



Taking responsibility for
a sustainable future



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Lincoln Envirotown Survey Results 2006

State-of-the-Town Report

26 September 2006



Sustainable Management Fund

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1. Introduction

The objective of the Lincoln Envirotown Survey was to gain information about the actions, knowledge and requirements of the Lincoln community as related to the progress of Lincoln towards being a sustainable township. The Lincoln Envirotown Trust will use the gathered information to design learning and action activities. In addition, Landcare Research will use the gathered information for research purposes.

The study was supported / funded by the Sustainable Management Fund (MfE), Landcare Research and staff members of Lincoln University.

1.1 Methodology

The survey was carried out using structured questionnaires that were sent to residents, business owners and other community members. The questionnaires included both multiple choice and open-ended questions and queried both qualitative and quantitative information.

The survey was designed by the Lincoln Envirotown Trust in cooperation with Landcare research and staff of Lincoln University. The Lincoln Business Association (LBA) and the Lincoln Community Committee (LCC) reviewed a draft of the survey and included additional topics. In addition, the students of Lincoln High School added a question regarding the reduction of plastic shopping bags. A pilot-test was carried out with a number of residents and business owners. The survey questionnaire is provided in Appendix 1.

Involving human participants, the survey required the approval of the Landcare Research Social Ethics Committee. The application to the Ethics Committee is provided in Appendix 2.

The survey questionnaires were distributed together with the newsletter of the Lincoln Community Committee. In addition, a number of questionnaires were distributed to staff of Landcare Research. A prize was provided as an incentive to complete and return the questionnaire. To collect the completed questionnaires, deposit boxes were provided at the Library / Service Centre and the supermarket. In addition, a number of questionnaires were returned to Landcare Research.

105 of about 1000 distributed questionnaires were returned. Given a number of approximately 894 households in Lincoln¹ and the fact that most of the questionnaires were completed by Lincoln residents, about 11-12% of the households responded to the survey.

All returned questionnaires were analysed. To ensure the participants' anonymity, names and contact information, which were collected to be put into to draw for the prize, were separated from the questionnaire before the analysis. In analysing the quantitative information, the data was partly coded, entered into a database, and illustrated in tables and graphs. In analysing the qualitative information, thematic categories were created. The information gathered from the interviews was broken down into these categories and written up as results. This report presents both the qualitative and quantitative results of the survey. In addition, secondary data regarding the population of Lincoln is provided in the following subsection.

¹ Information from Selwyn District Council, 26.09.06.

2. The residents' attitudes towards their community

The first question of the Lincoln Envirotown Survey was open-ended and asked the residents about what they liked and disliked about their community and why they had chosen to live in Lincoln. The respondents were generally very positive about Lincoln township and perceived negative issues were limited. The setting and character of the community, the community feeling, the relatively clean environment, the reserves and walkways, and the fact that Lincoln is a relatively safe place were mentioned as the most important assets of Lincoln. While some residents described the range of existing commercial services and community facilities as ideal, others would like to see further development. The growth of Lincoln and especially the rapid development of new subdivisions are the subject of many community and environmental concerns.

2.1 Setting and character of the community

There was general agreement among the respondents that the rural character or 'village' atmosphere of Lincoln, its setting in the countryside, its small size, its quietness and peace are the most important qualities of their community. Most residents enjoy living in a rural, quiet locality out of the city. The small size of the town is perceived as important; not only because it supports the quiet, rural character and community feeling of Lincoln, but also as it facilitates easy pedestrian access to work, shops and community facilities within Lincoln. Only one of the 105 respondents perceived the size of Lincoln as too small. The "beautiful views" of the Port Hills was also described as a positive feature.

*Why have you chosen to live in Lincoln?
Please comment about what you like or don't like about living here.*

- * *"The village atmosphere"*
- * *"Like rural character"*
- * *"Quiet, peaceful community"*
- * *"Like the country atmosphere"*
- * *"Rural setting, quiet"*
- * *"Can walk to work and to shops, community is relatively small"*

Many respondents perceived the distance to Christchurch as ideal. On the one hand, Lincoln is situated far enough away from the city to provide the character of a quiet, rural community. On the other hand, it is still close enough to Christchurch that people can commute to the city for work and to use the various other benefits of the city (such as shopping facilities, cultural events etc.). In addition to the central business district of Christchurch, the sub-centres of Hornby, Halswell, and Rolleston provide important shopping and service facilities to Lincoln residents. Only three respondents perceived the distance to Christchurch as too far.

Why have you chosen to live in Lincoln? Please comment about what you like or don't like about living here.

- * *"Qualities of a small town with the convenience of a large city close by"*
- * *"Christchurch is too busy and loud, Lincoln is quiet, but close enough to city to benefit from airport, theatre and restaurants"*
- * *"Close to Christchurch and accessible to shopping at Hornby, Halswell, and Rolleston"*

2.2 Community feeling and social relations

In addition to the location, the rural setting, and the small size of the town, the ‘sense of community’, or the ‘community atmosphere’, was highlighted as a very important feature of Lincoln. Many residents described Lincoln as a ‘friendly community’ with ‘good neighbourhoods,’ a place where people know each other. However, some long-term residents complained about a declining community feeling within the past 5 to 10 years. With the influx of many new people and due to the fact that many residents commute to Christchurch on a daily basis, they perceived that the sense of community had decreased.

- * *“The ‘community’ feel is great.”*
- * *“The small village community spirit.”*
- * *“A caring village life.”*
- * *“Small community where you can get to know people that pass you when you are out and about.”*
- * *“Like village atmosphere of 19 years ago!”*
- * *“Would prefer that Lincoln village was not just a dormitory suburb but had its own strong identity so people had more pride in the place and respected it more.”*

Three respondents commented favourably on the diversity of people living in Lincoln. They perceived the balance of young students, families and retired people, and the fact that the community includes people from different nationalities as a positive aspect.

Few residents mentioned conflicts within the community. However, one resident pointed out that the “attitude of some towards new residents is less than welcoming”. Another respondent complained about “students who wreck [...] fences and mail boxes on the way home from the pub at night”.

2.3 Quality of the environment and recreation areas

Compared with a central city location, Lincoln’s environment is generally less polluted. This was noted by seven respondents, who mentioned the relatively good air quality, or the location ‘out of the Christchurch smog’, as an important attribute of living in Lincoln. Interestingly, this issue was considered important enough to mention when respondents were asked what they liked about their community. Additionally, many residents find it important to live in a quiet area with relatively low levels of traffic noise.

- * *“No traffic noise.”*
- * *“Out of the Christchurch smog.”*
- * *“Do not wish to live in the Christchurch city area (too busy and big and has pollution problem which Lincoln does not have).”*

In addition to low pollution levels, the access to ‘natural’ areas or ‘reserves’ close by was mentioned as an important aspect of living in Lincoln. Many residents highlighted the Liffey reserve and access to walking tracks as a special feature of the community.

- * *“[The Liffey] is the jewel in Lincoln crown.”*
- * *“Love the Liffey and walkways.”*
- * *“The Liffey – great walking areas.”*
- * *“We like the Liffey reserves and walkways, playground, linkages and access to feeding birds. A great place to raise young children.”*

2.4 Security and crime

There was general agreement among the residents that security problems are not a great issue in Lincoln. Nine respondents mentioned the feeling of safety for themselves and their children as an important plus point of the community. However, two residents were concerned about a recent increase in crime in the community.

- * *“...it is a delightful area to live in. Peaceful, low crime rate etc.”*
- * *“The feeling of safety for myself and my children is so important.”*
- * *“Kids have ability to move safely from one end of the village to the next.”*

- * *“Came 20 years ago, thought it was a good ‘family’ place, no crime etc. This has changed in the last 5-10 years. Burglaries, vandalism probably similar to Christchurch now.”*
- * *“Don’t like the small element of crime that is starting to creep in.”*

2.5 Range of commercial services and community facilities

Asked for what they liked and disliked about Lincoln, many residents commented about the existing range of commercial services and community facilities. The great majority of these comments were positive. 16 respondents found the existing range of amenities sufficient or very good. The existence of some basic shopping facilities, doctors, a post office, a bank, a library, a church, and sports facilities [...] were perceived as “very good” for a rural town.

- * *“Quiet village with all necessary amenities (great).”*
- * *“The good range of shopping and business facilities.”*
- * *“Good selection of core services, e.g. doctor, dentist, optician, library etc.”*
- * *“Most requirements are met (shopping, medical, recreation opportunities).”*
- * *“Medical centre and Lincoln University Recreation centre were incentives to move to Lincoln.”*
- * *“Has most things we need/use.”*
- * *“Everything we need within walking distance.”*
- * *“The services here are exceptional.”*

The close proximity of quality schooling for residents living in Lincoln was highlighted as a very positive aspect of the township. As many as ten residents mentioned that there was a ‘great choice of schooling in the area’ and that the schools in Lincoln had a good reputation. For two residents the choice of schooling was even a major motivation to move to Lincoln.

