Report

Selwyn District Council Urban Design Plan Change Report

Prepared for Selwyn District Council (Client)

By Beca Infrastructure Ltd (Beca)

14 March 2011

Revision History

Revision Nº	Prepared By	Description	Date
A	Tracy Allatt/Rohit Singh	Report for Client comment	10/03/11
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Document Acceptance

Action	Name	Signed	Date
Prepared by	Tracy Allatt/Rohit Singh		
Reviewed by	Melissa Foster		
Approved by	Melissa Foster		
on behalf of	Beca Infrastructure Ltd		

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Appendices

1 Introduction

Beca Infrastructure Ltd (Beca) was commissioned by Selwyn District Council (SDC) in December 2010 to produce a report which provides supporting evidence for the Selwyn Urban Design Plan Change submission.

The purpose of the report was to provide evidence on the importance of active and other sustainable transport modes e.g. walking, cycling and public transport to the function of town centres and retail developments.

The project builds upon work conducted by Beca as part of an NZTA research project, “The Reallocation of Road Space” and involves undertaking additional surveys and focus groups in the Selwyn District to make the research more relevant for the Selwyn Region. The scope of works undertaken in this project involved:

- a review of background information – project inception meeting and review of Rolleston Neighbourhood Accessibility Plan;
- an origin-destination survey of users using the Rolleston shopping centre;
- an urban design/transport design elements community focus group; and
- a presentation of case studies from across New Zealand from similar locations or with relevant key lessons learnt.

The report will be provided to Selwyn District Council and key stakeholders to be used to assist the future planning of all town centres in the Selwyn region. The project was undertaken during the period between December 2010 and March 2011.

2 Project Methodology

2.1 Background Information

An inception meeting was held at the beginning of the project to clarify the project scope and to identify potential case studies. In addition, the Beca team liaised with the SDC Road Safety team to identify any common themes/actions that resulted from the Rolleston Neighbourhood Accessibility Plan (NAP). This process included a review of the findings from the NAP report. Consideration of the key factors resulting from this process were included in the further local investigation undertaken in this project.

The key aspect from this review was the importance of safe walking routes in the Rolleston area. The community workshop involved desk top exercises evaluating transport measures and focus group questions that focused on the importance of walking and cycling in local town centres.

2.2 Origin-Destination Surveys

Shopper origin-destination surveys were conducted in Rolleston town centre on Tuesday 15 February 2011 for the period from 9am to 5pm. The aim of these surveys is to assess the following aspects of shoppers' journeys:

- entry and exit points into the shopping centre;
- shops visited;
- route taken through the area;
- mode of travel used by shoppers to reach a destination; and
- location of parking, if in the immediate vicinity of the shopping centre.

The aim was to collect up to a maximum of 250 surveys to provide an adequate sample size for the study. For this survey process, two surveyors recorded the travel patterns of a random selection of the population across the entire duration of the survey period.

The survey was undertaken by observing behaviour, rather than engaging the individuals to complete the survey. This method was adopted to ensure that "normal behaviour" was recorded.

A blank copy of the survey form is available in **Appendix A**.

2.3 Community Workshop

A focus group was undertaken with residents of Rolleston on Thursday 17 February 2011. The meeting was held at Community House in the centre of Rolleston from 7pm to 9pm.

2.3.1 Community Participation

The aim was to invite people to the focus group who live in the Selwyn District. Rolleston was selected as the location for the workshop as it houses the largest concentration of the local population. Members of staff from SDC engaged the local population and invited the attendees to the workshop.

Two members of the Beca staff facilitated the workshop; no SDC staff were present at the meeting.

2.3.2 Format of the Workshop

The format of the workshop is outlined below:

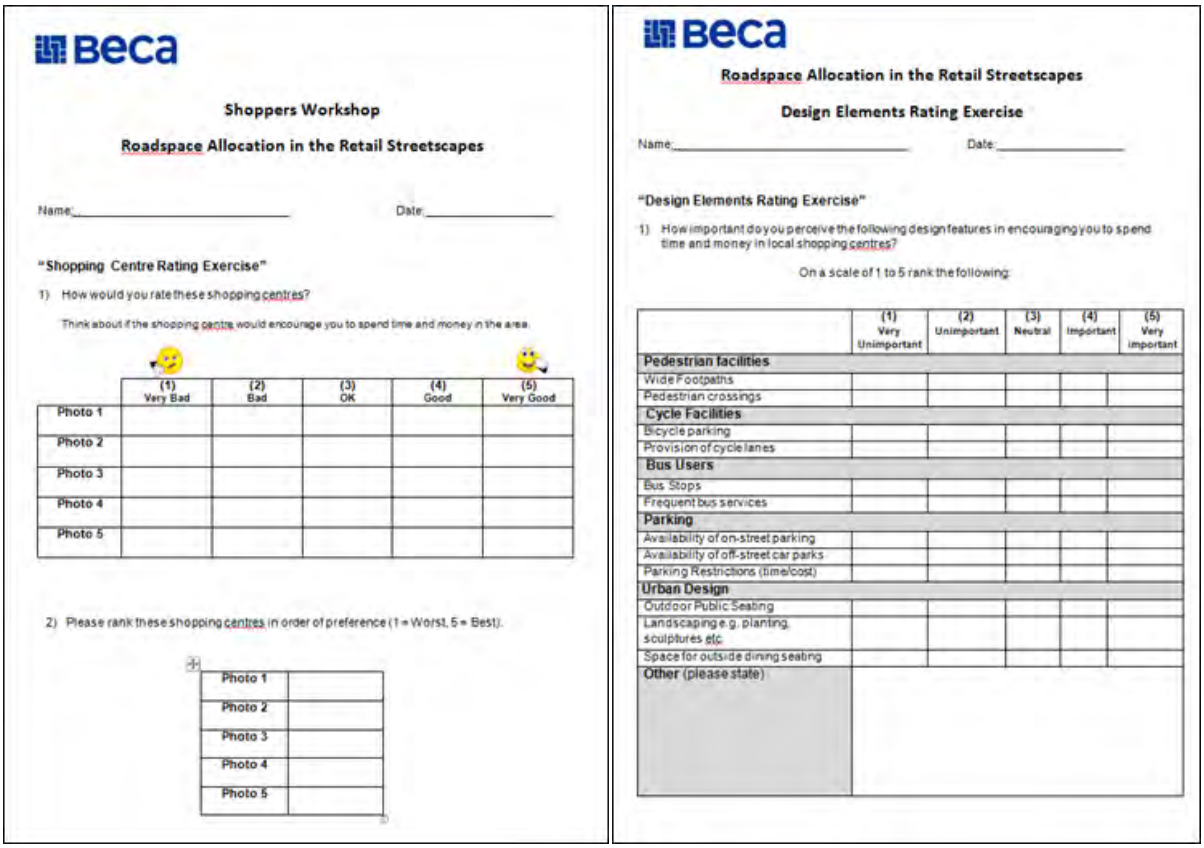
- welcome & Introductions;
- presentation outlining urban design and transport definitions;
- rating Exercise – urban design of shopping centres;
- rating Exercise – importance of different elements of transport and urban design facilities; and
- focus group – key questions to solicit user opinions.

The focus group was undertaken in two distinct parts. The generic introduction and rating exercise and an open-forum focus group.

2.3.3 Urban Design and Transport Rating Exercise

The aim of the first part of the workshop was to introduce the definitions of transport infrastructure and urban design. This was achieved by presenting key themes and definitions from a printed power point presentation. The discussion involved showing examples of the key themes and measures that can be developed. **Figure 2.1** provides an example of the exercises undertaken in the workshop.

Figure 2.1: The Transport & Urban Design Rating Exercises



Beca

Shoppers Workshop

Roadspace Allocation in the Retail Streetscapes

Name:_____ Date:_____

"Shopping Centre Rating Exercise"

1) How would you rate these shopping centres?

Think about if the shopping centre would encourage you to spend time and money in the area.

	(1) Very Bad	(2) Bad	(3) OK	(4) Good	(5) Very Good
Photo 1					
Photo 2					
Photo 3					
Photo 4					
Photo 5					

2) Please rank these shopping centres in order of preference (1 = Worst, 5 = Best).

Photo 1	
Photo 2	
Photo 3	
Photo 4	
Photo 5	

Beca

Roadspace Allocation in the Retail Streetscapes

Design Elements Rating Exercise

Name:_____ Date:_____

"Design Elements Rating Exercise"

1) How important do you perceive the following design features in encouraging you to spend time and money in local shopping centres?

On a scale of 1 to 5 rank the following:

	(1) Very Unimportant	(2) Unimportant	(3) Neutral	(4) Important	(5) Very important
Pedestrian facilities					
Wide Footpaths					
Pedestrian crossings					
Cycle Facilities					
Bicycle parking					
Provision of cycle lanes					
Bus Users					
Bus Stops					
Frequent bus services					
Parking					
Availability of on-street parking					
Availability of off-street car parks					
Parking Restrictions (time/cost)					
Urban Design					
Outdoor Public Seating					
Landscaping e.g. planting, sculptures etc					
Space for outside dining seating					
Other (please state)					

The first exercise involved the group rating five photographs of different types of shopping centres and the second provided further detail on the most important elements of urban design and transport measures for the individuals who participated in the workshop.

A copy of each of the rating exercise forms is available in **Appendix B**.

2.3.4 Focus Group Questions

Once the rating exercise was completed, a focus group was undertaken. This process was facilitated by the members of the Beca team who provided key questions to be discussed by the group. The questions are outlined below.

- What are the most important features for you to get around local shopping centres?
- Think about the design of a shopping centre, what makes a shopping centre attractive to you?
- Is it important for shopping centres to be attractive for walking?
- Supplemental – how can this be achieved? Think of examples where you think this is done well.
- Is it important for shopping centres to be attractive for cycling?
- Supplemental – how can this be achieved? Think of examples where you think this is done well.
- What are the most important aspects of car parking in local shopping centres?
- What is good about the local shopping centres in the Selwyn District?
- What improvements could be made to improve your shopping experience in the Selwyn District?

The discussion was recorded using a video camera, after receiving permission from the group. This was undertaken to ensure that all the details were adequately recorded.

2.4 Case Studies

The aim of this element of the report was to present relevant national and international case studies which support the case for supporting pedestrians and cyclists in town centres. In addition, relevant

In the main, the data was based on the findings from the unpublished NZTA research report, “Reallocation of Road Space” currently being undertaken by the Beca team. It is acknowledged that much of this research is focused on more central city and arterial sites. As such, this information has been supplemented by other New Zealand case studies which are similar to the Selwyn District that Beca have been involved in, which show how other authorities are planning local town centres.

3 Rolleston Origin Destination Case Study Results

3.1 Overview

Shopper origin-destination surveys were conducted in Rolleston town centre on Tuesday 15 February 2011 from 9am to 5pm. Data for 217 shoppers was processed and the results of these surveys are presented below. Data from a further 13 shoppers was collected; this has been retained for information but has not been included in the final data set due to incomplete information.

As outlined in the project methodology, this survey collected the following information:

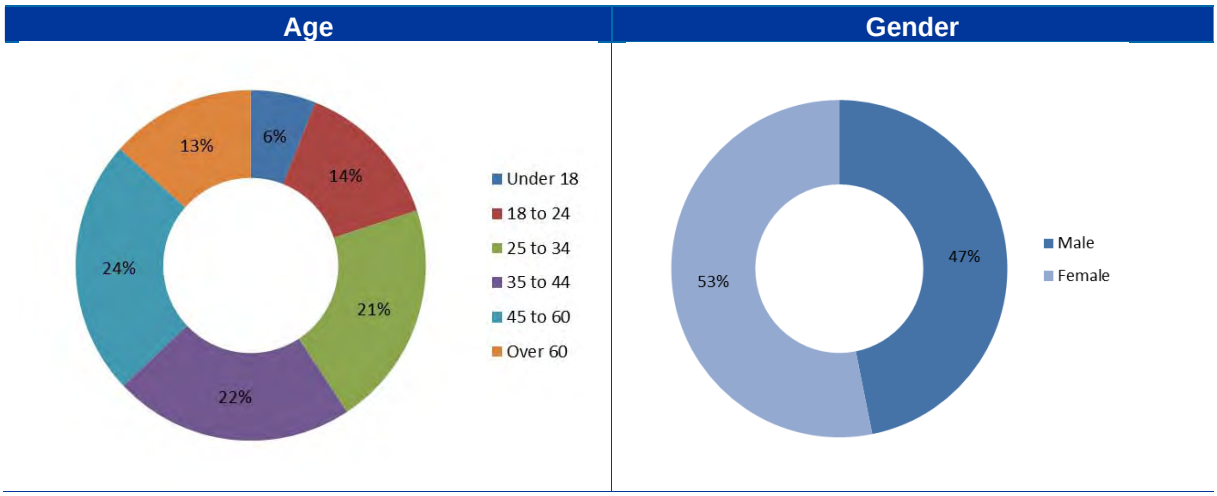
- the entry and exit point into the shopping centre;
- the route taken through the area;
- the mode of travel used by shoppers to reach a destination;
- which shops are visited, and for how long; and
- where shoppers parked, if in the immediate vicinity of the shopping centre.

Efforts were made to ensure that data collected during this survey represented shoppers of all age groups and genders who use the area.

3.2 Gender and Age Distribution

The data was analysed to assess the gender split of the survey sample set. The age and gender distributions of surveyed shoppers are provided in **Figure 3.1**. Although not necessarily representative of the actual customer profile, this data does provide a good sample of the habits of the people of different ages and genders.

Figure 3.1: Origin destination survey age and gender profiles



The age of the observed shoppers was estimated by the surveyor. Therefore, there could be a small variance between observed and actual age, particularly for the 25 to 34 age groups. However, the data presents useful information which could be supplemented by formal survey data, if required.

The data indicates an even split in the gender of customers observed during the survey period, although there is a slight bias toward female customers.

The age distribution of users is also fairly even. 35% of observed shoppers were between 18 and 35 years old, while 46% were between 35 and 60 years of age. 13% of people were over 60.

3.3 Entry and Exit Points

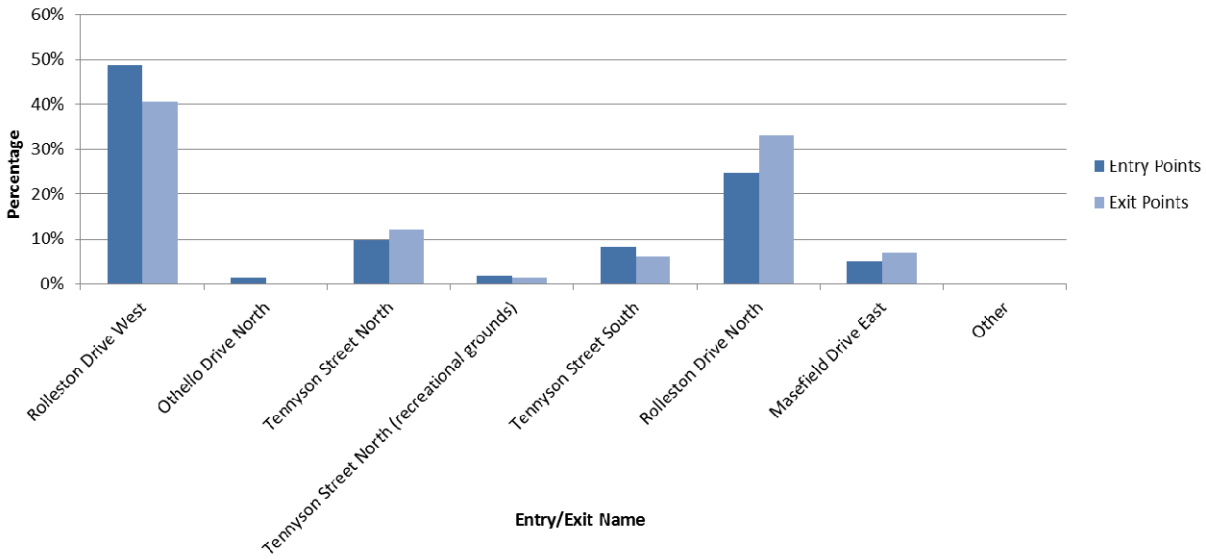
One of the key aims of this origin destination survey was to collect data regarding shoppers' entry and exit points from the shopping centre. The access points were mapped according to the locations identified in **Figure 3.2**.

