_\_

If no, where do you live? Within New Zealand (5) International (6)

\_\_\_\_\_

2. Which age category do you fall in?

16-20 (1)

21-30 (2)

31-40 (3)

41-50 (4)

51-60 (5)

61+ (6)

Prefer not to say (7)

3. How did you travel here today?

Car (1)

Bike (2)

Bus (3)

Walk (4)

Other (please specify) \_\_\_\_\_ (5)

4. Which best describes how often you visit this area?

Daily (1)

Weekly (2)

Monthly (3)

First Visit (4)

Rarely (5)

5. Prior to today, had you heard of the NorthCol transitional streetscape project?

Yes (1)

No (2)







## Appendix 8: Business Interview Questions

Hi,

Thank you for providing us with such great insight into the North Col project so far. We'd love to hear more from you and gather your opinions. Do you have some time to answer a few open ended questions about yourself and the project? We'd love to use a few quotes from you for our final report, if that is okay with you.

If you have a moment, would you mind writing a few brief sentences or bullet points on any/all of the following:

- Your involvement with the area - how long you've been there for, where you work etc
- Pre and post quake feel of the area- what was it like before? how have things changed? How has this impacted your use of Colombo street and the buildings?
- North Col- your opinions on the project- what works, what doesn't and why
  - eg- cycle lanes, cycle buffers, cycle racks
  - mixed use buildings
  - art and plantings
  - public social spaces eg seating, outdoor cafe seating etc
- Your vision for the street - what would you like to see? (in both the short and long term)

We thank you for your valuable time.

Regards,

Astoria Delaney on behalf of  
Cal Buckmaster, Astoria Delaney, Laura Gruschow, Ashleigh Hamilton and Tjalve Mollison-Sjoberg

North Colombo Research Team  
University of Canterbury