- * *“Lincoln High School provided the main reason to shift here from Christchurch as we didn’t live in an appropriate High School zone in Christchurch. Lincoln High School has a good name.”*
- * *“Great choice of schooling in the area.”*
- * *“Moved here for and schooling.”*
- * *“Very good schools.”*

Seven residents identified satisfaction with a “very good bus service to Christchurch” Only one respondent complained about the frequency of the bus service on weekends. In addition, the wide variety of leisure and sport activities, and especially the Lincoln University Recreation Centre, were mentioned as an important plus point of Lincoln. Last but not least, the Christmas Parade was said to be a favourite.

- * *“Lincoln has an excellent bus service.”*
- * *“A good bus service – very important.”*
- * *“Excellent sports facilities apart from swimming pool.”*

Few respondents (4) found that the range of existing shopping and community facilities was inadequate. In particular, a public swimming pool and a supermarket were mentioned as facilities that many residents would like to have in their community. In addition, the library was perceived as too small by some respondents.

- * *“There’s no pool at uni or in town.”*
- * *“Inadequate main shopping centre [...] which we use only for emergency purposes.”*
- * *“Barely adequate library.”*
- * *“Minimal business infrastructure: have to go to town for bulk of shopping. This in some way may have led to reduced community feel as everyone has to travel to groceries etc. rather than meet up at the local.”*

The issue of a possible future expansion of the shopping and business centre and the residents’ attitudes towards such developments will be discussed in more detail in Chapter 8.3.

2.6 Housing development and growth

Lincoln is currently undergoing considerable growth and development in terms of housing. This has raised environmental and community concerns among the residents. As many as 20 respondents used the first open-ended question of the survey, which was about what they liked and disliked about Lincoln, to express their concerns about the rapid population growth,

- * *“I love living here but if it develops too much or turns into being like another suburb of Christchurch, I will move further out, e.g. [to] Leeston.”*
- * *“The only concern we have is that Lincoln does not get too big that it loses its small town appeal.”*

the large number of new subdivisions, and a lack of overall planning. Many residents fear that the influx of increasing numbers of people and the style of the new subdivisions could undermine the community feeling and will change the ‘village’ appear of Lincoln in favour of a more sub-urban character.

While the population growth provides opportunities for the future development of shopping and service facilities, and some residents have expressed positive attitudes towards a possible development of the commercial infrastructure, other residents are concerned that this would further deteriorate the quiet, rural character of Lincoln and generate more traffic.

The issues of housing and commercial development will be discussed in more detail in Chapters 8.2 and 8.3.

2.7 Traffic and road infrastructure

The question about what people like and dislike about their community was used by some respondents to express their concerns about the increasing traffic, the lack of parking, and the lack of or inadequate maintenance of foot paths and cycle ways. These issues will be examined in Chapter 8.4.

2.8 Conclusion

In conclusion, the majority of the surveyed residents have a positive attitude towards living in Lincoln. The rural character of the community, the small size, quietness and friendliness of the town, the community feeling, the Liffey Reserve with its walkways, the relatively good air quality, the low levels of crime, the good range of commercial and community facilities including schools, the good bus service, and the ideal distance to Christchurch and other sub-centres were described as the major strengths of Lincoln.

- * *“We have never regretted living out here.”*
- * *“Gives kids a chance to live closer to nature, enjoy good schools in a good environment.”*
- * *“Really love living in Lincoln.”*
- * *“Shifted here 18 months ago because of the good things we had heard about the area from friends who already lived here.”*
- * *“Like living here.”*
- * *“Nothing we don’t like.”*

These qualities of the community attract increasing numbers of people. Lincoln is located within a zone of rapid suburban development that surrounds Christchurch. As a result, the community is currently undergoing rapid housing development. Many residents are concerned that the rapid population growth could undermine the community feeling and that the quiet, rural character of their community could get lost in favour of a suburban like atmosphere. Some long-term residents stated that the community feeling had already weakened within the past few years. In addition, the recent increase in crime is a subject of concern.

Some residents suggested an expansion of the commercial and community facilities as positive developments. In particular, they proposed a public swimming pool, a supermarket, and an upgrading of the library.

3. Why people have chosen to live in Lincoln

For many residents, the qualities of Lincoln that were discussed in Section 1 were a secondary incentive to move into the community. The primary (or more personal) reasons that made people decide to move to Lincoln can be grouped into four major categories: firstly, work (or study) in Lincoln or close by; secondly, family members and friends living in the area; thirdly, retirement, and finally, the quality and affordability of housing. Two thirds of the respondents had moved to Lincoln due to one of these four reasons.

3.1 Work (or study) place in the area

27 respondents mentioned that a work place in Lincoln or close by either had been a major incentive to move to Lincoln or was perceived as a positive aspect. Many residents had chosen to live close to their work place to reduce their travel time and costs, and to be able to walk to their work. In addition, 9 respondents had chosen to live in Lincoln specifically because they either work or study at Lincoln University.

- * *“Initially moved to Lincoln to attend university.”*
- * *“Studying at Lincoln uni.”*
- * *“Work in Lincoln, can save money and time by walking to work.”*
- * *“Initially moved here because of employment.”*
- * *“Work close by, like to walk to work.”*
- * *“Closer to work and high school for all family members (can now walk or bike).”*
- * *“Rural community close to the university where I work.”*

3.2 Family members and friends

For 13 residents, family members and friends who already lived in or around Lincoln were a major incentive to live in Lincoln.

- * *“Family lived nearby.”*
- * *“Family ties.”*

3.3 Retirement

Another incentive to move to Lincoln is that it is perceived as a good place for retirement, especially by people from neighbouring areas. 8 respondents stated that they had chosen Lincoln as a place for their retirement. Most of these respondents had lived (and ‘farmed’) in the rural areas around Lincoln. They had been involved in the local Lincoln clubs for many years, had used many facilities (for example schools, medical services, and shops) and had friends in the area. In other words, they were very familiar with the community, and chose it as a place for their retirement as it provided all essential amenities like basic shopping facilities, medical services etc.

- * *“Because it is close to where we farmed, has essential amenities for retirement, friends, activities.”*
- * *“Suitable place for retirement.”*
- * *“When I moved to Lincoln, it was a nice mixture of town and country with a very good infrastructure, the important things close at hand, it was a retirement village.”*
- * *“Have lived 30km from Lincoln as a farmer’s wife [....]. During frequent visits to Lincoln over that time for school, doctor, hairdresser, I came to appreciate Lincoln Have retired here.”*
- * *“Having lived in the Lincoln (rural) area virtually all our lives i.e. Springston, South, Ladbrooks, Greenpark, on retirement Lincoln seemed the obvious choice.”*
- * *“Were born and bred in neighbouring districts and farmed there for 17 yearsknew so many people in the area and joined in the various clubs etc. ...chose to retire in*

3.4 Housing

For 12 respondents, the availability of ‘affordable’ or ‘high-quality’ housing or just the fact that they found a house that they liked was the major incentive to move to Lincoln.

- * *“Affordable housing in 2003.”*
- * *“Found a house and section we liked.”*
- * *“Only place I can find a flat cheap enough for me.”*
- * *“Allowed us to get ‘energy wise’ home, it was and is a good subdivision – different from most.”*
- * *“Price of housing.”*
- * *“Slightly cheaper housing than city.”*
- * *“High quality housing in pleasant surroundings.”*
- * *“Friendly and affordable.”*
- * *“Good quality housing in pleasant area.”*

4. Social, educational and environmental activities

In Question 2 of the survey, the respondents were asked about their involvement in three different groups of activities: firstly an evening class; secondly, social groups like interest groups, community, church, or voluntary groups and thirdly, various environmental activities. The question regarding involvement in evening classes was to provide an indicator for the interest in educational activities (or the 'willingness to learn'). The involvement in community or other voluntary groups provided an indicator for the respondent's engagement in social activities. A question regarding various environmental activities (e.g. use of buses or car pooling, limiting the use of electricity and water, participation in an environmental organisation etc.) provided a picture of the respondent's 'environmental friendliness'. For each activity, the respondent could choose between five options: 1. No (and not interested). 2. No (but might like to in the future). 3. Occasionally (at least once a year but less than once a month). 4. Regularly (at least once a month but less than once a week). 5. Frequently (at least once a week).

This question seemed to stimulate careful thought and thus, the information presented in this chapter can be regarded as highly meaningful. The results are shown in Figure 1.