Figure 3.2: Origin Destination Survey Entry and Exit Points

Figure 3.3 shows the results of the survey period. The most frequent entry and exit points are:

- Rolleston Drive (West); and
- Rolleston Drive (North).

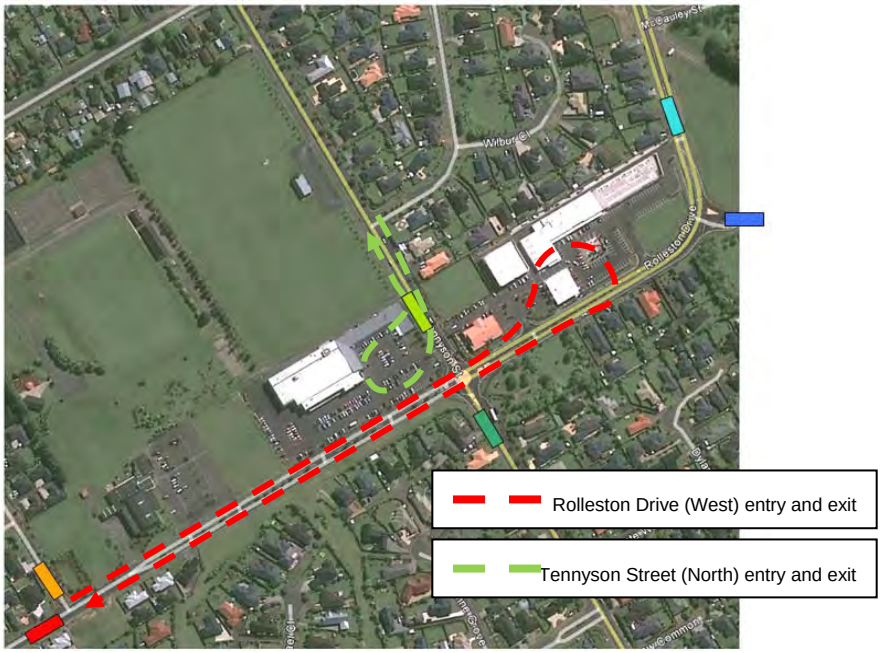
Figure 3.3: Origin Destination Survey Entry and Exit Points



All possible entrance points are used to access the area, although the number of shoppers observed to be entering from Othello Drive was particularly low. The patterns for the exit point provide similar results, with Rolleston Drive (West and North) being most popular exits, followed by Tennyson Street (North).

These results indicate that Rolleston Drive provides the primary route of travel through the area. The results also suggest that there is more of a residential use of the area with people entering and exiting from the same location. An analysis of the route taken by pedestrians and cyclists supports this conclusion, with most of the the pedestrians and cyclists entering and exiting the town centre from either Rolleston Drive (West) or Tennyson Street (North), as shown in **Figure 3.4**.

Figure 3.4: Common routes (pedestrians and cyclists)

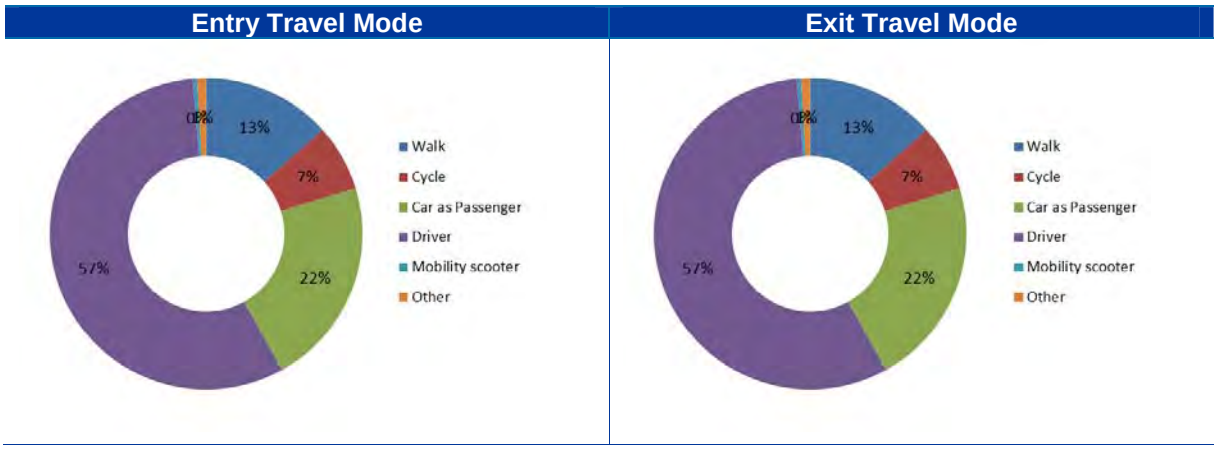


3.4 Travel Mode

The second key element of the survey was to analyse **how** people travelled to and from the shopping centre. The travel modes were recorded for both entry and exit as there was potential for the way people travel in and out of the centre to be different e.g. car passenger on the way in and catching a bus home.

The results of the entry travel choice for the 8-hour weekday survey period are presented in **Figure 3.5**. Travel modes for entry and exit were observed to be identical. The majority of people (79%) either drove to the centre, or were passesngers in a car. 13% and 7% of shoppers walked and cycled to the centre, respectively. These results are consistent with the proportion of motor vehicles, cyclists and pedestrians observed in the count undertaken on Tennyson Street. A small number of shoppers (accounting for 1% of all people surveyed) on mobility scooters were also observed at times.

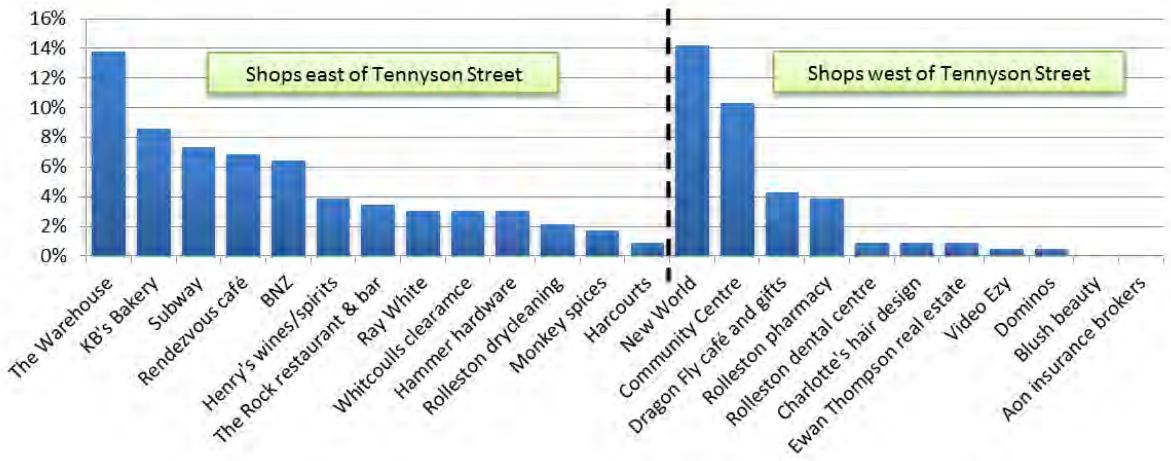
Figure 3.5: Entry and exit travel modes



3.5 Shopping Experience

Another element of this survey was to identify which shops people visited whilst in the area. The shops visited by shoppers in the area were logged and the results are provided in **Figure 3.6**.

Figure 3.6: Shops visited



The most popular facilities visited during the survey period were:

- New World;
- The Warehouse; and
- Rolleston Community Centre.

The survey results also highlight the popularity of various local cafes and eating jestablishments, such as KB's Bakery, Subway and Rendezvous Café, in the shopping centre. Overall, a higher number of shoppers were surveyed in the shops east of Tennyson Street (Rolleston Square) as compared to those located west of Tennyson Street.

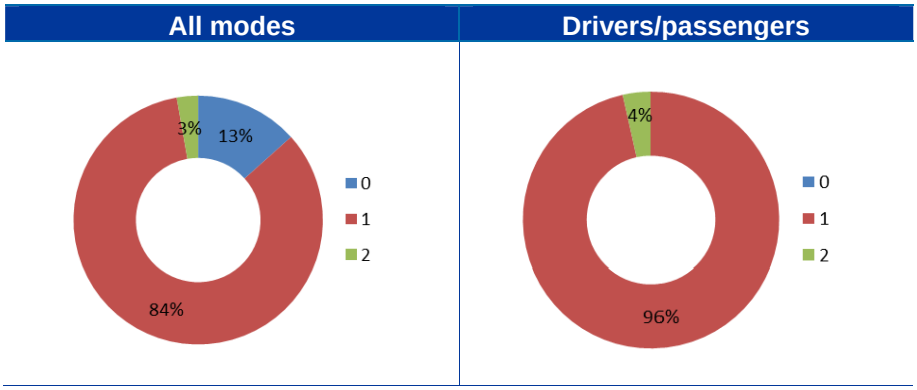
3.6 Number of stopping points made for parking

Figure 3.7 shows the number of stops made by shoppers during their visit to Rolleston Town Centre. Separate figures are also provided for shoppers travelling by car.

The figures show that the majority of shoppers (84%) made a single stop in the centre. This figure was even higher for shoppers travelling by car, with 96% of shoppers making a single stop, while the remaining 4% made two stops.

All cyclists surveyed during the day made a single stop, while pedestrian shoppers were deemed not to have any stopping points due to the nature of their journeys.

Figure 3.7: Number of parking stops



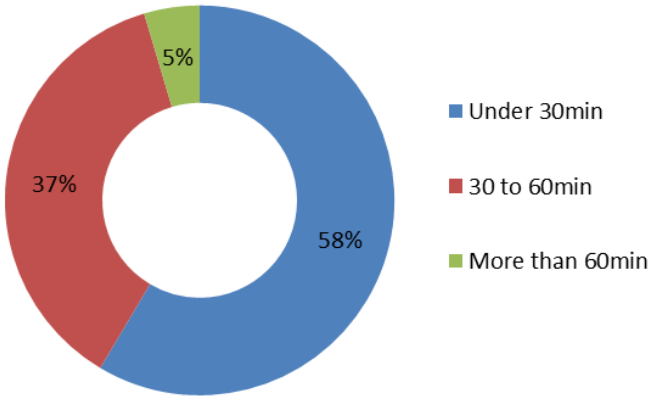
Further analysis of the data for shoppers making more than one stop was undertaken. Only 3% of the surveyed shoppers (corresponding to 6 shoppers) were observed to make 2 stops in the area. All of these shoppers were travelling by car and visited two different shops in Rolleston Square, of which the Warehouse was invariably one. These shoppers parked at two different locations at the Warhouse/shopping centre car park south and east (refer to map in Appendix A), before exiting from Rolleston Drive North.

The above data suggests that most trips made to the centre are for a single pre-determined purpose. Also, except in a small number of cases (3% of all shoppers), most shoppers only visited a single shop in the area.

3.7 Duration of stay

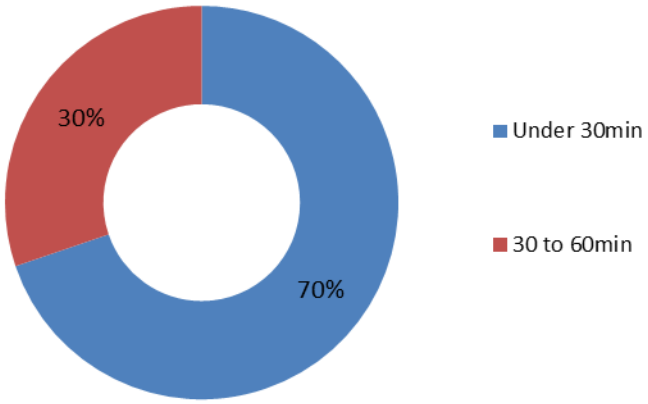
The final element of the survey also involved analysis of the total amount of time spent by shoppers in the town centre. The results are presented in **Figure 3.8**. The majority (58%) of shoppers spent less than 30 minutes in the area, which in most cases corresponded to visiting a single shop, while 37% of shoppers spent between 30 to 60 minutes. A small number of shoppers (5%) spent more than 60 minutes in the shops.

Figure 3.8: Duration of stay



An analysis of the duration for pedestrians and cyclists was also undertaken, to assess if there were any differences against the average duration of stay. The results are provided in **Figure 3.9**. The results show that pedestrians and cyclists spend on average less than 30 minutes in the shopping centre.

Figure 3.9: Duration of stay for pedestrians and cyclists

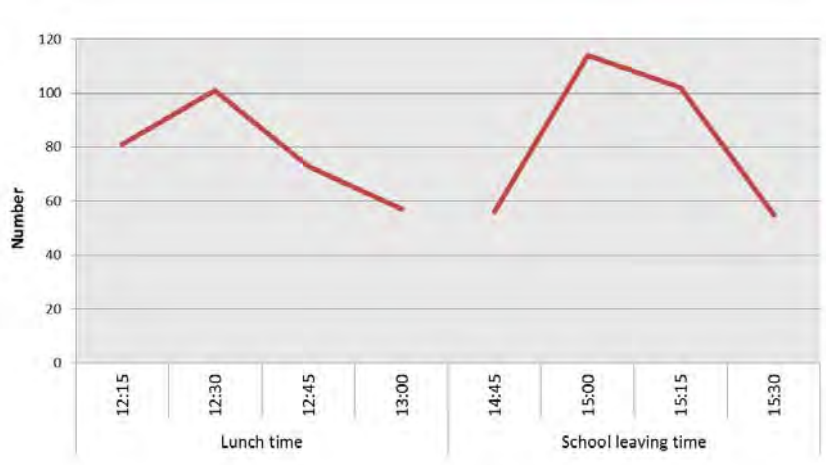


3.8 Tennyson Street Count Survey Results

Traffic counts were conducted on Tennyson Street (North) just north of the New World car park exit from 12 noon to 1pm and from 2:30pm to 3:30pm. Two separate count periods, each of 1-hour duration, were used to cover the lunchtime and the school-leaving peak periods. Motor vehicles, pedestrians, cyclists and users on mobility scooters were each counted separately, by direction of travel. However, only the total figures are presented in **Figure 3.10 and 3.11** for the purpose of reporting.

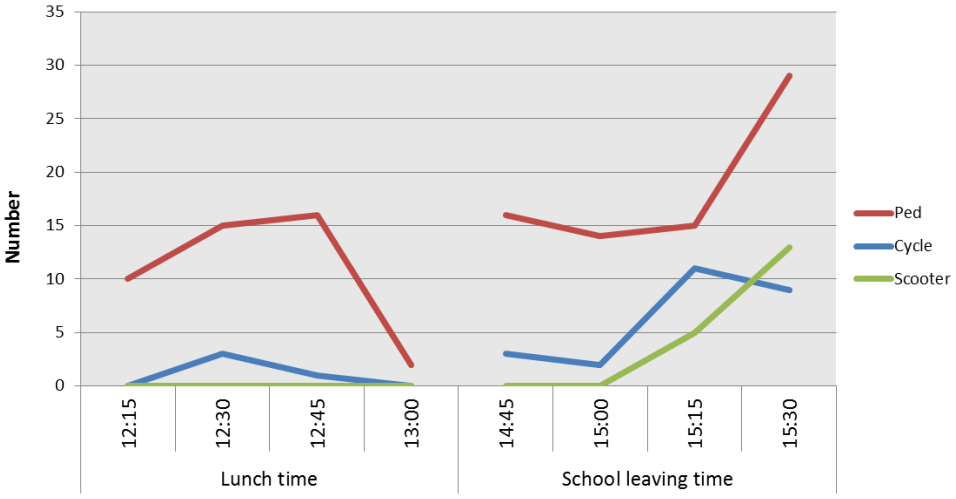
Figure 3.10 shows motor vehicle counts during the survey periods. A total of 312 motor vehicles were observed on Tennyson Street between 12 and 1pm, while this figure was 327 for the 2:30-3:30pm period.