39 of 97 respondents have attended an evening class some time within the past 12 months. 48 of the 58 respondents who have not attended an evening class might like to attend one in the future; only 10 respondents are generally not interested in evening classes.

More common is the involvement in interest or community groups. About four fifths of the respondents have been involved in interest or community groups during the past 12 months. Only 20 respondents stated that they had neither been involved in an interest nor in a community group. Of these 20 respondents, 18 mentioned that they might like to become involved in such groups in the future; only 2 residents are not interested at all.

Most common among the various 'environmental' activities are those that are related to individual households, such as the separation of waste, the reduced use of electricity, the cultivation of fruit and vegetables, the responsible use of tap water, and the composting of garden and kitchen scraps. Less common are the activities that go beyond the level of the own household, such as participation in an environmental organisation, the planting of native species, or participation in a project to improve the natural environment. Among the two relatively environmentally friendly traffic options, public transport is used by more people than car pooling, but those who are involved in car pooling do so on a more regular basis, whereas public transport is used by many only on an occasional basis.

77 respondents stated that they had obtained some type of environmental information over the course of the past year; 52 of them had done so either frequently or regularly. 21 respondents had not obtained any environmental information. 16 of them might do so in the future. Only 5 respondents are not interested in obtaining environmental information at all.

Social, educational, and environmental activities

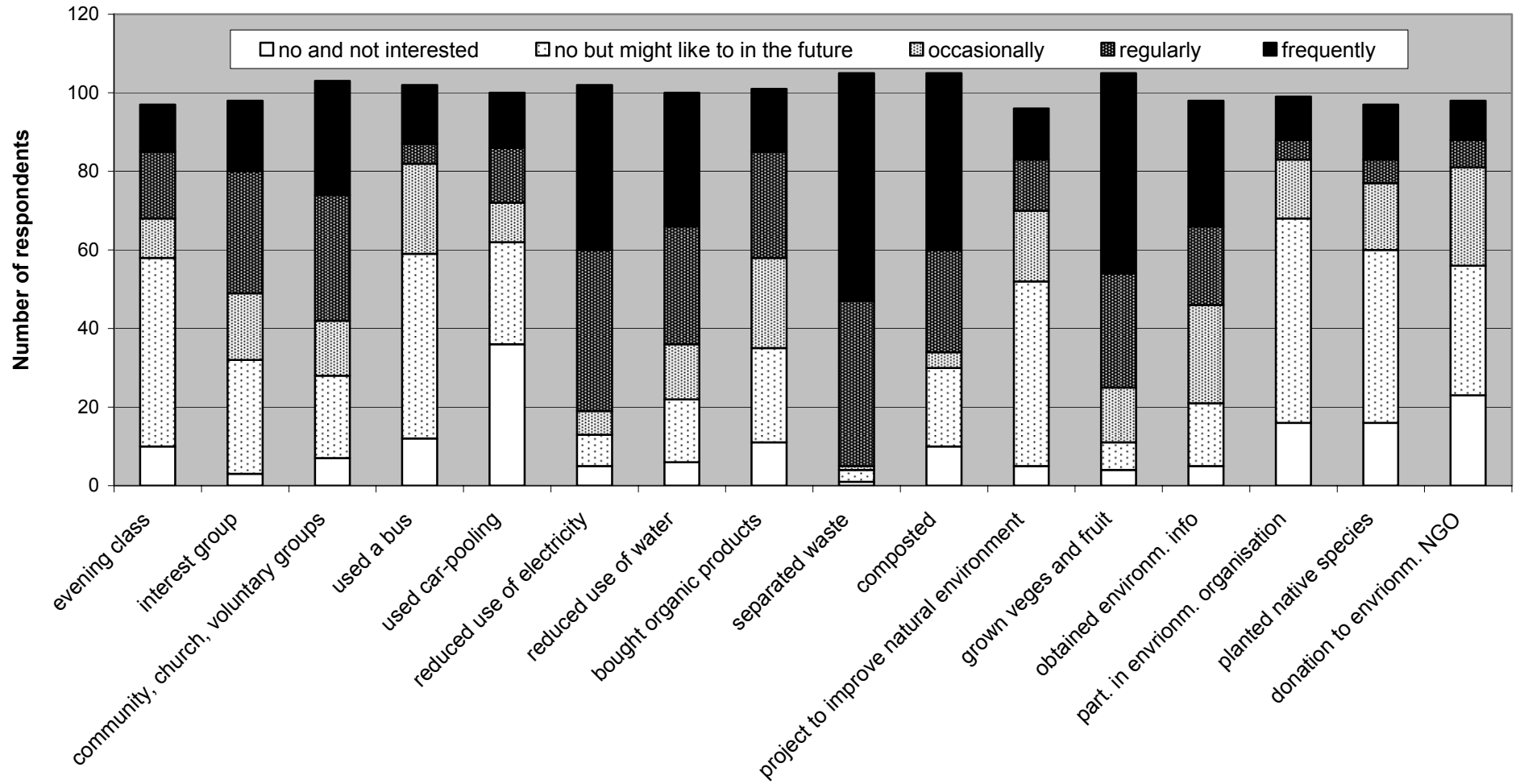


Figure 1

In order to find out whether there are any correlations between the respondents' involvement in evening classes, social and community organisations, and environmental activities, the activities of the latter two groups were summed up in indices. Accordingly, the respondent's

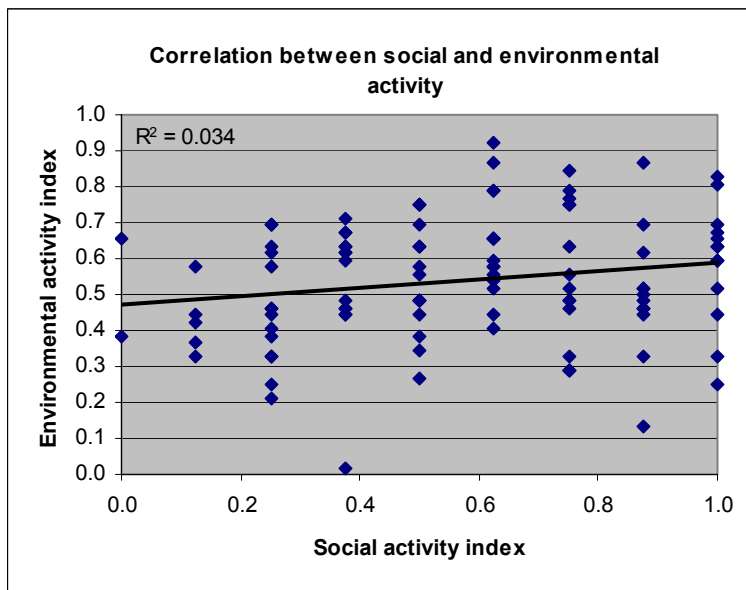


Figure 2

involvement in social and community activities is measured by a Social activity index¹ and the involvement in the various 'environmental' activities is measured by an Environmental activity index. The analysis (see Figure 2) shows that there is a positive, though very weak, correlation between Social and Environmental activity index, or in other words, the 'environmental friendliness' of the residents' lifestyles is hardly correlated to their involvement in interest and community groups.

Similarly, the enrolment in an evening class is hardly correlated with the involvement in 'environmental' activities (see Table 1). However, there is a weak correlation between the enrolment in an evening class and the involvement in interest and community groups. The average Social activity index of the residents who have attended an evening class is 0.7 as compared to 0.5 of those who have not attended an evening class. In other words, those who are involved in interest and community groups are more likely to attend an evening class than those who are not.

Attended evening class	Number of respondents	Social activity index	Environmental activity index
Yes	40	0.68	0.59
No	58	0.50	0.52

Table 1

¹ In calculating the Social and Environmental activity indices for each respondent, the frequency of being involved in or carrying out the various activities was coded in the following way: 0 - No (and not interested). 1 - No (but might like to in the future). 2 - Occasionally (at least once a year but less than once a month). 3 - Regularly (at least once a month but less than once a week). 4 - Frequently (at least once a week). The numeric values of the environmental and social activities were summed up for each respondent and expressed as percentage of the maximum score. Thus, the indices can have values between 0 and 1, with 0 indicating that the respondent has not been involved and is not interested in any of the activities and 1 indicating that the respondent has been frequently involved in all activities.

5. Knowledge and interest regarding environmental issues

For the future design of information and education activities by the Lincoln Envirotown Trust, it will be important to have an overview of the residents’ knowledge about environmental issues and their interest to learn more about these issues. Accordingly, the respondents were provided with a range of environmental issues and asked to state if they knew something about these issues or not, and if they would like to know more about these issues. In addition to the given categories, the respondents had the opportunity to add more issues to the list. For the list of given issues and for the results see Figures 3 to 5.

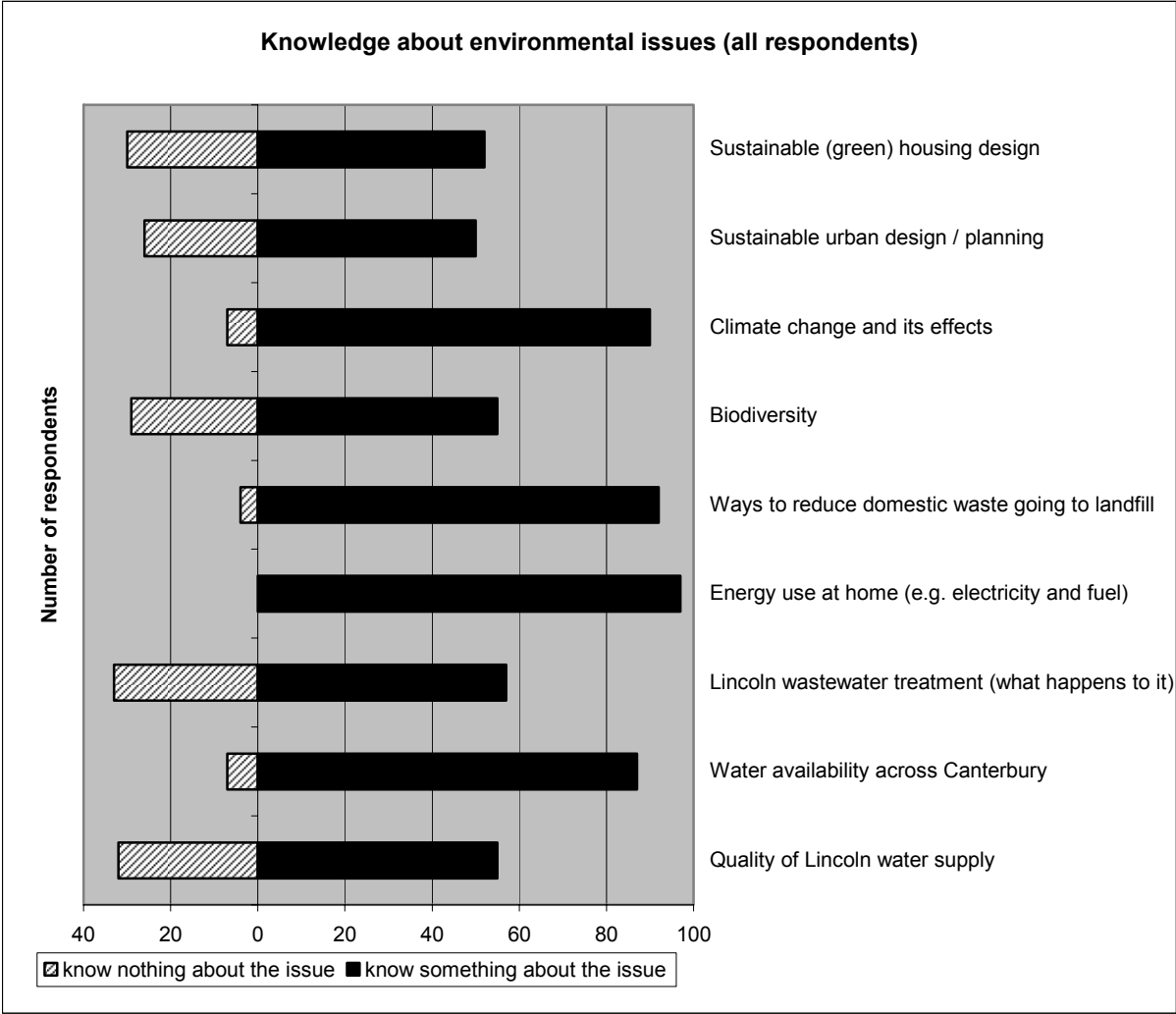


Figure 3

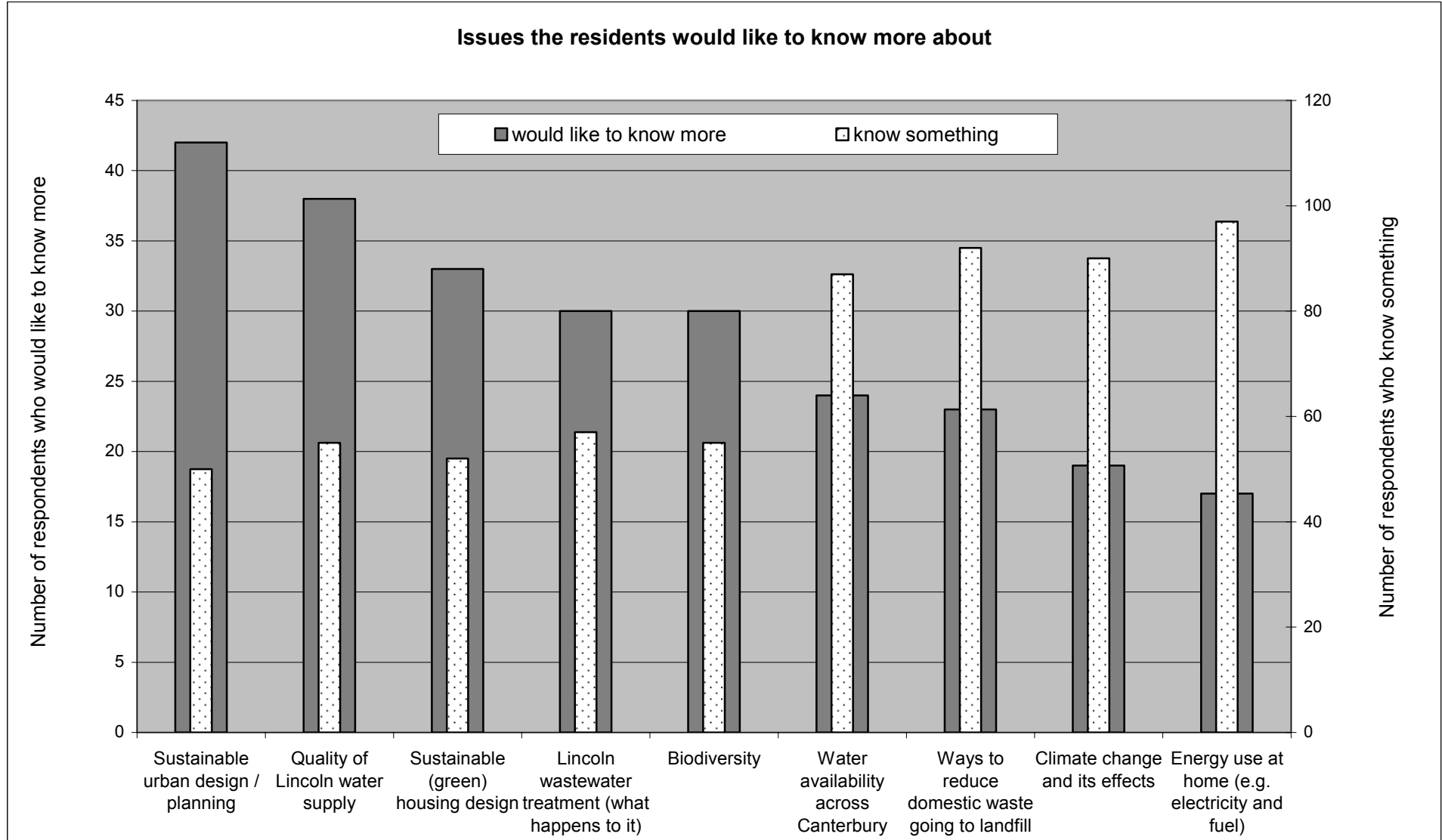


Figure 4

The top issues most people were conversant in were energy use at home and ways to reduce domestic waste going to landfill (see Figure 3). This corresponds with the finding in Chapter 4 which suggests that most people actually separate waste and try to reduce their energy consumption. In other words, for these two issues, there is a correlation between environmental knowledge and action. In addition, many respondents were also aware of issues relating to climate change and water availability in Canterbury. Figure 4 shows that there is a negative correlation between the amount of knowledge the respondents already have about an issue and their desire to learn more about it. Most people already have some knowledge about domestic energy use, climate change, waste separation, and water availability across Canterbury, and thus, the demand for more information about these issues is relatively limited. However, it would be misleading to say that there is no demand for more information about these topics at all. Between 17 and 24 respondents would like to know more about them.