Figure 3.10: Motor vehicle counts (Tennyson Street)



The number of pedestrians, cyclists and people on mobility scooters was observed to be higher during the school-leaving period at 74, 25 and 18 respectively, as compared to the lunchtime period, as shown in **Figure 3.11**.

Figure 3.11: Pedestrian, cyclist and mobility scooter counts (Tennyson Street)



3.9 Summary of Key Outcomes

Results from the shopper origin destination survey provide some useful insights into shoppers' behaviour at Rolleston Town Centre. The analysis of responses from 217 shoppers indicates that most people used the same entry and exit points within the area. While the two ends of Rolleston Drive (North and West) were observed to be the most frequently used entry and exit points, Tennyson Street was also popular with some shoppers.

Travel modes used for entry and exit into the town centre were observed to be similar overall, although some shoppers used a different mode to exit than what they used to enter. 79% of shoppers drove to the centre, while 21% either walked or cycled. Tennyson Street (North), along with Rolleston Drive (West), was a popular entry/exit point for pedestrians and cyclists.

The data also shows that the majority of trips to the centre were for a single predetermined purpose, with 84% of all shoppers, 96% of shoppers travelling by car and all observed cyclists making only a

single stop. Overall, 58% of shoppers spent less than 30 minutes at the centre, while this figure was much larger for pedestrians and cyclists at 70%.

Results of the count survey undertaken on Tennyson Street show a distinct peak for motor vehicles between 2:30 and 3:30pm, although the peak for other road users (pedestrian, cyclists and those on mobility scooters) was between 3:30 and 4:30pm.

4 Community Workshop Feedback

4.1 Overview

A total of 15 people attended the workshop. All of those who attended were Rolleston residents. Some of the group were also involved in active groups in the area including Envirotown and the Rolleston Youth Council.

Although, the specific age of users was not recorded, there was a diverse age range within the group and good representation of both male and female participants. The statistics show that 60% (9) of the participant were female and 40% (6) were male.

4.2 Rating Exercise Results

As outlined in the methodology, two rating exercises were undertaken:

- town centre ratings; and
- design element ratings.

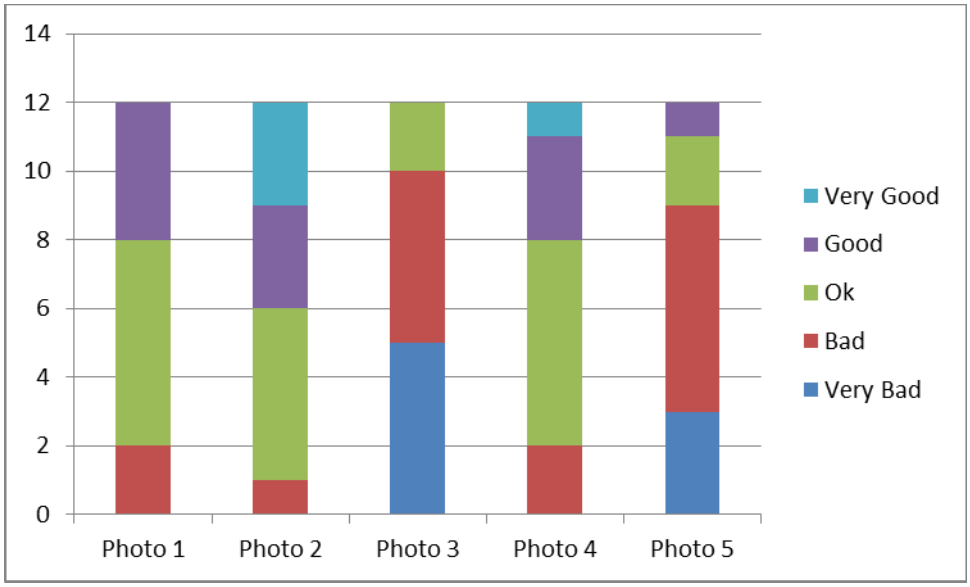
The results from these exercises are outlined below. Please note that the results account for only 12 and 14 completed responses respectively, as some of the participants arrived after the exercise was underway.

4.2.1 Town Centre Ratings

Two exercises were completed when rating five photos of different shopping centres across New Zealand. The first exercise involved the individual participant rating each photograph on a 1 to 5 scale, 1 being very bad and 5 being very good. The group was encouraged to rate the shopping centre on how much they like the area.

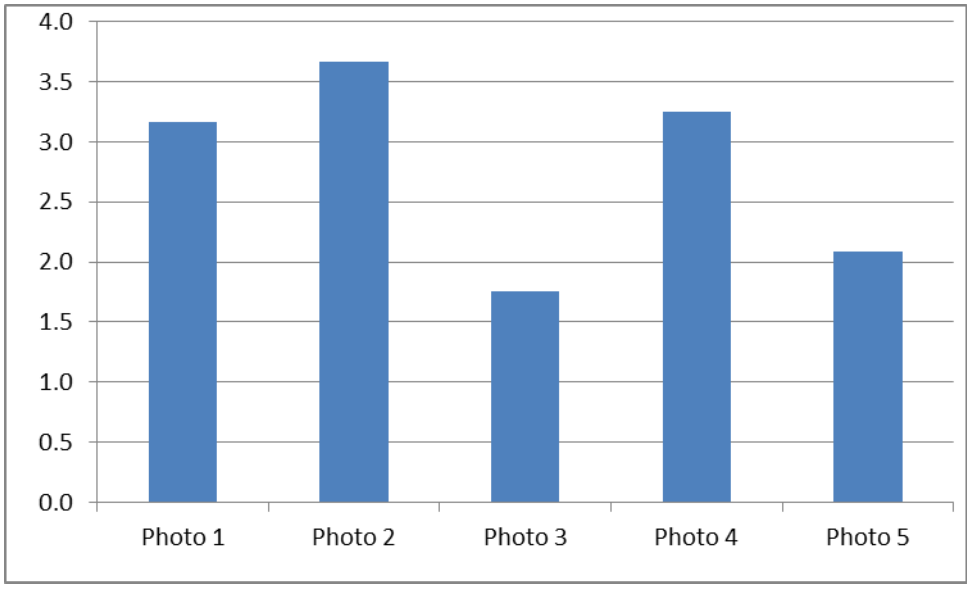
Only 12 participants completed this exercise. The overall results for the exercise are provided in **Figure 4.1**.

Figure 4.1: Overall results – individual photograph ratings



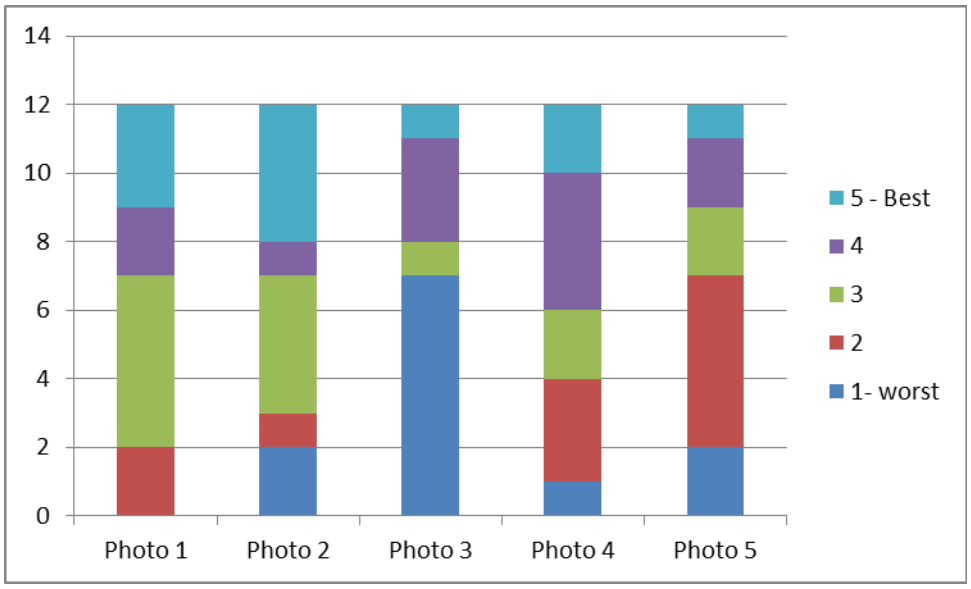
The results indicate, based on the “gut instinct” of participants, photograph 2 was clearly the most popular shopping centre and photo 3 was the least popular shopping centre. To further analyse this data, an exercise was undertaken to collate the average rating for each shopping centre, the results of this are shown in **Figure 4.2**. The results again show that Photograph 2 is the most popular shopping centre, closely followed by Photographs 4 and 1.

Figure 4.2: Average rating – individual photograph ratings



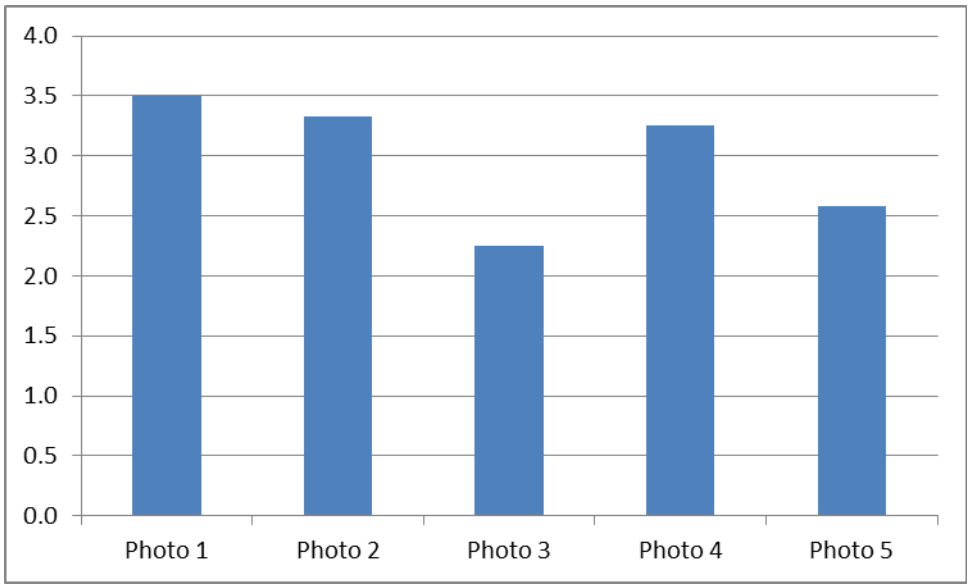
Once this exercise was completed, the group was asked to give an overall rating and compare the five shopping centres to indicate which shopping centre was the best. On a scale of 1 to 5, 1 represented the worst shopping centre and 5 represented the best shopping centre. The results of this process are provided in **Figure 4.3**.

Figure 4.3: Overall results: comparison of shopping centres



The results for the preferred shopping centres are more evenly spread, but photo 3 is still the least preferred site. To further analyse the data, an average rating of the shopping centres was undertaken, the results are provided in **Figure 4.4**.

Figure 4.4: Overall results: rating of shopping centre comparison



As can be seen from the results, overall, photograph 1 is the most preferred shopping centre, closely followed by photo 2 and photo 4. This differs slightly from the results of the first rating exercise, where photo 2 was the preferred photo.

The photographs are presented in **Figures 4.5 to 4.9**, below, with a summary of how they were rated in the workshop.

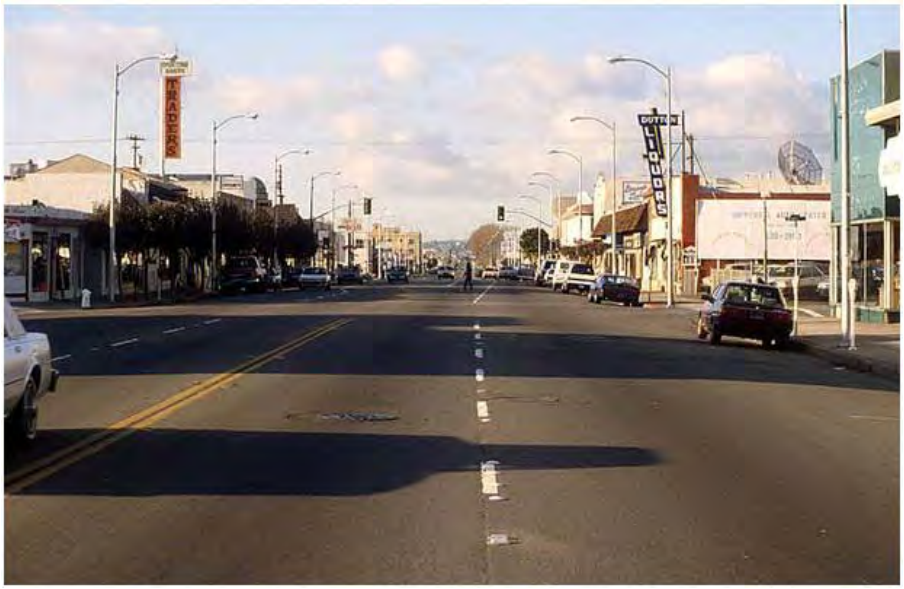
Figure 4.5: Photo 1

This photo was the third most preferred photograph in the initial rating exercise but was the most preferred in the second exerise. Note, in this photograph, pedestrian crossings, seating and wide footpaths are provided in the shopping centre.

Figure 4.6: Photo 2

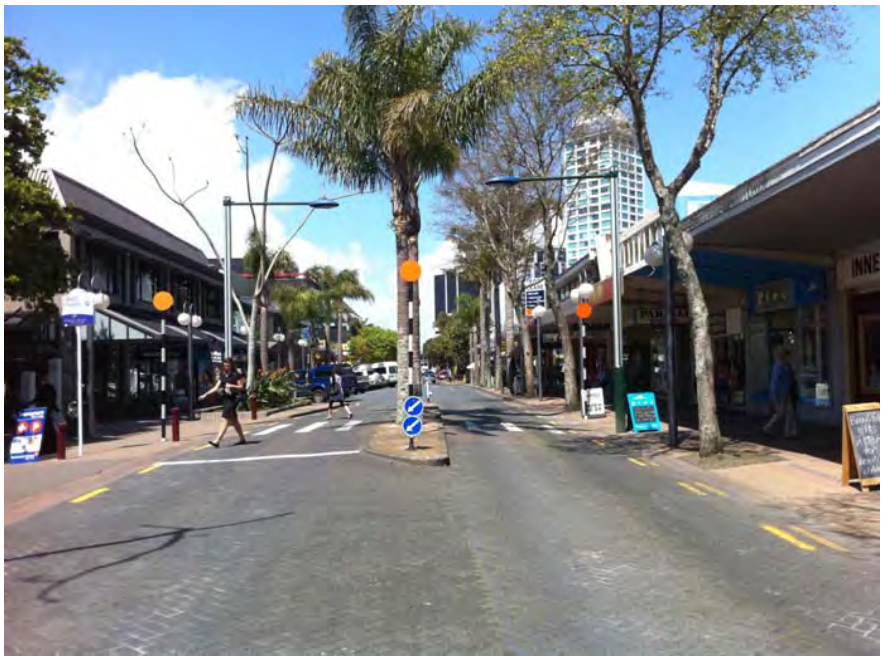
This photograph was the most preferred shopping centre in the first exercise and was a very close second favourite in the second rating exercise. This shopping centre provided wide footpaths and coloured surfacing. Trees were also present in the streetscape.