Knowledge about sustainable housing design, sustainable urban planning, biodiversity, Lincoln waste water treatment, and the quality of Lincoln water supply, is relatively limited. Approximately half of the respondents claimed knowledge relating to these issues. At the same time, they are interested in receiving more information about these subjects (see Figure 4). The top issues people would like to know more about are sustainable urban design, the quality of Lincoln water supply, and sustainable green housing design. Depending on the issue, between 33 and 38 respondents would like to learn more about these subjects. The residents' high levels of interest in sustainable urban design and green housing design, together with the fact that Lincoln is currently undergoing rapid developments in terms of population growth and housing development, provides tremendous opportunities for the Lincoln Envirotown Trust to shape the future development of the community.

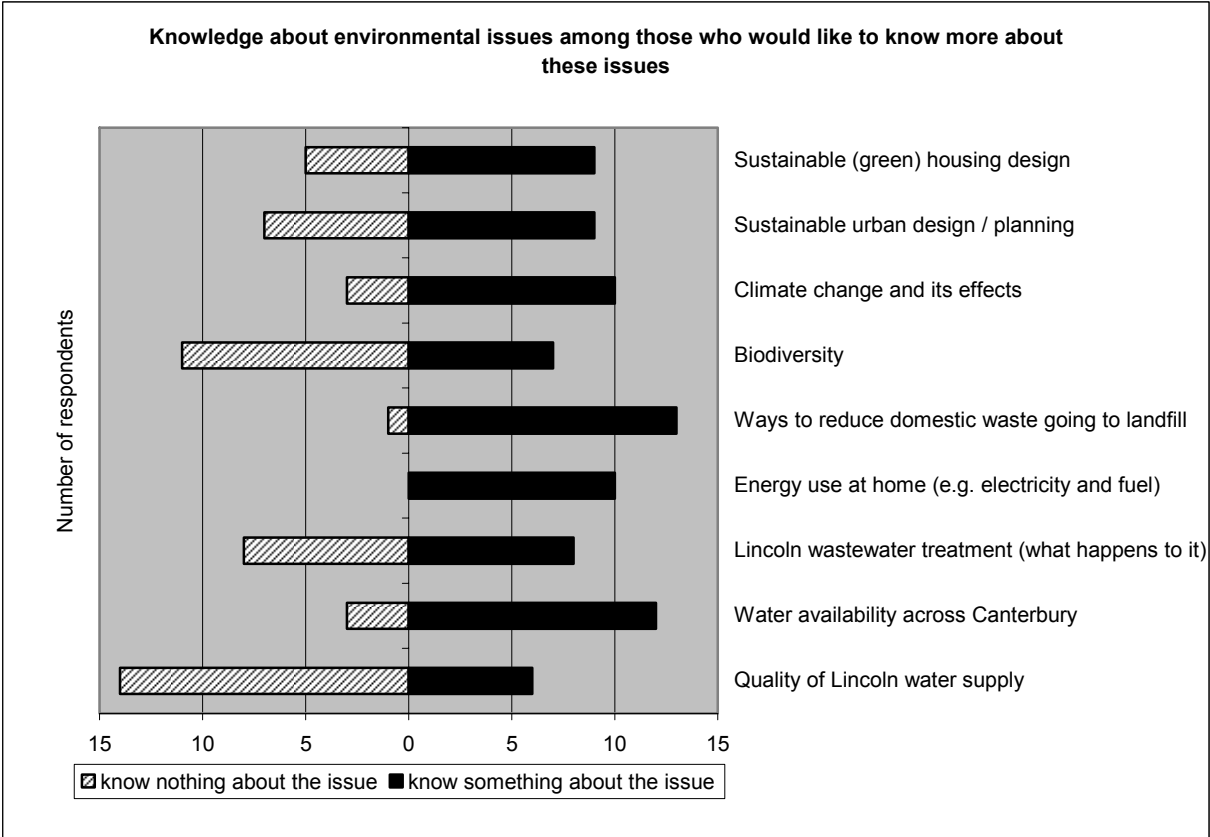


Figure 5

In designing any information and education activities, it is important to know the current level of knowledge that potential learners have. The group of potential learners is likely to

particularly include those who stated a desire to learn more about the subjects discussed above. Therefore, Figure 5 illustrates the level of knowledge about environmental issues only among those who want to learn more.

In addition to the list of nine environmental issues that were provided in the questionnaire, the respondents were asked to identify additional topics they perceived as important. Of the 19 additional topics that were given by the residents, 10 were related to transport issues and future energy options:

- transport future
- transport planning
- transport
- heavy traffic through village
- hybrid cars
- bio fuels
- sustainable alternatives to petrol and diesel
- nuclear power generation
- alternative power options
- wind
- domestic heating options

The range of additional topics is diverse: house and garden maintenance, air quality, health of tributaries of Waihora, improving soil quality, preservation of arable land, emergency plan (bird flu, oil peak), council planning, dishonest subdivisions, recreational fishing.

In order to find out if there are any correlations between the respondents’ knowledge about environmental issues and the ‘environmental friendliness’ of their lifestyles, an Environmental knowledge index¹ was calculated and then compared with the Environmental activity index². Figure 6 shows that there is a positive correlation between environmental knowledge and the involvement in ‘environmentally friendly’ activities. In other words, the more people know about environmental issues the more ‘environmentally friendly’ are their lifestyles.

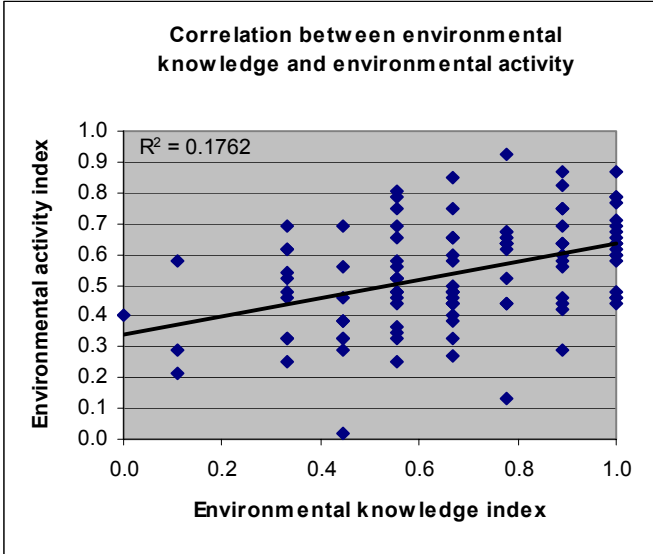


Figure 6

¹ In calculating the Environmental knowledge index for each respondent, 1 point was given for each topic the respondent knew something about. The points were summed up and expressed as percentage of the maximum number of points (which is 9). Accordingly, an index of 0 indicates that the respondent does not know anything about any of the given issues while an index of 1 means that the respondent knows something about all topics.

² For more information about the Environmental activity index and refer to Chapter 4.

To find out if the respondents' levels of environmental knowledge and interest are correlated with their involvement in educational activities, the Environmental knowledge index was compared with the enrolment in an evening class. In addition, an Environmental interest index¹ was calculated as a measurement for the respondents' interest to learn more about environmental issues. Table 2 shows that the respondents' level of environmental knowledge is not correlated with their enrolment in an evening class. However, the level of environmental interest is positively correlated with the enrolment in an evening class. The respondents who have attended an evening class tend to be more interested in learning more about environmental issues than those who have not.

attended evening class	Number of respondents	Environmental knowledge index	Environmental interest index
Yes	40	0.67	0.34
No	58	0.70	0.22

Table 2

¹ In calculating the Environmental interest index for each respondent, 1 point was given for each topic the respondent wanted to know more about. The calculation of the index was done in the same way as the Environmental knowledge index (see above).

6. Preferred sources of information

The survey included two different questions about the preferred sources of information the residents would use. Firstly, a section relating to environmental knowledge (see Chapter 5) included a question regarding where the respondent would go to find out more about different environmental issues. Secondly, Question 5 of the questionnaire queried the generally preferred option for sourcing and receiving information. The two questions were different in nature: the first one issue-specific and open-ended, and the second one general and with categories. The results will be presented separately for both questions in the following two sections.

6.1 Preferred sources of information about specific environmental issues

In addition to their level of knowledge and interest relating to various environmental issues,

Source of information	Number of times the source of information was mentioned (average across categories)
Internet	8.4
Selwyn District Council (SDC)*	3.6
Library	2.3
Leaflets / local paper	1.3
Community workshops	0.9
Media	0.8
E-Can / E-Can website	0.5
* includes SDC website, SDC plan, and leaflets that SDC should provide	

the respondents were asked about the sources of information they would most likely use to obtain more information. The most frequently mentioned sources of information are given in Table 3. The replies varied only slightly by topic. Across all environmental topics, the internet is the by far most important source of information people would use. The Selwyn District Council including its website and leaflets would serve as a source of information especially for questions about Lincoln wastewater treatment, sustainable urban design, water availability across Canterbury, and ways to reduce domestic waste going to landfill. The library would be

Table 3 used predominantly for questions regarding biodiversity. E-Can was regarded as an important source of information about water availability across Canterbury. Community workshops were only mentioned by one respondent.