Figure 4.7: Photo 3



This was the least preferred shopping centre in both rating exercises. The site has four traffic lanes and plenty of on-street parking. The difficulty occurs when trying to cross the road.

Figure 4.8: Photo 4



This shopping centre was liked by many of the participants. Only two people rated it as the best location. It does have similarities to photo 2, with coloured paving on the footpath and a paved roadway. The site also has a dedicated pedestrian crossing with good lighting.

Figure 4.9: Photo 5

This results of the rating exercise showed that this photo was one of the least preferred shopping centres. The site has on-street parking available, a wide footpath and cycle facilities, however, it is located on a busy arterial.

4.2.2 Design Element Ratings

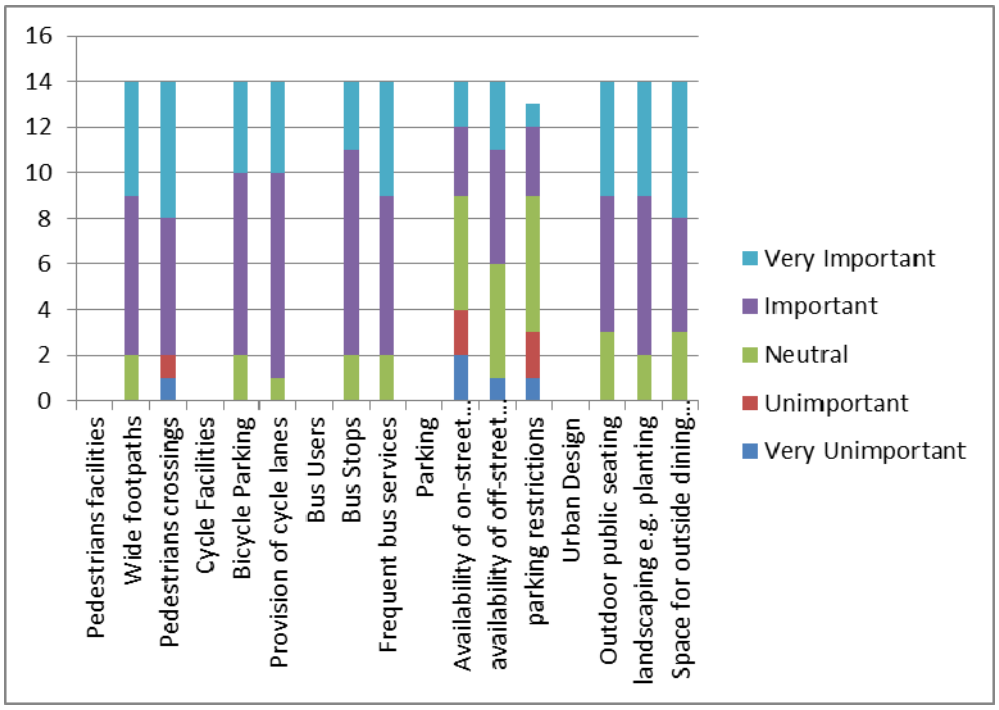
Following the initial rating exercise, further investigation was undertaken into the importance of specific transport and urban design elements that can be implemented in local shopping centres. The design features considered are highlighted in **Table 4.1**, below. A total of 14 participants completed this exercise.

Table 4.1: Transport & Urban Design Elements.

Design Elements
Pedestrians facilities
Wide footpaths
Pedestrians crossings
Cycle Facilities
Bicycle Parking
Provision of cycle lanes
Bus Users
Bus Stops
Frequent bus services
Parking
Availability of on-street parking
availability of off-street parking
parking restrictions
Urban Design
Outdoor public seating
landscaping e.g. planting
Space for outside dining seating

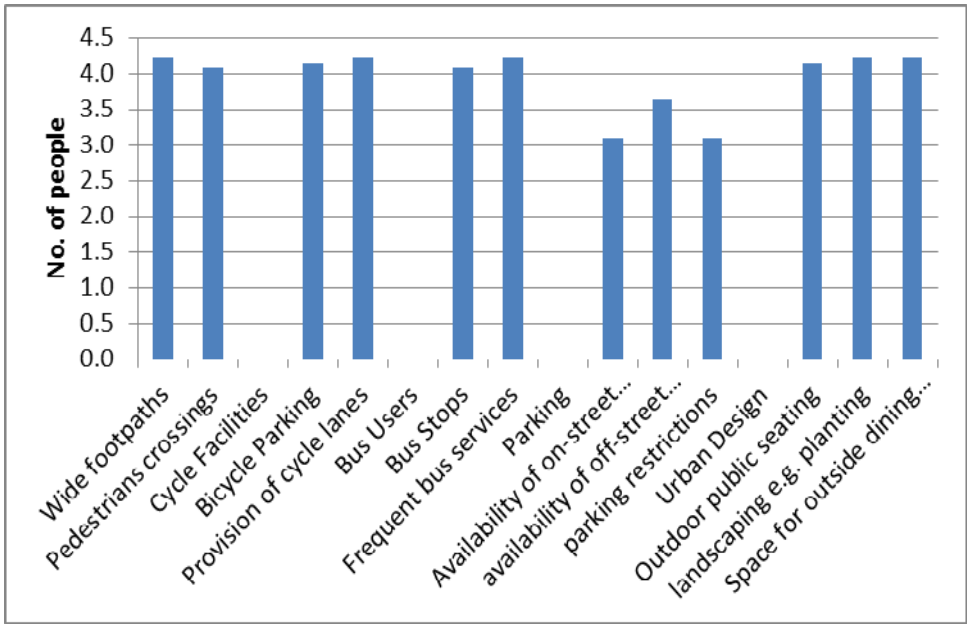
The aim of the exercise was to understand what features affected the judgement of shopping centres for the participants of the focus group. The overall results of the exercise are provided in **Figure 4.10**

Figure 4.10: Overall design element results



The results clearly show that pedestrian facilities and urban design features are considered very important.

Figure 4.11: Design Elements Average Rating



4.3 Focus Group Results

The focus group aimed to provide further discussion on specific subjects. The questions used to steer the conversation are provided in Section **2.3.4** of this report. However, these were only ever meant to be a guide to inform the discussion points. The full group of 15 people participated in this discussion and provided useful feedback. The focus group lasted approximately 1hr 15 minutes.

The results of the workshop have been summarised in to the key themes which resulted from the discussion.

4.3.1 What makes people visit a shopping centre

The key discussion points on this topic are outlined below:

- The right shop;
- I go to Warehouse Hornby instead of Rolleston because of the poor design of the Rolleston site;
- I go to Methven if I want a nice trip out;
- A mix of local businesses and bigger shops; and
- Being unique.

4.3.2 Walking, cycling, public transport and disabled users

Some of the key outcomes are outlined below:

- Having footpaths on both sides of the road;
- Need wheelchair ramps for disabled users;
- Bicycle lanes;
- Segregated bike routes;
- Pram and wheelchair access;
- Mobility access;
- Footpaths in car parks; and
- Create a link with the rail trail, offer bike hire to attract day users.

4.3.3 The shopping experience within the Selwyn district

The key discussion points on this topic are outlined below:

- Need a code for how the town looks – a look of Riverstone;
- Cafes' that come out onto the street;
- Combat the wind in Rolleston;
- Something fun to do e.g. timezone;
- Something that doesn't cost much to do;
- Youth area/youth centre/skate park;
- Toastie shack (like hastings);
- Currently a utility shopping centre;
- Make a difference – make it unique;
- Create a walking area in the mall and have parking outside of the centre in Rolleston;
- Council have a key role in the planning of the centre;
- Attract people from Christchurch to Rolleston by creating unique shopping experience.
- I like the local feel, do we need to attract people;
- Introduce a book shop/deli/cinema/bowling into Rolleston;
- Located high street shops in i-zone and niche shops in the centre;
- Ensure that any dairy is clean and tidy; and
- Have dairies and fish and chip shops local areas as well as town centre.

4.3.4 Parking and car access

The key discussion points on this topic are outlined below:

- Easy access;
- Shade in the summer;
- Speed limit in car parks;
- Footpaths in car parks;
- Enough space in car parks;
- Angled parking;
- Short term; and
- Allocate parking underneath buildings or above.

4.3.5 Urban Design and Transport Features

The key discussion points on this topic are outlined below:

- Township approach – pedestrian access and bikeways;
- Design like Frankton, South Auckland;
- Design like Whitford, NZ;
- Restricted hours in town centre for freight;
- Shelter and green space;
- Some kind of planting;
- Water fountains;
- Cromwell is a good example – all cars parked outside and shopping centre is pedestrianised; and
- Make use of the little train station.

4.4 Summary of Key Outcomes

The workshop provided some useful data and ideas. There were several different views that were solicited from the group but some of the key discussion points are summarised below.

The look and feel of the shopping centre was a major discussion point - members of the group presented the idea of creating uniformity in the local shopping centres within Selwyn. In particular, Rolleston, one idea was to ensure that all building had some “stone” within the design of the shop front. This type of policy would require changes in local legislation and liaison with local business and landowners, as well as the wider Rolleston population.

Another key consideration in the design of the area is to provide shops that cater for the younger population of the community. It was noted that a large proportion of the younger population is bored and this results in anti-social behaviour. Members of the youth community are working to address this issue and highlighted the need to have shops and/or facilities that cater for the younger market in Rolleston. This issue applies across all town centres in Selwyn.

It was identified that there are currently poor pedestrian and cycle links in Rolleston. The group highlighted the need to improve access for disabled users. The experience of one regular wheelchair user was recounted in the discussion. The person in question has to ride on road until they can get back onto the footpath to visit Rolleston Town Centre. The group also considered the need for safe cycling facilities to and from town centres. Many people in the group liked the option of segregated routes.

The results of the workshop reflected national and international research indicating that the type of shop is the most important factor in choosing where to shop. If the shop that people want to visit is in a shopping centre, they will go visit that particular shopping centre. All transport and urban design considerations are secondary to the shop choice. The group discussed the importance of “niche shops”, which were considered to be more important in local town centres compared to high street shops. The key outcome being that a shop that differentiates the shopping centre will attract more people.

Another key outcome from the workshop identified that trees and public space are important. Creating an identity for local shopping centres, in particular, Rolleston was considered vital. The group discussion resulted in an overwhelming need to improve and prioritise pedestrian space, above the needs of providing car parking space. The group discussed the option of providing car parking either above or below the shopping centre or within walking distance of the shopping centre to allow the space outside the shops to be used for pedestrians, cyclists and disabled users and as meeting space.

5 Supporting Case Studies

5.1 Background

There is considerable interest within urbanised areas across New Zealand and Australia into the optimisation of current infrastructure in order to meet the growing needs of people and the demand for safe, sustainable and efficient travel. In the case of transport, the reallocation of road space in central cities and on arterial corridors often epitomises the sometimes conflicting views between transport planners, local business communities and area users. This conflict often focuses around on-street parking provision. Road space is increasingly being valued in terms of the movement of people and person journey time, rather than just vehicles numbers alone.

Another key consideration for the future planning of local urban environments is the composition of the local community. We will be living in an increasingly ageing society. In the New Zealand context the national projection is that the population will grow to approximately 5.05 million people by 2051, half of the population (over 2.5 million people) is expected be over 46 years of age. The proportion of people aged 65 or over is also set to increase to 26% (equivalent to 1.33 million people) of the total NZ population by 2051. This is a marked increase from the 2004 statistics where only 12% of the population are over 65. (Statistics New Zealand, 2004).

5.2 Case Study Selection

The majority of the case study material presented in this section of the report is based on research undertaken in the yet unpublished NZTA research report, “Reallocation of Road Space.” The topics that are discussed are of relevance to the planning of town centres within the Selwyn District, but are often sourced from national and international research focused on bigger town centres.

The topics covered within this section include:

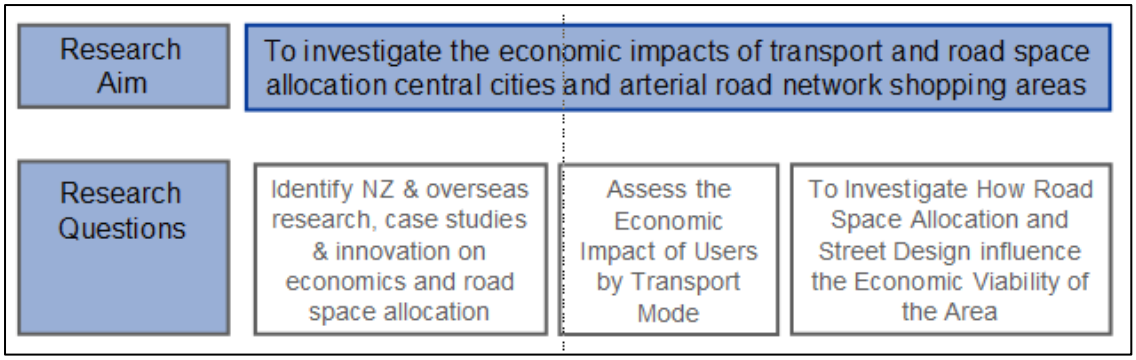
- the importance of walking;
- the importance of cycling;
- the importance of urban design and land use;
- the value of parking; and
- the economic impact of shoppers.

Therefore, we have also provided case studies that Beca have been involved, in which have similar characteristics to the town centres in the Selwyn District or are part of New Zealand research projects, which provide useful information for the design of local shopping centres.

5.3 Reallocation of Road Space Research

The Reallocation of Road Space Research Report (currently unpublished) investigates the economic impacts of transport and road space reallocation. The overarching aim being to provide evidence of how transport can contribute to creating localised economic growth and safe, vibrant and sustainable local and central city commercial centres. The research aims and objectives are provided in **Figure 5.1**.

Figure 5.1: Reallocation of road space research project aims and objectives



5.3.1 The importance of walking

Encouraging more walking is embedded in national policies. But, as highlighted in the Wellington Urban Design Strategy (1994). The strategy reflected the fact that while walking can still account for half of all journeys made within an urban area, the design of pedestrian facilities often lags behind the amenity levels provided for those who move by vehicle.

There are other significant benefits of encouraging walking in local areas for local business owners and operators. These include:

- More activity in the local area reducing the risk of burglary and requirements for additional security measures;
- Attraction of more business to the area to support the local economy; and
- Space saving! Providing for pedestrians – pedestrians require less space per person. Tolley (2003) shows that pedestrians require only 0.8m^2 compared to 60m^2 per car travelling at 40km/h

As noted in the New Zealand Pedestrian Profile (2000) "Creating walkable road environments is cost effective in comparison to other transport modes". For less than the cost of building a single kilometre of motorway, it is possible to achieve a safe, direct and pleasant road environment for pedestrians within an existing urban community of 50,000 people, as well as undertake the education, enforcement and promotion programmes required to further enhance safety and maximise its use.

Therefore it should be easy to justify schemes that reallocate space for walking trips. As noted by Litman (2004) conventional transport planning undervalues pedestrian improvements because of the low cost nature of schemes.