6.2 Preferred sources of information in general

The Lincoln Envirotown Trust plans to provide useful information on topics that people want to know more about. In order to understand in what form information could best be provided, the respondents were asked about the sources of information they prefer and use most. The respondents could choose between five given sources and had the possibility to add additional ones.

The two most important sources of information are the internet and books/magazines, which are preferred by 64 and 62 respondents (see Figure 7). In addition to individual information gathering, friends are perceived to have a very important role in providing information and advice. The community oriented sources of information (discussion meeting / evening class & demonstration, projects, video, field-day) serve as a preferred source of information for 28

and 22 respondents respectively¹. In addition to the given categories, two additional sources of information were mentioned by several residents. The community newsletter (or local paper), and leaflets (or circulars) were perceived as an important source of information by 9 and 8 respondents respectively.

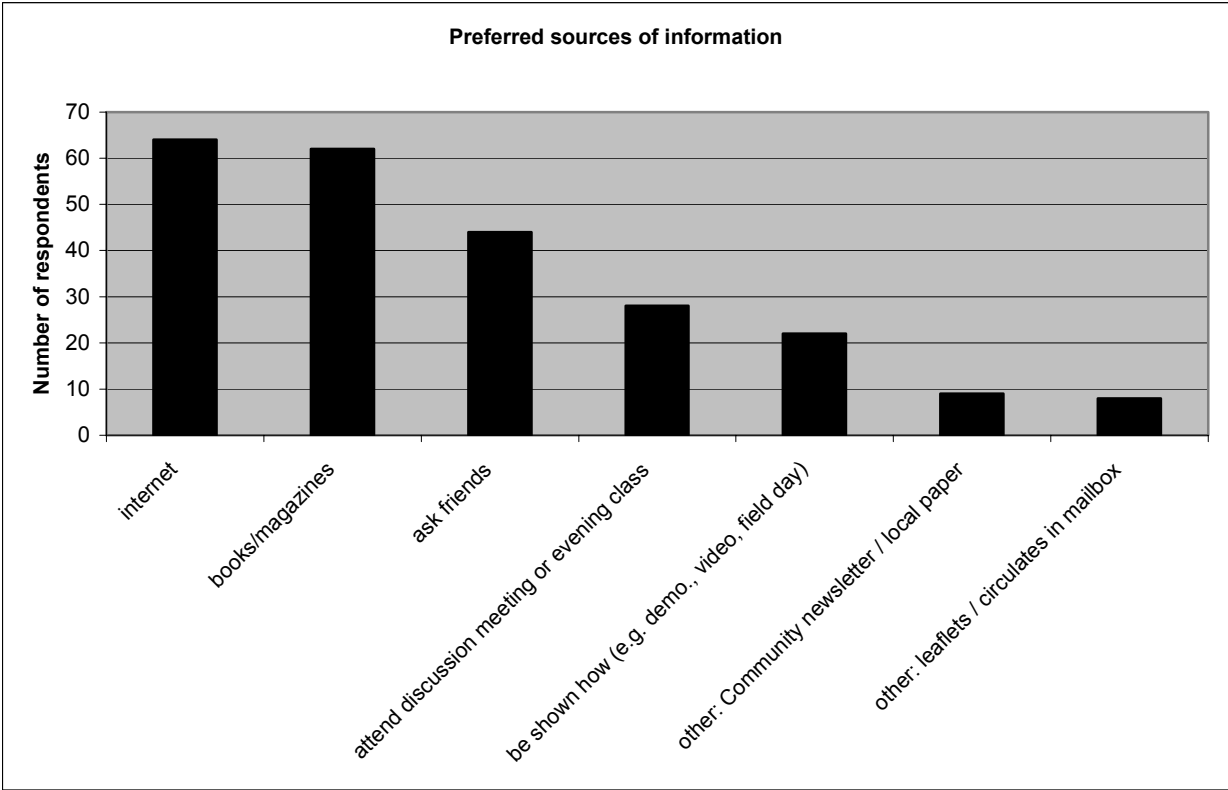


Figure 7

Figure 8 shows the variation of the preferred sources of information by age group. As one would generally expect, the use of the internet to get information and advice is relatively more important among the younger age groups whereas books and magazines are relatively more frequently used by elder people. Surprisingly, the younger age groups are more interested in community oriented sources of information (discussion meeting, evening class, demonstrations, projects etc.) than the older generation.

¹ To date, few community workshops have been offered in Lincoln, and thus many respondents may be unfamiliar with community oriented sources of information.

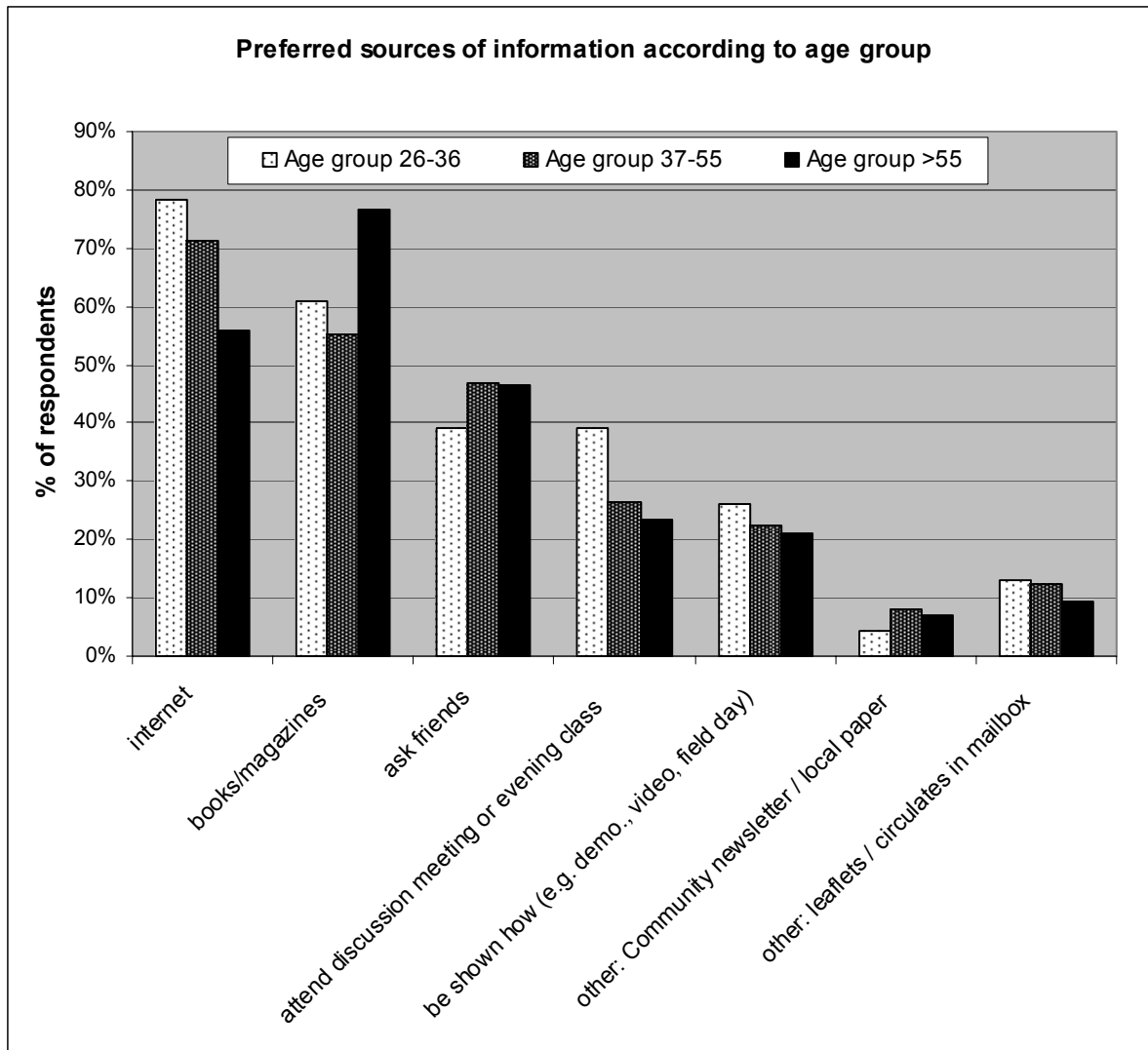


Figure 8

Though the community oriented sources of information were generally not regarded as a primary source of information by many people, they will likely be used by the Lincoln Envirotown Trust to provide the residents with information. In order to find out which group of residents might be more receptive towards discussion meetings, evening classes, demonstrations, projects, videos, or field days, a Community learning index¹ was calculated. This index combines the two community oriented sources of information (discussion meeting or evening class & be shown how) that were given in the questionnaire and measures the openness of the respondents towards such events.