In a study conducted in SoHo, New York, the shoppers who value wider sidewalks over parking spent about five times as much money, in aggregate, as those who value parking over sidewalks. Or, as White puts it, "The people who are willing to forgo parking for sidewalks are the big spenders." (Schaller, 2006)

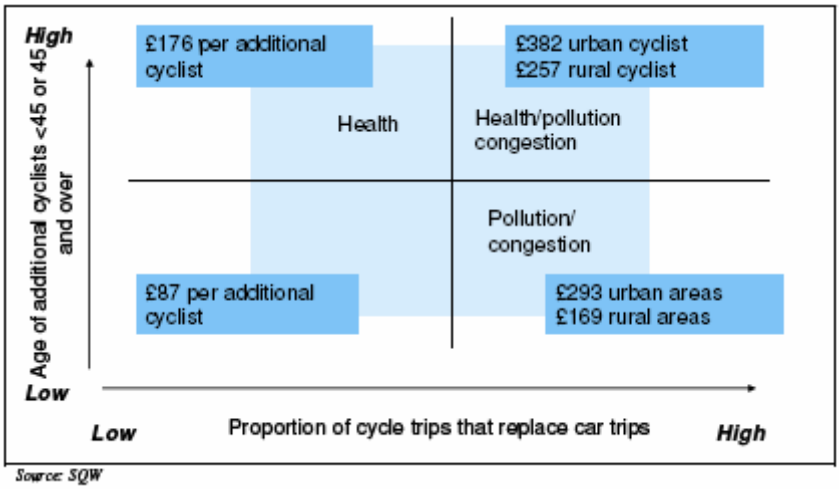
5.3.2 The importance of Cycling

The benefits of cycling as a mode of transport are widely understood and recognised across the globe. As such, cycling forms an integral element of the transport system to provide a genuine alternative travel choice and contributes to healthier lifestyles, benefiting both individuals and society as a whole.

A study conducted in the UK (SQW, 2007) aimed at examining the economic benefits of cycling and how it can contribute to policy objectives. The study based the development of savings per cyclist on a detailed breakdown of how they would impact on the following key criteria:

- improving health and fitness;
- reducing pollution; and
- tackling congestion.

Figure 5.2: Matrix of types and value of cyclists (Source: SQW, 2007)



The study calculated that if, by 2015, the number of cycle trips returned to the level of 1995, the savings in health, pollution and congestion would be around £500 million. An increase of 50% in the level of cycling – far below the original 1996 target of quadrupling trips by 2012 – but this would create total savings of more than £1.3 billion.

5.3.3 The Importance of Urban Design and Land Use

The New Zealand Ministry for the Environment commissioned research by McIndoe et al (2005) to establish if there is a persuasive case for the economic, environmental and social benefits of urban design. The research was effectively a literature review of relevant papers to identify where benefits have been assessed in overseas research. The evidence available suggested that high quality urban design will:

- Attract highly skilled workers and high tech businesses;
- Potentially add to the value of housing and retail property;
- Encourage walking and cycling – leading to health benefits; and
- Contribute to economic success over time.

The research highlighted that one of the key problems of creating areas with high quality urban design is the need for developers to minimise the cost of new developments and their limited appreciation of the wider benefits of good quality urban design. Often, the benefits of good urban design are not realised in the short term and therefore do not immediately benefit the developer. This situation can create a situation where “the market will provide poorer urban design than is socially optimal” (Mcindoe et al, 2005). Therefore the introduction of policies to ensure that quality urban design is considered in new designs is vital.

5.3.4 The Value of Parking

Often, car parking management is seen simply as a way to generate revenue for Local Councils. Implementing parking management schemes in urban centres can encompass time restrictions, parking charges or removal of on-street parking.

There are many reasons why parking may be limited in town centres. This may be to create wider footpaths, reduce traffic speeds and road crossing widths or to create cycle and bus lanes. The primary obstacle is that local businesses and the general public object to schemes as they perceive that measures that include the removal of parking spaces and road space will reduce business from passing traffic. There can also be objections from the general public when undertaking major changes to the local environment. Some of the more common objections are highlighted below.

- "My Business will die if there are no on-street parking areas outside my shop"
- "I have a right to park on street outside my own house"

In a study conducted on Prince Street in SoHo, New York, the shoppers who value wider sidewalks over parking spent about five times as much money, in aggregate, as those who value parking over sidewalks. Or, as White puts it, "The people who are willing to forgo parking for sidewalks are the big spenders." (Schaller, 2006) Only 7% of respondents indicated they would spend less.

The Reallocation of Road Space project is also undertaking an evaluation exercise of the importance of parking for shoppers which will be published in 2011.

5.3.5 The Economic Impact of Shoppers

Ultimately, business owners are focused on one thing – revenue. The main objection to road space reallocation projects is that they will negatively impact on local businesses. One of the key factors for the development of this perception is that local business owners often overestimate the importance of the car. The other side of this debate is that the value of pedestrians, including those who use public transport and cyclists is underestimated. These are discussed in greater detail in the following case studies from New Zealand and Europe.

New Zealand case studies

Figures 5.3 and 5.4 show average shopper spends and frequency of trips (by mode of travel) for two shopping centres in New Zealand, namely Colombo Street in Christchurch and Dominion Road (Eden Valley) in Auckland. This data was collected as part of shopper surveys conducted for the Reallocation of Road Space research project.

Figure 5.3: Shopper Total Spend by Mode of Travel (Source: Reallocation of Road Space Research Report, unpublished)

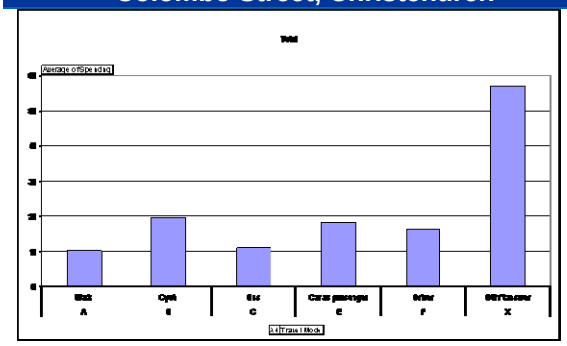
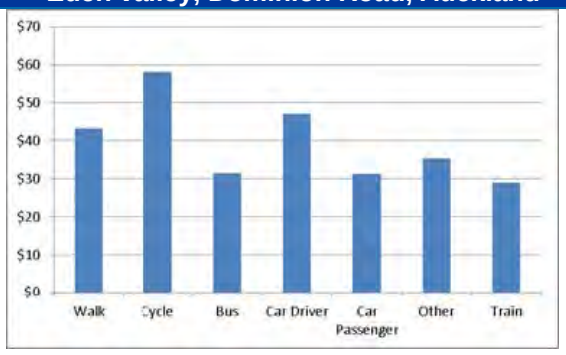
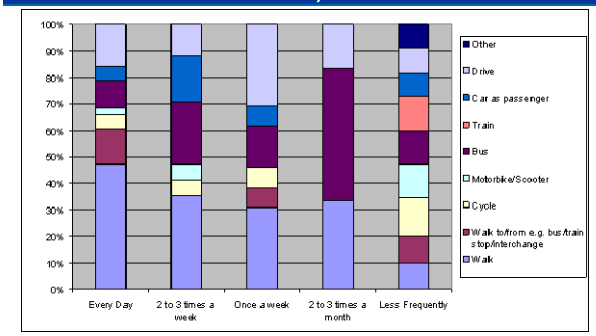
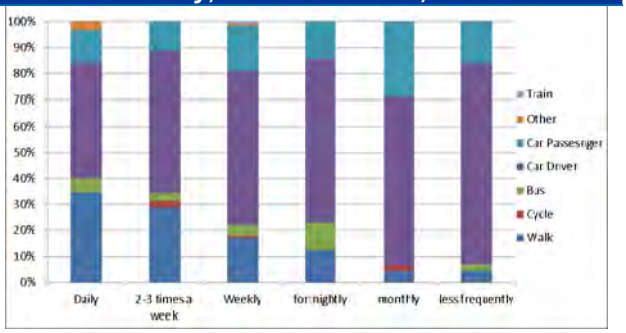
Colombo Street, Christchurch	Eden valley, Dominion Road, Auckland
	

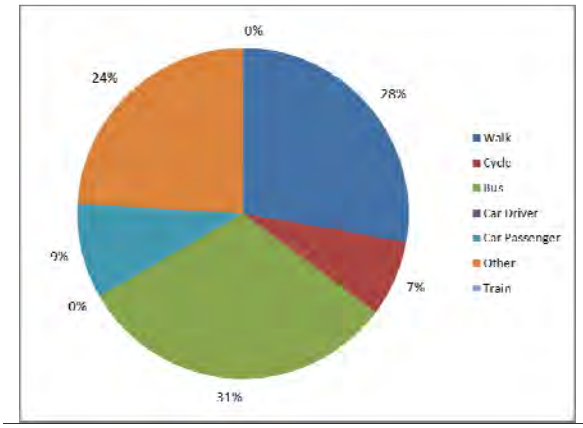
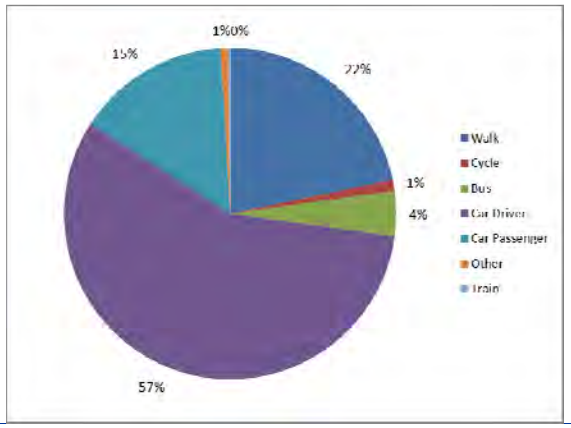
Figure 5.4: Shopper Trip Frequency by Mode of Travel (Source: Reallocation of Road Space Research Report, unpublished)

Colombo Street, Christchurch	Eden Valley, Dominion Road, Auckland
	

The data shown in Figure 5.3 shows that pedestrians and cyclists in these shopping centres were spending on a level comparable to that of car drivers and passengers. In addition, as shown in Figure 5.4, shoppers who travelled to the shopping centre on foot or by bike represented a significant proportion of people visiting the area regularly. Although the sample set for this data is limited, it does indicate that pedestrians, cyclists and public transport users have a positive impact in local shopping centres. The final Reallocation of Road Space research report will provide results from a more comprehensive data set, covering additional sites from New Zealand cities.

Based on results from the New Zealand household travel survey from 1989-2008, the Ministry of Transport (2009) estimates that walking contributes to 13% of the total time spent travelling, and that around 25% of people walk in New Zealand on any given day. Additional results from the shopper survey support these findings, and show that 28% and 22% of shoppers observed in the survey at Colombo Street and Eden Valley, respectively, walked to the shopping centre (see Figure 5.5).

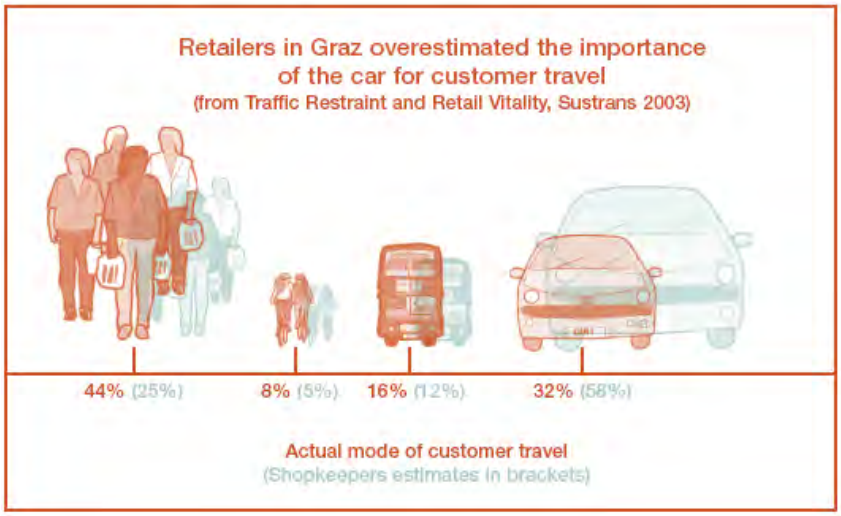
Figure 5.5: Shopper Mode of Travel (Source: Reallocation of Road Space Research Report, unpublished)

Colombo Street, Christchurch	Eden Valley, Dominion Road, Auckland
	

European case studies

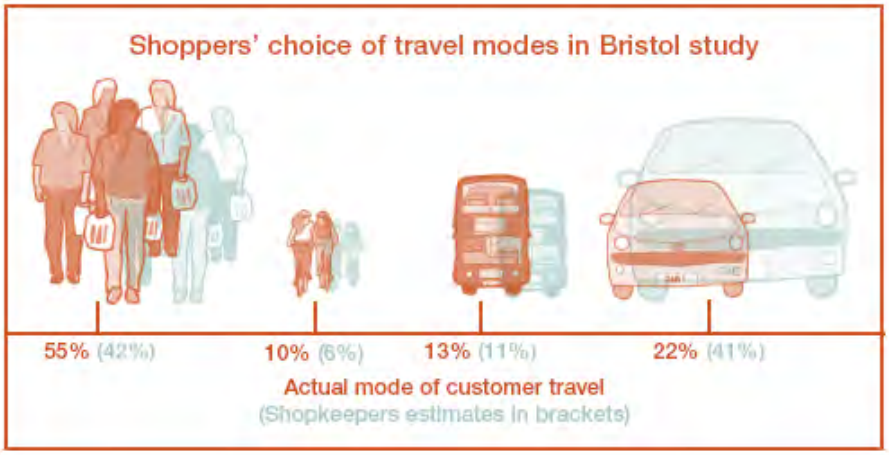
A study conducted in Graz, Austria (1991) evaluated the reality of how shoppers travelled in Graz, compared to the perception of how business owners thought people travelled. The results showed that business owners underestimated how many customers walked, cycled and used public transport. Figure 5.6 shows the results of the Graz Survey

Figure 5.6: Results of Shopper Travel Surveys – Graz, Austria (Source: Sustrans, 2006 – from Traffic Restraint and Retail Vitality, Sustrans, 2003)



This study was replicated in a local shopping centre along an arterial road in Bristol, UK (Sustrans, 2006). The study involved interviewing 126 retailers and 840 customers. The results again show that business owners overestimate the impact of car travel. The results are shown in Figure 5.7.

Figure 5.7: Results of Shopper Travel Surveys – Bristol, UK (Source: Sustrans, 2006)



Other key results from the survey showed that 86% of shoppers lived within 2 miles, compared to the perceived estimate of local trade from retailers of only 12%. The results of the shopper and retailer surveys in Graz and Bristol show that, on average, actual car usage was just over half of what retailers estimated it to be, and that retailers underestimated use of walking, cycling and public transport by 35%, 40% and 20% respectively.

5.4 New Zealand Urban Design & Transport Case Studies

Additional case studies have been provided in **Appendix C**, which provide details on joint urban design and transport schemes for local centres in the North Island. The case studies are for the following sites:

- Leamington; and
- Cambridge.

In addition, a case study highlighting the results of a NZTA research project, “Predicting Walkability”, have also been provided. The key outcomes from this research indicate that wide footpaths and trees make areas more attractive to pedestrians.

6 Conclusions & Recommendations

6.1 Summary of Previous Research

There is a plethora of research on the economic benefits of sustainable transport users and the reallocation of road space. Much of this research is based on providing evidence that investing in walking, cycling and public transport will achieve wider transport policy objectives to reduce congestion and reduce the impact on health. Some of the key findings from this research are outlined below.

- Useful research on the needs of shoppers and the perception retailers have of their shoppers needs have been conducted overseas. These studies indicate that that the impact of car trips and the need for parking is widely overestimated.
- The removal of traffic lanes does not necessarily result in increased traffic congestion and results in a significant reduction in crashes.
- Reallocating road space to other modes of transport also provides benefits for the wider community.
- European studies show that on average, business owners overestimate car use by approximately 20%.
- European studies show that on average, business owners underestimate walking trips to local shopping centres by 13 to 19%.
- The retention of on street car parking is a priority for retailers, although parking is a relatively low priority for shoppers (composition of shops is the priority).

6.2 Summary of Rolleston Case Study

Results from the shopper origin destination survey provide some useful insights into shoppers' behaviour at Rolleston Town Centre.

79% of shoppers drove to the centre, while 21% either walked or cycled. Of those walking, Tennyson Street (North), along with Rolleston Drive (West), were popular entry/exit points for pedestrians and cyclists.

The majority of people travelled to the centre for one specific purpose i.e. to visit one shop. The majority of the people surveyed were spending less than 30 minutes in the shopping centre. Based on the results of the workshop, this could be due to the fact that there is nothing attracting people to staying in the shopping centre longer.

The look and feel of the shopping centre was a major discussion point - members of the group presented the idea of creating uniformity in the local shopping centres within Selwyn. In particular, the presence of multi-coloured façades to shops is likely to reduce the overall look and feel of the shopping centre. In Rolleston, one idea was to ensure that all buildings had some "stone" within the design of the shop front. Also, changes to colour schemes of store façades, such as those of McDonalds and the Warehouse, to make them in line with the overall look of the shopping centre would help improve overall aesthetics of the centre This type of policy would require changes in local legislation and liaison with local businesses and landowners, as well as the wider Rolleston population.

It was identified that there were currently poor pedestrian and cycle links in Rolleston, the group highlighted the need to improve access for disabled users. The experience of one regular wheelchair user was recounted in the discussion. The person in question has to ride on road until they can get back onto the footpath to visit Rolleston Town Centre. The group also considered the

need for safe cycling facilities to and from town centres. Many people in the group liked the option of segregated routes.

6.3 Overall Conclusions

The shopping centre is typically being used as a utility “quick stop” for the local residents. The majority of people are spending less than 30 minutes and only visiting a single shop in the shopping centre, which would concur with the views of the focus group.

The results of the workshop reflected national and international research indicating that the type of shop is the most important factor in choosing where to shop. If the shop that people want to visit is in a shopping centre, they will go visit that particular shopping centre. All transport and urban design considerations are secondary to the shop choice. The group discussed the importance of “niche shops”, which were considered to be more important in local town centres compared to high street shops. The key outcome being that a shop that differentiates the shopping centre will attract more people. The current feel of Rolleston is that there is nothing that attracts people to the centre. Working with those who are using the area during the day and weekends will be vital to investigate what types of commercial activity will be supported in the area.

It is clear that individual users have different perceptions of how a shopping centre is used and what will make the area popular. Some of the urban design and transport measures do appear to be important in any design. These are:

- wide footpaths;
- pedestrian crossings;
- trees;
- planting; and
- coloured surfacing.

Overall the focus group was keen to see action to improve pedestrian and cycle facilities and to ensure that when new developments occur, high quality provision for disabled users, pedestrians and cyclists is included in any designs. The survey results show that more 20% of people walked to the centre, however observations show that a significant number of people at some point, travel to the shopping centre on foot, and thus the actual proportion of people walking to the town centre is likely to be much more. implies that most shoppers will,. This again highlights the need for facilities for non-motorised users in the area.

The group also commented that Council has presented several different concepts for the town; some of the measures are liked by the group, while others are not. Members of the group were keen to see uniformity in the growth of the town centre. Indeed, the idea of satellite shopping centres was considered important. This was a very informed group who could assist with the practical implementation of any future strategies.

The key outcome from the workshop identified that trees and public space are important. Creating an identity for local shopping centres, in particular, Rolleston was considered vital. The group discussion resulted in an overwhelming need to improve and prioritise pedestrian space, above the needs of providing car parking space. The group discussed the option of providing car parking either above or below the shopping centre or within walking distance of the shopping centre to allow the space outside the shops to be used for pedestrians, cyclists and disabled users and as meeting space.

6.4 Recommendations

The key recommendations from this research are outlined below.

- Any future design and amendments to the network should include provision for pedestrians, cyclists, disabled users and other vulnerable users e.g. mums with prams and those with limited mobility.
- Footpaths should be provided on both sides of the road in all new commercial and residential developments.
- The availability of open/active space i.e. areas to eat/meet are important to the local population in Selwyn – any future design should consider the inclusion of such areas.
- Consider the inclusion of street trees in any future designs for town centres.
- Include members of the youth council/younger community in any consultation.
- Be consistent with any information that is presented to the public.
- Collect data on the use of town centres to inform future planning and to be used to monitor the use of town centres in the Rolleston area.
- Ensure that any future commercial development in town centres is integrated with existing commercial and residential activity.

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Appendix A

Origin – Destination Survey Blank Form

1

Rolleston Town Centre – Shopper Origin/Destination Survey

Time: **Total duration of stay**: Under 30min ☐ 30 to 60min ☐ More than 60min ☐

Age of Respondent: Under 18 ☐ 18 to 24 ☐ 25 to 34 ☐ 35 to 44 ☐ 45 to 60 ☐ Over 60 ☐

Gender of Respondent: Male ☐ Female ☐

Surveyor:

Date:

Survey no:

Ref: NZI 4026861

Beca

2

Entry and Exit Points	Entry	Exit
Rolleston Drive West		
Othello Drive North		
Tennyson Street North		
Tennyson Street North (from recreational grounds)		
Tennyson Street South		
Rolleston Drive North		
Masefield Drive East		
Other		

3

Stopping Point	Comments
New World car-park	
Warehouse/shopping centre car-park south	
Warehouse/shopping centre car-park east	
Community Centre car park	
Coffee shop/beauty clinic car park	
On-street car park opposite shopping centre	
Other Where?	
Illegal parking - where	
Cycle parking - where?	

4

Mode of Travel Trip	Entry	Exit
Walk		
Cycle		
Car as passenger		
Driver		
Mobility scooter		
Other (please specify)		

Additional comments:

Shops visited (please tick)

BNZ ☐
Monkey spices ☐
Ray White ☐
KBs Bakery ☐
Whitcouls clearance ☐
Harcourts ☐
Subway ☐
Rolleston dry cleaning ☐
The Warehouse ☐

New World ☐
Dragon Fly café and gifts ☐
Rolleston pharmacy ☐
Rolleston dental centre ☐
Video ezy ☐
Charlottes hair design ☐
Dominos ☐
Blush beauty ☐
Aon insurance brokers ☐
Ewan Thompson Real estate ☐

Hammer hardware ☐
Henrys wines/spirits ☐
Rendezvous cafe ☐

Rendezvous cafe ☐

The Rock restaurant+bar ☐

Community centre ☐

Appendix B

Community Workshop Survey Forms

Roadspace Allocation in the Retail Streetscapes

Design Elements Rating Exercise

Name:_____ Date:_____

"Design Elements Rating Exercise"

1) How important do you perceive the following design features in encouraging you to spend time and money in local shopping centres?

On a scale of 1 to 5 rank the following:

	(1) **Very Unimportant**	**(2)** **Unimportant**	**(3)** **Neutral**	**(4)** **Important**	**(5)** **Very important**
Pedestrian facilities					
Wide Footpaths					
Pedestrian crossings					
Cycle Facilities					
Bicycle parking					
Provision of cycle lanes					
Bus Users					
Bus Stops					
Frequent bus services					
Parking					
Availability of on-street parking					
Availability of off-street car parks					
Parking Restrictions (time/cost)					
Urban Design					
Outdoor Public Seating					
Landscaping e.g. planting, sculptures etc					
Space for outside dining seating					
Other (please state)					

Shoppers Workshop

Roadspace Allocation in the Retail Streetscapes

Name:_____ Date:_____

"Shopping Centre Rating Exercise"

1) How would you rate these shopping centres?

Think about if the shopping centre would encourage you to spend time and money in the area.

	(1) Very Bad	(2) Bad	(3) OK	(4) Good	(5) Very Good
Photo 1					
Photo 2					
Photo 3					
Photo 4					
Photo 5					

2) Please rank these shopping centres in order of preference (1 = Worst, 5 = Best).

Photo 1	
Photo 2	
Photo 3	
Photo 4	
Photo 5	

Appendix C

Case Studies

Selwyn Urban Design Plan Change Case Studies

Case Study Compendium Pro-Forma

Section A – Issues & Objectives

Name	Waipa Town Concept Plans – Cambridge Town Plan				
Type *(tick one)*	Scheme (Installed)		Policy (Adopted)		
	Scheme (Proposed)		Policy (Proposed)	√	
Town/City	Cambridge – Waipa District				
Country	New Zealand				
Date Implemented	December				
Cost of Scheme *(approximate)*	50k fees				
Contact Information	Name:	Fiona Hill PROJECT MANAGER DISTRICT PLAN REVIEW WAIPA DISTRICT COUNCIL			
	Address	Waipa District Council			
	E-mail:	fiona.hill@waipadc.govt.nz			
	Tel No:	Phone: 07 872 0030 Ext 7506			
	Web Site:	www.waipadc.govt.nz			

Existing or Previous Site Description/ Context	The town centre of Cambridge is an existing retail and service centre located adjacent to SH1 on the northern side of the Waikato River which dissects the township. The town centre has a recognised character with this defined as a character area outlined within the District Plan. A series of guidelines outlines the desired character of developments within the character area. There is a range of small and large format shops within the town centre with the large format shops located on the periphery near the State Highway and fronting the river edge. The existing pedestrian amenity is of a high quality with wide paved footpaths, continuous awning cover (beyond the main street) .Arcades and lanes connect the main street retail to open public carpark areas behind. There are currently very few vacant retail sites within the town centre.
Existing or Previous Problem / Issues	Urban design aspirations for commercial areas are provided as a series of guidelines with development controls providing the basis on which development is assessed in the District Plan. These guidelines do not have the same weight as development controls. The effect of this is that some developments have been able to gain consent and have been built without regard to the surrounding character. Translating some of these guidelines into rules is seen as a way to provide desired urban design outcomes more

	weight. The character area is seen as too small and there is no control required of the larger format stores to consider the special character Cambridge has in their design.
Description and Objectives of Scheme/Policy	Town Concept plans were prepared through consultation with the community and elected members prior to the Waipa District Plan review. The town concept plans outlined key objectives and principles derived from the community consultation (evening visioning workshop, presentations to elected councillors) and provided framework plans and strategies by which these objectives could be implemented. Key outcomes from that process include: Cambridge Town Centre Framework – Landmarks, connections and links 1. Support the extension of the existing service lane up to Lake Te Ko Utu reinforcing the potential vistas to the south side of the domain. 2. Integrate vehicular/pedestrian/landscaped connection to increase opportunities for small format shops/offices and link to Anzac Street. 3. Create a cross connection to increase potential for small format shops; and rationalise visibility and access to a centrally located multi storey car parking building (providing a consolidated carparking area and releasing pressure from Empire Street) . 4. Support further delineation of framed vista to Lake Te Ko Utu to reinforce gateway condition. 5. Support the creation of a walking loop around town centre character area including the edge of the Karapiro Stream, along the Dr Seddon walkway and around the Lake Te Ko Utu. 6. Support opportunities to increase pedestrian priority at junction of Victoria Street and Empire Street either by closing off the road for a pedestrian square or shared street. 7. Recognise the potential to strengthen Maori heritage values associated with Lake Te Ko Utu through the preparation and implementation of an appropriate planting and art strategy throughout the park area. 8. Extend a pedestrian amenity area north along Lake Street to Lake Te Ko Utu and reinforce the route with small format retail and offi ce use that will assist in attracting pedestrian traffi c and greater vibrancy to the street. Cambridge Town Centre Framework – Land use 1. Support the development of land uses fronting onto streets to create complete blocks and support small format shops at ground fl oor for increased street vitality. Maximise ground fl oor retail use within the town centre and provide for office and residential at second and third storey. 2. Over the longer term support the development of a smaller block pattern and include street landscaping to reinforce key vistas. 3. Support the development of 'complete' blocks with the design of a car parking area coordinated with the perimeter block. 4. Increase the town centre character area boundary to create an edge between residential and commercial area and reinforce the special nature of existing town centre. The rationale for the increased area is that it will: • Allow for built form along Queen Street to change once the state highway designation is removed. • Reinforce the entry at Duke Street. • Reinforce the entry at Hamilton Road/ Victoria Street intersection. • Consider views from the south side of the river. • Account for the level change at the midblock between Fort Street and Williamson Street. • Support the creation of a complete perimeter block behind Victoria Street. • Provide guidelines for buildings (built form) around Victoria Park. • Provide for guidelines for compact residential along Fort Street. A council hearing process was undertaken before the Town Concept Plans were finalised in December 2009.The Waipa Town Concept Plans provided one of the inputs into the District Plan review and have been integral in the desire to have a much more design focus to the urban environments as

	opposed to the purely effects based approach of previous Plans. Elements that have been incorporated within the proposed District Plan are as follows; A site analysis statement is required for developments in identified precinct areas. The analysis includes the scale, setback, materials , building width and modulation. Also an outline on how the building will be in keeping with the existing context and character of the streetscape is required. The applications are then assessed against the character statements that have been outlined in schedules within the Proposed District Plan
Economic Analysis/ Justification	Economic Input into the Town Concept Plans was largely derived from Economic Profile Statements developed prior to the Town Concept Plan process - this statement outlined the current and future retail, office and industrial land requirements for the District. A diagrammatic depiction of the office and retail capacity was included in the Town Concept Plan to illustrate the location and height of future built form out to 2036 and 2050. These diagrams were presented to elected councillors and stakeholders and were valuable in demonstrating that the existing zoned area had enough capacity to accommodate future growth.
Key Success Factors	A key component of the Town Concept Plans is the graphical overview of the aspirations for the Town Centre (maps, cross sections and precinct studies). The three dimensional form studies graphically illustrating future commercial floor area was valuable to illustrate what the economic figures meant in real terms and how this could change to look and feel of Cambridge. Also critical to the success was the engagement with the community. Charette style, informal workshops at times of the day that suited the community (not just the consultants and council) were imperative to understanding the constraints and opportunities for Cambridge. This level of interaction resulted in a smooth process through the submissions and hearings phase. The consultation process also enabled thorough engagement with the NZTA. This resulted in the NZTA understanding the vision and aspirations the community had for Cambridge assisting in the development of a much more integrated approach to transportation planning and enabling the relevant information to feed that into their local projects such as the Cambridge Bypass.