The comparison of the Community learning index with the enrolment in an evening class and with the Social activity index clearly shows positive correlations with both of them (see Tables 4 and 5). 55% of the residents who have attended an evening class are interested in at least one of the two given community oriented sources of information (community learning index >0) as compared to only 28% of those who have not attended an evening class.

¹ A Community learning of 1 indicates that the respondent is interested in both, 'discussion meeting/evening class' and 'be shown how (e.g. demonstration etc.)'. A Community learning index of 0.5 indicates that the respondent is interested in one of them, and an index of 0 indicates that the respondent is not interested in any of them.

Similarly, the respondents who are more engaged in interest and community groups (those with a higher Social activity index) are more interested in community oriented 'learning events' (48%) than those who are not as much engaged in interest and community groups (22%). In conclusion, the residents who have already been engaged in interest and community groups or who have attended evening classes are clearly more open minded towards community oriented sources of information than average.

Attended evening class	Number of respondents	Number of respondents with community learning index >0	% of respondents with community learning index >0	Average community learning index
Yes	40	22	55%	0.375
No	58	16	28%	0.164

Table 4

Social activity index	Number of respondents	Number of respondents with community learning index >0	% of respondents with community learning index >0	Average community learning index
<=0.5	49	11	22%	0.112
>0.5	56	27	48%	0.348

Table 5

7. One environmental issue: Ways to reduce the use of plastic shopping bags

Many people would like to see the number of plastic shopping bags going to landfill reduced. Lincoln High School students suggested asking residents what would encourage them to reduce their use of plastic shopping bags. The respondents were provided with five possible answers and had the opportunity to give additional suggestions.

Approximately half of the respondents stated that they already minimised their use of plastic shopping bags (see Figure 9). The most preferred way to reduce the use of plastic shopping bags was the provision of reusable bags by retailers either at a low cost for everyone or free for their regular customers. 26 respondents perceived a charge per plastic shopping bag as the best way to reduce their use. Two residents stated that they do not see any reason for reducing their use of bags.



Figure 9

In addition to the given categories, various alternative ideas of how to reduce the use of plastic shopping bags were provided by the respondents. The numbers in brackets indicate the number of respondents who suggested each of the options:

- Retailers should provide paper bags (5)
- Retailers should provide environmentally friendly shopping bags (2)
- Retailers should provide biodegradable bags (2)
- Plastic shopping bags should be recycled (4)
- Customers should use their own bags (3)
- Re-use plastic bags as much as possible (3)
- Re-use plastic shopping bag as rubbish bin liner (2)
- There should be public pressure / plastic bags should be out of fashion (2)
- Go plastic free like Collingwood / Takaka (2)
- NZ wide plastic bag tax (1)

8. The residents' attitudes towards the rapid growth of their community

The Lincoln Envirotown Survey included three questions about the future development of Lincoln (three 'development questions'):

- Firstly, the respondents were asked to list the three issues they thought were most relevant for the future of Lincoln and to give reasons for their choice. In addition, they could indicate if they would like to know more about the respective issues.
- Secondly, the respondents were provided with four issues that are related to the rapid growth of Lincoln and are thought to be very relevant for the future development of the community. These issues were: (1) the development of the business/shopping centre; (2) Increasing traffic through the town centre; (3) Parking problems; (4) Planning decisions such as sub-division design. The respondents were asked to comment on these issues and to provide ideas for possible solutions. In addition, they could write other issues relating to the growth of Lincoln.
- Thirdly, there was a question regarding currently available services in Lincoln, and any additional services which the residents would like to have. The respondents were provided with a list of 41 different services and asked how often and where (if not in Lincoln) they used these services, and if they would like to have the respective services in Lincoln.

Since the three questions deal with the same broad topic, 'the development of Lincoln', and since the information provided by the respondents in the different questions shows many overlaps, the results of all three questions are discussed in this chapter.

8.1 Issues that the residents find most relevant for the future of Lincoln

The first of the three 'development questions' was open ended and asked the respondents to list the three issues they thought were most relevant for the future of Lincoln. In analysing the results, the issues that were given by the residents were grouped into 10 different categories.

Table 6 provides an overview of the results. The 10 categories are ordered by importance as perceived by the residents. The top-group of issues is the 'growth of Lincoln, town planning and subdivision design'. 49 respondents listed at least one issue that fits into this category. The second most important issue that was brought up by 33 residents is the development of the business / shopping centre. Almost as important is the transport issue for the residents. 32 respondents listed at least one issue related to traffic and parking problems, transport infrastructure or public transport.

Many residents perceived issues relating to the development of recreation facilities (like sports facilities, swimming pool) and the further development and maintenance of reserves as important for the future of Lincoln. 15 residents raised various issues relating to environmental problems and sustainability, of which domestic waste and recycling were the most important issues. In regard to community facilities, the top three issues related to the new Community Centre, the use of the Lincoln Club building, and the size of the library. 12 residents perceived water related issues as important for Lincoln's future development. The category about the 'appearance of the community and the development of the town centre' mainly includes issues and comments relating to aesthetic values and the cleanness of Lincoln township, and to a social area that some residents would like to have in the town centre. Finally, some residents are concerned about the possible impacts of population growth on the community's education facilities.

In addition to listing their top issues together with their comments, the respondents had the opportunity to indicate whether they would like to know more about the respective issues. Table 6 shows the number and percentage of respondents who would like to know more about ‘their’ issues for each category. According to the respondents’ interest to learn more about ‘their’ issues, the top three categories are: environment and sustainability, recreation facilities and reserves, and water related issues. 58/60% of the respondents who raised these issues would like to know more about them.

Table 6

Category	Number of respondents	Number of issues listed	Share of respondents who would like to know more about ‘their’ issue	
			Number	Percentage
Growth of Lincoln, town planning, and subdivision design	49	57	21	43%
The development of the business / shopping centre	33	36	17	52%
Transport: traffic and parking, roads, foot paths and cycle ways, public transport	32	35	13	41%
Recreation facilities and reserves	19	22	11	58%
Environment and sustainability	15	21	9	60%
Community facilities	12	15	5	42%
Water availability and quality, wastewater	12	13	7	58%
Appearance of the community and development of the town centre	10	10	3	30%
Education (schools and university)	4	4	1	25%
Other issues	6	7	2	30%

Interestingly, the top three categories of issues that were given by the respondents in the open-ended first ‘development question’, exactly correspond to the four topics that were subsequently provided in the second ‘development question’. Also additional topics that the respondents provided in the second question show many overlaps with the information that was given in the first ‘development question’. Therefore, the complete information that was provided by the respondents in the second ‘development question’ could be incorporated into the categories in Table 6. The 10 categories will form the following sections. They are ordered by the importance of the issue as perceived by the residents.

8.2 Growth of Lincoln, town planning, and subdivision design

The quiet, rural character of Lincoln in combination with its location close to Christchurch has attracted increasing numbers of new residents moving into the community. As a result, Lincoln has been rapidly increasing in size (100 homes annually), and this growth is projected to continue over the next few years.

8.2.1 How the growth of the community is perceived in general

Many residents are very concerned about the influx of new people and the rapid growth of new subdivisions. A majority of the respondents assessed the growth of their community as too extensive, too rapid, and unplanned or not carefully enough adapted to the character of the existing township. Many residents would like to see the development of new subdivisions stopped or at least heavily restricted.

- * *“Housing development: we have far too much of this!!”*
- * *“Do we want it to join Christchurch – No.”*
- * *“No more developments; village get too big.”*
- * *“No more subdivisions.”*
- * *“Growth of Lincoln – keep it to a minimum!”*
- * *“Be bold and cap this community – just say – sorry, we are full – you’ll need to wait for a vacancy. Only the developers win from this activity – the land loses, the water loses, the people lose.”*
- * *“When does the growth stop?”*
- * *“How big will Lincoln be allowed to grow?”*
- * *“[Subdivisions:] Time we stopped these! Too many houses. Lincoln is growing too much and losing its character. No more development please!”*

Only 6 residents stated that they perceived the growth of Lincoln as positive or as not being a big problem as long as it is well coordinated and the subdivisions are attractive and sections reasonably sized. One resident stated that *“Lincoln should welcome growth [a growing population can support more services] rather than seeing it as a problem that needs a ‘solution’.*

The residents’ concerns about housing development and the influx of new people are based on a variety of arguments. Firstly, the people do not want to lose the quiet, rural ‘village’ character of their community in favour of a busier, more anonymous, suburban atmosphere. Secondly, the increase in population places pressure on the existing infrastructure, such as roads, schools, water supply, sewage, and brings about additional traffic. Thirdly, with the community getting larger, the community feeling could weaken. As many residents commute to Christchurch for work and shopping, Lincoln might develop towards a “dormitory suburb” of Christchurch rather than being a ‘community’. Fourthly, the population growth places additional pressure on the environment with green areas being used for new subdivisions and increasing traffic causing noise and deteriorating the air quality. Finally, some residents are concerned about the subdivision of valuable, fertile farm land that cannot be used for agriculture anymore.