Section B – Existing / Pre-scheme Description						(POLICY CASETUDIES PLEASE GO STRAIGHT TO SECTION C)
1	What type of road is the shopping centre/area located on?	Central City	Major Arterial	Minor Arterial	Collector	Other
2	What are the approximate AADT traffic flows along the route?		Over 10,000	6-10,000	2-6,000	<2,000
3	Is the shopping centre/area located along part of a wider cycling network / route? *If yes, please attach map/plan or provide weblink* *http://www.waipadc.govt.nz/NR/rdonlyres/3C4B23C2-6136-46A8-81EE-7110A6013B34/74997/WITS_FINAL_lowres_web.pdf* *Page 34*				Yes	No
4	a) Are there any marked cycle lanes?				Yes	No
	b) If yes, do they have a coloured surface?				Yes	No
5	Is the shopping centre located along a designated bus route? *If yes, please attach a map/plan or provide web link, and the approximate service frequency*				Yes	No
6	Is there any on street parking available outside the shops?				Yes	No
7	Is there any dedicated off street parking for customers available within 100m of the site e.g. car parks?				Yes	No
8	Are there any parking restrictions and/or parking fees? *If yes, please describe…*				Yes	No
9	Are there any dedicated pedestrian crossing facilities? *If yes, please describe…* Pedestrian crossings with buildouts integrated with landscaping, paving, street furniture location				Yes	No
10	Have there been any other recent landscaping/urban design enhancements in the area? *If yes, please describe…* A streetscaping project on the main street approximately 10 years ago. This included pedestrian refuges, footpath upgrade, pedestrian/ street lighting and street trees. Although this was a long time ago the quality of the upgrade has stood the test of time and has not dated and is well maintained.				Yes	No

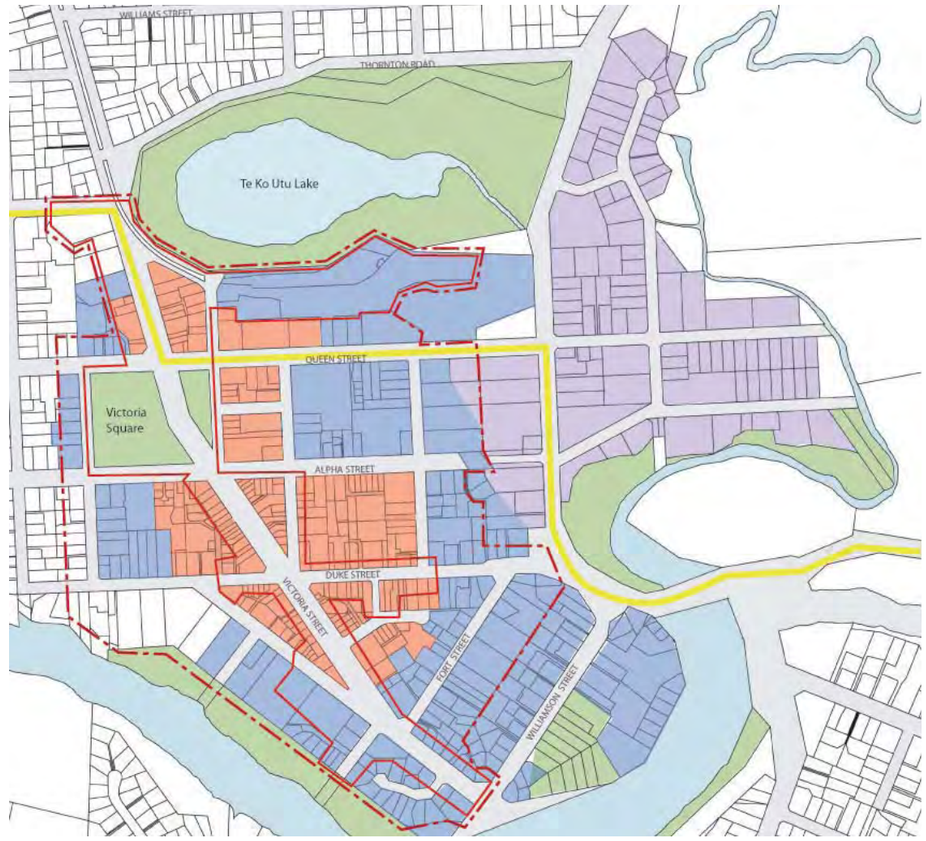
5.2 Town centre

5.2.1 Town Centre framework

This section outlines key strategies to achieve a consolidated town centre that assists in enhancing the social, cultural and economic wellbeing of Cambridge.

An enlarged Cambridge central character area is proposed as shown on the adjacent plan.

Figure 18: Cambridge Town Centre - existing zoning and character area boundary; and proposed character area boundary



It is the Council's desire that the Town Centre Character Area continues to grow as an attractive, lively and functional commercial heart for Cambridge and the surrounding area, with strong connections to the Waikato River, the Karapiro Stream, surrounding public spaces and local communities.

Strengthening pedestrian, cycle, public transport and vehicle links between north and south Cambridge by providing attractive routes between the town centre, Leamington and other key activity areas will provide opportunities to enhance community growth and access to local amenities. At a local level, continuing to enhance the streetscape and built form beyond Victoria Street will assist in creating a more cohesive town centre, and, with an appropriate hierarchy of streets, will facilitate efficient movement throughout the town.

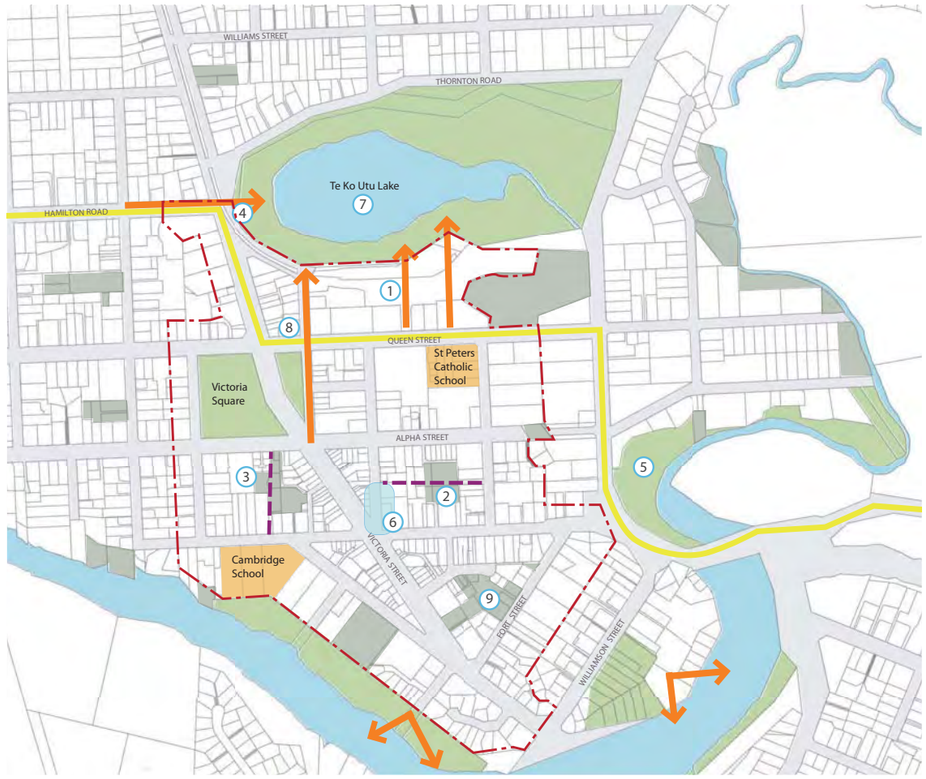
Figure 17: Victoria Streetscape and built form should be carried through to surrounding streets and blocks.

The town centre is the commercial hub of Cambridge and is well placed to remain so as it grows into the future. Growth should be encouraged while seeking to retain and build upon the key characteristics of the town centre that make it an enjoyable place for people to visit and carry out their daily activities. Enhancing the relationship and links to the Waikato River and connections with surrounding open spaces, including Lake Te Ko Utu, Victoria Square and the town belt to the east of the Albert Street industrial land will build upon the existing character of the town and provide ongoing opportunities for local growth and attracting visitors to the area. Providing a strong definition to the town centre commercial area and ensuring that commercial uses do not bleed out into the surrounding residential area (or dominate commercial ground floor areas) will assist in providing the area with a strong character and identity as a heart at the centre of Cambridge.

There are also opportunities to improve the Lake Crescent interface with Lake Te Ko Utu and link through to the Town Hall. The former railway land provides an opportunity in the longer term to extend smaller format shops. In the short-medium term the continued use of the area for large format retail is generally considered to be appropriate.

Cambridge's town centre identity will be enhanced through the provision of appropriate development that responds to local character and history, Maori values and the town's relationship with the landscape. Detailed design of streetscape, parks and buildings has the potential to enhance amenity at a local level, providing interest to the public realm and buildings and providing local residents with a feeling of ownership.

Figure 18: Town centre framework - landmarks, connections and links



1. Support the extension of the existing service lane up to Lake Te Ko Utu reinforcing the potential vistas to the south side of the domain.
2. Integrate vehicular/pedestrian/landscaped connection to increase opportunities for small format shops/offices and link to Anzac Street.
3. Create a cross connection to increase potential for small format shops; and rationalise visibility and access to a centrally located multi storey car parking building (providing a consolidated car parking area and releasing pressure from Empire Street) .
4. Support further delineation of framed vista to Lake Te Ko Utu to reinforce gateway condition.
5. Support the creation of a walking loop around town centre character area including the edge of the Karapiro Stream, along the Dr Seddon walkway and around the Lake Te Ko Utu.
6. Support opportunities to increase pedestrian priority at junction of Victoria Street and Empire Street either by closing off the road for a pedestrian square or shared street.
7. Recognise the potential to strengthen Maori heritage values associated with Lake Te Ko Utu through the preparation and implementation of an appropriate planting and art strategy throughout the park area.
8. Extend a pedestrian amenity area north along Lake Street to Lake Te Ko Utu and reinforce the route with small format retail and office use that will assist in attracting pedestrian traffic and greater vibrancy to the street.
9. Consider opportunities to create an improved pedestrian linkage between the town centre and Fort Street.

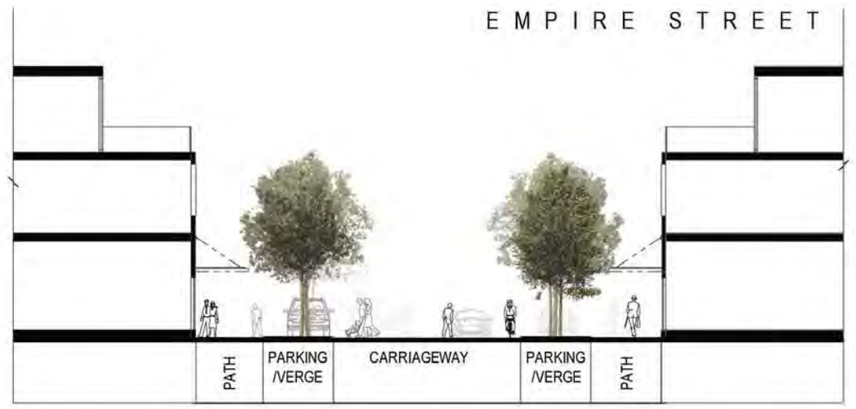


Figure 18: Indicative section through Empire Street, showing future shared surface / pedestrianised vision for the street.

1. Support the development of land uses fronting onto streets to create complete blocks and support small format shops at ground floor for increased street vitality. Maximise groundfloor retail use within the town centre and provide for office and residential at second and third storey.

2. Over the longer term support the development of a smaller block pattern and include street landscaping to reinforce key vistas.

3. Support the development of 'complete' blocks with the design of a car parking area coordinated with the perimeter block.

4. Increase the town centre character area boundary (as shown on Figure 13 and 17) to create an edge between residential and commercial area and reinforce the special nature of existing town centre. The rationale for the increased area is that it will:

    - Allow for built form along Queen Street to change once the state highway designation is removed.
    - Reinforce the entry at Duke Street.
    - Reinforce the entry at Hamilton Road/ Victoria Street intersection.
    - Consider views from the south side of the river.
    - Account for the level change at the midblock between Fort Street and Williamson Street.
    - Support the creation of a complete perimeter block behind Victoria Street.
    - Provide guidelines for buildings (built form) around Victoria Park.
    - Provide for guidelines for compact residential along Fort Street.

Figure 20: Town centre framework - land use

Existing Character Area Boundary
Proposed Character Area Boundary
State Highway
Road
Open / Public Space
Council Owned Land
Education Facilities
New Complete Block with Retail Edge
Existing Complete Block
Development Site (complete blocks could be considered
Streetscaping
1 - 4 See explanation on this page

5.2.2 Retail and office capacity

An assessment of the space required for specialty retail and large format retail has been made utilising the Waipa 2050 Economic Profile Statement as basis for the figures. In Cambridge it has been indicated that there is there is currently a shortage of large format retail supply. The existing large format retail is located within the town centre and general zones and there is capacity to locate the additional large format retail required out to 2050 within these areas and within the Carter's Flat area (provided that any such future use is provided for with strong pedestrian links to the town centre and adjoining open space).

The demand for retail and office space will grow as the population grows and as there is more opportunity to live, work and play within the town. As illustrated in the following table and schematic a suitable built form of three storeys in height will meet the demand for specialty retail and large office in the town centre zone out to 2050. Large format will continue to be provided for in the vicinity of Lake Te Ko Utu over the short and medium term and would be appropriately provided for in Carter's Flat (transforming the area from an industrial zone to a high amenity commercial zone through appropriate planning) over the medium to long term.

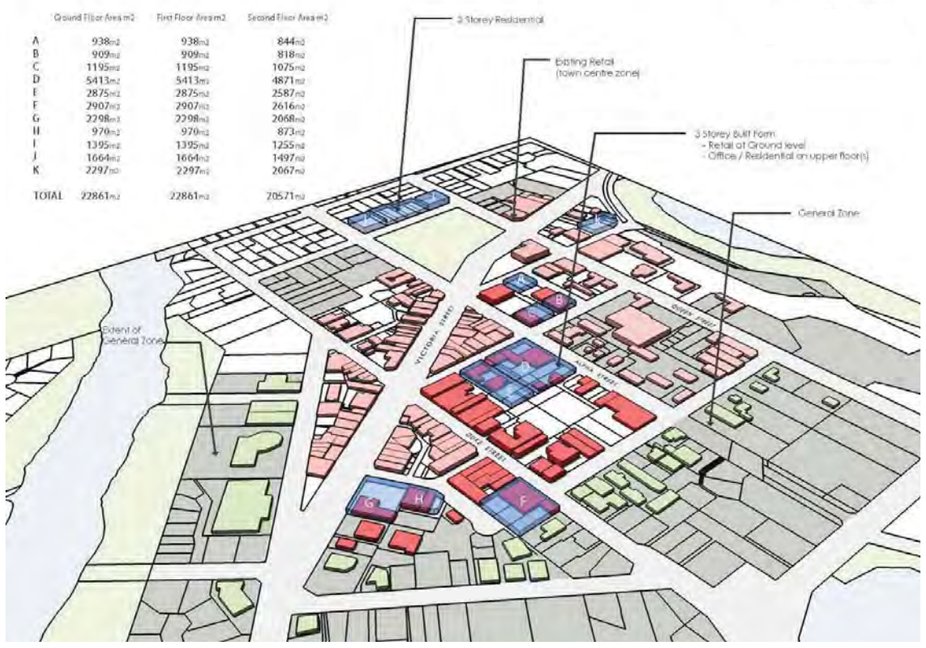


Figure 21: Schematics showing town centre capacity in 2036 (left) and 2050 (right).

Table 1: Retail and office demand(m²) to 2050

	Existing supply	Potential supply - next 5yrs	Demand 2006	Demand 2036	Required additional m² in 2036	Demand 2050	Required additional m² in 2050
Speciality retail	30000		26000	46000	16000	56000	26000
Large format retail		17000	(note 2) 20000	32000	15000	38000	21000
Total retail		47000	46000	78000	31000	94000	47000
Office					(note 3) 55000		77500

Table 2: Total retail and office capacity in 2036

	Ground floor	First and second floor
Floor area identified as required in 2036	31000	55000
Floor area shown in the schematic	23000	43000

Table 3: Total retail and office capacity in 2050

	Ground floor	First and second floor
Floor area identified as required in 2050	47000	77500
Floor area shown in the schematic	31000	63000

Notes:

[1] Figures are gross and indicate the building footprint

[2] Assumes a large format retail development occurs in Cambridge in the next 5 years.

[3] Up to half of the office development is small business in residential zone. The table shows the area within the general and town centre zone.

[4] These figures are based on work undertaken by Waipa District Council and may be amended as a result of a wider regional exercise undertaken on retail demand.

Selwyn Urban Design Plan Change Case Studies

Case Study Compendium Pro-Forma

Section A – Issues & Objectives

Name	Waipa Town Concept Plans - Leamington				
Type *(tick one)*	Scheme (Installed)		Policy (Adopted)		
	Scheme (Proposed)		Policy (Proposed)	√	
Town/City	Cambridge - Waipa				
Country	New Zealand				
Date Implemented	June 2010				
Cost of Scheme *(approximate)*	*50k*				
Contact Information	Name:	Fiona Hill PROJECT MANAGER DISTRICT PLAN REVIEW WAIPA DISTRICT COUNCIL			
	Address	Waipa District Council			
	E-mail:	fiona.hill@waipadc.govt.nz			
	Tel No:	Phone: 07 872 0030 Ext 7506			
	Web Site:	www.waipadc.govt.nz			

Existing or Previous Site Description/ Context	This case study outlines in more detail the strategy for the central area of Leamington - a southern suburb of Cambridge itself. The strategy and content within the Town Concept Plan have formed the basis of discussion with a developer in a pre-consent application stage. Leamington is the area of Cambridge located south of the Waikato River. Nearly half of the residential development in Cambridge is within Leamington however the area is serviced by only a small commercial node and with no local supermarket. As such all of the predominant shopping needs for Leamington residents requires a trip across the two bridges connecting Leamington to Cambridge central. The potential increase in local retail requirements including large format food retail has particular relevance with the business area in Leamington a focus of the Town Concept Plans showing the community and council desires for development in the area. The local centre is strip retail along the main street (Shakespeare Street) generally on one side with carparks located at the front of the shops. The range of shops include vet, medical centre, superette, petrol station, takeaways Behind the strip of retail on Shakespeare Street is an area of land with empty tavern, church and residential sites. It is the remainder of this block that would be have a supermarket development in the future.
Existing or Previous Problem / Issues	Urban design aspirations for commercial areas are provided as a series of guidelines with development controls providing the basis on which development is assessed in the District Plan. These guidelines do not have the same weight as development controls. The effect of this is that some developments have been able to gain consent and have been built without regard to the surrounding character. Translating some of these guidelines into rules is seen as a way to provide

	desired urban design outcomes more weight.
Description and Objectives of Scheme/Policy	Town Concept plans were prepared through consultation with the community and elected members prior to the Waipa District Plan review. The town concept plans outlined key objectives and principles derived from the community consultation (evening visioning workshop, presentations to elected councillors) and provided framework plans and strategies by which these objectives could be implemented. Key outcomes from that process include: Leamington local area strategy This strategy seeks to facilitate a safer, more pedestrian focused neighbourhood centre over the long term. The provision of compact residential development around the periphery of the neighbourhood centre will assist in building towards a vibrant centre that is commercially viable and a social and cultural asset to the wider community. Key Strategies 1. Consolidate Leamington centre on an east west axis 2. Enhance the centre's strategic connections with the wider community 3. Establish high amenity shared surface zones at the town centre on Burns and Campbell Streets 4. Enhance the relationship between commercial land use and adjoining open space 5. Provide for compact residential on the town centre periphery and adjacent to high amenity open space 6. Provide opportunity for up to 3000m_2 of commercial activity within the centre area A council hearing process was undertaken before the Town Concept Plans were finalised in December 2009.The Waipa Town Concept Plans provided one of the inputs into the District Plan review and have been integral in the desire to have a much more design focus to the urban environments as opposed to the purely effects based approach of previous Plans. Elements that have been incorporated within the proposed District Plan are as follows; A site analysis statement is required for developments in identified precinct areas. The analysis includes the scale, setback, materials , building width and modulation. Also an outline on how the building will be in keeping with the existing context and character of the streetscape is required. The applications are then assessed against the character statements that have been outlined in schedules within the Proposed District Plan
Economic Analysis/ Justification	Economic Input into the Town Concept Plans was derived from Economic Profile Statements developed prior to the Town Concept Plan process - this statement outlined the current and future retail, office and industrial land requirements for the District.
Key Success Factors	A key component of the Town Concept Plans is the graphical overview of the aspirations for Leamington (maps, cross sections and precinct studies). These have been useful in conveying to developers the urban design aspects that are seen as appropriate for development in Leamington. Also critical to the success was the engagement with the community. Charette style, informal workshops at times of the day that suited the community (not just the consultants and council) were imperative to understanding the constraints and opportunities for Cambridge. This level of interaction resulted in a smooth process through the submissions and hearings phase. The document has provided the basis for urban design discussions with

	developers prior to resource consent being lodged for developments. Through this process recommendations council's aspirations for the interface with the public realm have been able to be discussed and incorporated early in the design process.
Lessons Learnt	More discussion in the Town Concept Plans on the mechanisms by which the objectives and principles could be implemented within the District Plan would have been helpful. This would have assisted the team developing the proposed District Plan as well as providing the community more information on how their ideals could be translated into built outcomes. This information was ultimately developed by the Town Concept Plan team through the District Plan review phase.

Section B – Existing / Pre-scheme Description						(POLICY CASETUDIES PLEASE GO STRAIGHT TO SECTION C)
1	What type of road is the shopping centre/area located on?	Central City	Major Arterial	Minor Arterial	Collector	Other
2	What are the approximate AADT traffic flows along the route?		Over 10,000	6-10,000	2-6,000	<2,000
3	Is the shopping centre/area located along part of a wider cycling network / route? *If yes, please attach map/plan or provide weblink* *http://www.waipadc.govt.nz/NR/rdonlyres/3C4B23C2-6136-46A8-81EE-7110A6013B34/74997/WITS_FINAL_lowres_web.pdf* *Page 34*				Yes	No
4	a) Are there any marked cycle lanes?				Yes	No
	b) If yes, do they have a coloured surface?				Yes	No
5	Is the shopping centre located along a designated bus route? *If yes, please attach a map/plan or provide web link, and the approximate service frequency*				Yes	No
6	Is there any on street parking available outside the shops?				Yes	No
7	Is there any dedicated off street parking for customers available within 100m of the site e.g. car parks?				Yes	No
8	Are there any parking restrictions and/or parking fees? *If yes, please describe…*				Yes	No
9	Are there any dedicated pedestrian crossing facilities? *If yes, please describe…*				Yes	No
10	Have there been any other recent landscaping/urban design enhancements in the area? *If yes, please describe…* *A streetscaping project on the main street (Shakespeare Street was completed in 2009. This included pedestrian refuges, footpath upgrade, pedestrian/ street lighting and street trees*				Yes	No

5.6.2 Leamington

This strategy seeks to facilitate a safer, more pedestrian focused neighbourhood centre over the long term. The provision of compact residential development around the periphery of the neighbourhood centre will assist in building towards a vibrant centre that is commercially viable and a social and cultural asset to the wider community.

Key Strategies

1. Consolidate Leamington centre on an east west axis
2. Enhance the centre's strategic connections with the wider community
3. Establish high amenity shared surface zones at the town centre on Burns and Campbell Streets
4. Enhance the relationship between commercial land use and adjoining open space
5. Provide for compact residential on the town centre periphery and adjacent to high amenity open space
6. Provide opportunity for up to 3000m^2 of commercial activity within the centre area

Figure 35: Strategy for Leamington

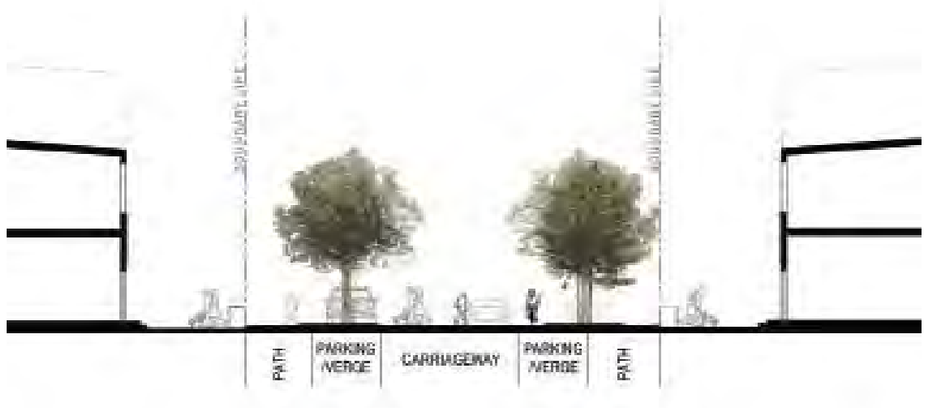


Figure 36: Section AA – Indicative section through compact residential street

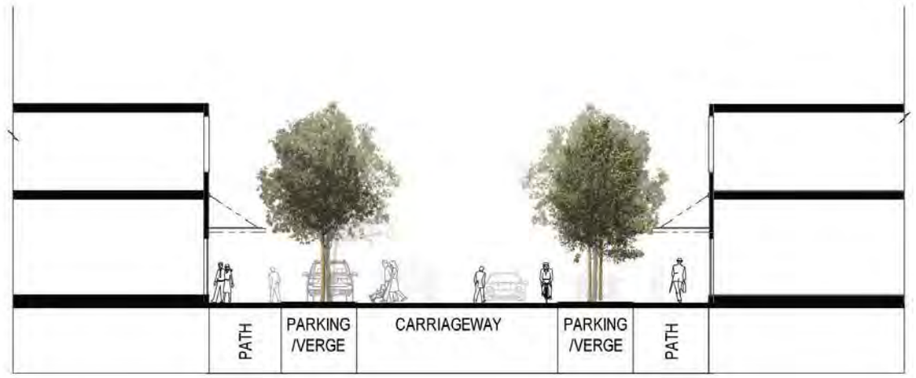


Figure 37: Section BB – Indicative section through Campbell Street neighbourhood centre

Selwyn Urban Design Plan Change Case Studies

Case Study Compendium Pro-Forma

Section A – Issues & Objectives

Name	Predicting Walkability				
Type *(tick one)*	Scheme (Installed)		Policy (Adopted)		
	Scheme (Proposed)		Policy (Proposed)		
	Research ×				
Town/City	Auckland, Wellington, Christchurch, Gisborne				
Country	New Zealand				
Date Implemented	N/A				
Cost of Scheme *(approximate)*	N/A				
Contact Information	Name:	*Rohit Singh*			
	Address	Level 3, PwC Centre, 119 Armagh Street, Christchurch			
	E-mail:	rohit.singh@beca.com			
	Tel No:	+64 3 366 3521			
	Web Site:	www.beca.com			
Existing or Previous Site Description/ Context	*Urban designers and many other professionals, including many transport professionals, acknowledge that walking is a very important mode of transport in most urban areas and that the amount of walking that takes place is closely related to how liveable a city or town is considered to be. Walkability is a term that is used to specify "the extent to which the built environment is walking friendly". In New Zealand the Community Street Review (CSR) process has been developed to assess the level of walkability of footpaths and road crossings. This method involves taking a group of pedestrians along a route consisting of a number of footpath sections and road crossings and asking them to rate across a number of factors (eg. safe from falling and safe from traffic) how they felt on a scale of 1 to 7. Based on the ratings across the group and each factor, each section is given an average walkability score.*				
Existing or Previous Problem / Issues	*While there have been a number of CSR undertaken across New Zealand and it remains an effective means to measures walkability, transport professionals are interested in quantifying what elements of the walking environment and walking experience lead to high levels of walkability and hence more walking. From this they can develop walking environments that are more attractive for walking.*				
Description and Objectives of Scheme/Policy	*This study looked at the linkage between the walkability scores from CSRs and the physical and operational characteristics of a footpath and road crossing. In addition to layout information, such as width of footpath and road crossing distance, it considered road noise, urban design features, amount of greenery and even the temperature and amount of wind. In total 107 variables where considered across each of the regression models and 17 variables were found to be important.*				
Economic Analysis/ Justification	*N/A*				
Key Success Factors	*The most important factors affecting the walkability of a path were footpath condition, quantity of greenery, presence of comfort features, deviation in path and adjacent vehicle speed.* *Footpath condition and presence of comfort features were the two biggest*				

	factors that reduced the risk of falling on a path, while greenery, footpath condition, weather (wind) and presence of comfort features significantly affected its pleasant nature. *Crossing type, vehicle speed, visibility to traffic and footpath condition were the most important factors affecting walkability of road crossings, and featured in all models except those for zebra crossings and delay. The coefficient for crossing type suggests that traffic signals are considered to be more walkable as compared to zebra or uncontrolled crossings. The presence of a central island was also shown to positively affect the walkability of a crossing.* *Reduction in vehicle speeds and improved visibility result in pedestrians feeling safer while crossing. Signalised crossings were found to be safer and had less delay than zebra and uncontrolled crossings.*
Lessons Learnt	• *Trees and wide footpaths are important to pedestrian.* • *The sample set used in this study did not include a sufficient number of sites at LOS D, E and F to enable closer assessment and prediction of walkability scores for these sites. Future studies should focus on data collection from a broad range of sites, including an adequate number of sites having low pedestrian LOS ratings.* • *The data utilised for developing the walkability prediction models was obtained from CSR surveys that were held at various times during the day. Future studies could look at examining the walkability of sections by time of day, especially in busy CBD areas where the walking environment can differ markedly between peak and non-peak times.* • *Further research is also recommended on analysis of walkability for able-bodied pedestrians and those with physical impairments.*

Section B – Existing / Pre-scheme Description						(POLICY CASETUDIES PLEASE GO STRAIGHT TO SECTION C)
1	What type of road is the shopping centre/area located on?	Central City	Major Arterial	Minor Arterial	Collector	Other
2	What are the approximate AADT traffic flows along the route?		Over 10,000	6-10,000	2-6,000	<2,000
3	Is the shopping centre/area located along part of a wider cycling network / route? *If yes, please attach map/plan or provide weblink*				Yes	
4	a) Are there any marked cycle lanes?				Yes	No
	b) If yes, do they have a coloured surface?				Yes	No
5	Is the shopping centre located along a designated bus route? *If yes, please attach a map/plan or provide web link, and the approximate service frequency*				Yes	No
6	Is there any on street parking available outside the shops?				Yes	No
7	Is there any dedicated off street parking for customers available within 100m of the site e.g. car parks?				Yes	No
8	Are there any parking restrictions and/or parking fees? *If yes, please describe…*				Yes	No
9	Are there any dedicated pedestrian crossing facilities? *If yes, please describe…*				Yes	No
10	Have there been any other recent landscaping/urban design enhancements in the area? *If yes, please describe…*				Yes	No

Section C - Evaluation of Impacts

Assessment Criteria	Qualitative Rating *(1 – negative impact/decrease to 5 - significant impact/increase)*					Comments
	 1	2	 3	4	 5	
Encourages more walking					Đ	
Encourages more cycling			Đ			
Encourages more public transport use			Đ			
Change in local trade (local shopping trips)				Đ		*indicate if increased or decreased*
Change in passing trade				Đ		*indicate if increased or decreased*
Change in retail unit rental values				Đ		*Please indicate if increased or decreased*
Increased the overall amount of people visiting the area					Đ	
Improved perception of overall shopping environment / attractiveness					Đ	
Public perception of safety				Đ		
Actual safety e.g. CAS			Đ			
Others *(please describe)*						

Section D – Supplementary Information

Figure 1 depicts the rating scale used to rate the walkability of a site in the Community Street Reviews, along with the implied Level of Service categories.

Figure 1 - Community Street Review – Level of Service

Opinion	Score	Pass/Fail	Numerical Grade #	Level of Service	Represented by Colour
Very Good	7	Pass	>=6	A	Green
Good	6		>=5 and <6	B	Green
Slightly Good	5		>4 and <5	C	Green
Neutral	4		=4	N	White
Slightly Bad	3	Fail	>=3 and <4	D	Yellow
Bad	2		>=2 and <3	E	Blue
Very Bad	1		<2	F	Red

Figure 1 provides a general guide to assessing the walkability ratings predicted by the various models reported on in this document. A predicted walkability rating of 4 is considered to be at a 'neutral' level, with scores higher and lower than 4 representing 'good' and 'bad' levels of walkability of a particular site.