- * “[...] we are fast losing our ‘village’ appeal and facilities can’t cope.”
- * “The less subdivisions the better! Would like the rural feel to stay!!”
- * “Do we need to become a suburb of Christchurch? We are losing the character.”
- * “Danger of becoming a satellite town rather than a country town.”

- * “Resources will be stretched to the limit.”
- * “Infrastructure is not in place for further expansion, new subdivisions must pay for enlargement of water, sewage etc.”
- * “Concerned about increasing traffic and crowded schools.”

- * “May lose community feel if it becomes too ‘sprawly’.”
- * “Are people moving here to be part of the community or as a dormitory suburb of Christchurch.”

- * “Population increase and reduction in rural green area [...]”
- * “I think too much valuable farm land is subdivided; Don’t allow valuable fertile farm land to be sub-divided.”

Whereas the new residents move to Lincoln partly because of its rural, quiet character and the community feeling, the longer term residents fear that the influx of too many newcomers will undermine these very values. The following two contrasting quotations are to illustrate both the concerns of the longer term residents and the conflicting interests between longer term residents and newcomers:

- * “We chose (many years ago) to move to Lincoln because it was a small community that was active in how it was governed, people knew each other and there was a sense of belonging, commitment for the township and for each other at a more personal level. Since the developers have taken over, the community has become more fractured, too large and a sense of isolation. It seems it is now more about money than community. People who are new to the area are here because of what a small township has to offer but what have they got to give back. There is too much traffic, lack of care, everybody too busy. There is a sense of detachment.”

- * “As a ‘new’ local I do not resent Lincoln growing, as many older residents do. It is called progress.”

8.2.2 Planning the growth of the community

Almost every fifth respondent had the opinion that there had been a lack of overall planning so far and that more and better (long term) planning is necessary in the future. Many residents found that to date, the planning process had too one-sidedly focussed on the design of subdivisions, while the broader issues and development perspectives of the community as a whole had been ignored. They found that the development process had been dominated by commercial housing developers while the Selwyn District Council and the community had only limited input.

Several residents suggested that planning decisions should primarily be made by the Council and / or the community, and that there should be more guidelines regarding the planning and design of subdivisions.

While some respondents regarded the Council as the major planning institution, others suggested that there should be more involvement of the 'grassroots' level (the residents and the Township Committee). But there was general agreement that the planning process should be guided by the public rather than exclusively by housing developers.

- * *"Piecemeal [the planning]"*
- * *"It would appear any application for subdivision is approved without addressing major issues; Subdivision design is easy, the more global view for Lincoln seems to be ignored."*
- * *"SDC has for far too long allowed subdivisions to be developer led."*
- * *"There has been no forward thinking beyond the developers' wallets."*

- * *"Developers shouldn't dictate design. SDC should decide what is best for the whole town."*
- * *"Concerned of the lack of initiative by SDC to maintain/enhance the rural character of Lincoln. SDC needs to have better control of layout of subdivisions allowing open spaces and pedestrian movement."*
- * *"Planning decisions made by local people."*
- * *"Get the council to listen to community."*
- * *"Township Committee should have input and listened to. All subdivision plans to be looked at by committee."*

Some residents stated that it was important to plan the growth of the community **before** it is actually going to take place. Before new subdivisions are being built, there should be a plan of how the community should grow and where the boundaries are. Infrastructure and public facilities, like roads, linkages, green areas, and sports fields 'should be planned before subdivision consents are granted'.

- * *"Enviro-Design, ecologically sustainable."*
- * *"Lincoln needs a 'point of difference' – Envirotown."*
- * *"Sustainable urban design and planning."*
- * *"Getting the SDC committed for the Envirotown Concept – will ensure Lincoln develops in a planned and coordinated manner."*

8.2.3 *How the community should develop*

Many residents perceived that it was important that despite the growth of the community, its rural character, the ‘village’ atmosphere, and the community feeling are maintained. It is “essential to preserve the village identity” rather than “becoming another suburb of Christchurch”. One respondent pointed out that the surveys in 1975 and 2002 had already indicated that the “rural people desire to keep rural”. Other residents would like to see the development planned in a way that “promotes community building, environmental soundness, and adds vibrancy to the community live”, and that “encourages the people moving into Lincoln to use Lincoln facilities, so [that] it is a community and not just a dormitory of Christchurch”.

8 residents would like to see the development of their community according to sustainable urban design principles. 4 of them mentioned the ‘Envirotown’ concept as a good option that needs to be promoted. Four respondents perceived that it was important to limit the boundaries of the community to contain further ‘urban sprawl’ onto rural land.

8.2.4 *Concerns about high-density subdivisions*

A large number of residents are concerned about the development of high-density subdivisions with small section sizes that would fit into a city but not into a rural town. For many residents, it is important to maintain and enhance the rural character of their community. With a large number of high-density subdivisions, they think Lincoln would lose its ‘country village appeal’. Almost every fifth respondent was concerned about this issue, and most of them suggested a lower limit for the size of subsections. This would allow having enough open space for gardens and trees. Section sizes between 600/700 and 1000m² were suggested as a minimum. One resident suggested that “if the section size of a new subdivision is below say 850m², compensation should be made by providing public space [...] for planting etc.”

- * *“Small section sizes reduce semi-rural outlook → increase minimum size.”*
- * *“Don’t have sections under 600/700m².”*
- * *“Control section sizes; Increase size, proportion to distance from town centre.”*
- * *“Subdivisions should have larger section size.”*
- * *“Subdivisions in keeping with the rest of Lincoln, no high density housing.”*
- * *“Maintain adequate lot sizes which allows for tree planting etc.”*
- * *“It needs to stay with the rural feel. I think too much development of the wrong kind will ruin that. Rolleston can take that on, i.e. malls, town-like things, subdivisions (town-like: small area ones).”*
- * *“....minimum or at least average section size to be 850m².”*
- * *“Limit the number of subdivisions and put a minimum on sections, Lincoln will lose its attractive character if subdivisions are permitted as has happened in Halswell and Rolleston.”*
- * *“Don’t like proliferation of subdivisions which have section sizes more befitting a city not a rural town, minimum should be 1000m² with say 10% down to 700m² (for elderly).”*
- * *“Don’t like new high density housing e.g. Heathridge.”*
- * *“A concern is that Lincoln will lose its “country village” appeal with the amount of small section subdivisions.”*

8.2.5 Subdivision design

The great majority of the residents who commented about the design of subdivisions expressed that there was much scope for improvement. Only one resident was overly satisfied and found that ‘most new ones are well designed and add to the area’.

In addition to larger section sizes that provide space for private gardens and tree plantings, many residents would also like to have more open public space within the subdivisions. More space for trees and other plantings, playgrounds, and recreational areas should be provided. Ryelands subdivision was mentioned by one respondent as a good example with “good-sized sections, attractive planting (especially natives), [and] walkways [...]”, whereas Heathridge subdivision was said to be “poorly designed”.

- * *“New subdivisions are dead ends – need to interconnect with each other”*
- * *“Allow for cycle and walkways”*
- * *“All new subdivisions only open to the main road; More interconnecting roads, more of a grid like the original township”*
- * *“Give them more than one entrance or exit – they should be joined”*
- * *“More linking roads, walk ways between each”*
- * *“Walkways connecting subdivisions would be great. [...] keep Lincoln community connected”*
- * *“Must be actively viewed by LCC for advice on linkage + integration to add to the community and not fragment it”*
- * *“Ensure sufficient walkways that link centres/routes cycle ways”*
- * *“They need to all join up to make a tidy community”*
- * *“**Must** have linkages”*
- * *“Can end up with separate enclaves and little ‘neighbourliness’”*
- * *“Communities need to be linked with an inclusive flow”*
- * *“I worry that new subdivisions have no pedestrian/bike/road connections with the rest of the village”*
- * *“community feeling: an expanding town is not necessarily a community, facilitate integration of new areas into the existing town e.g. road or walking linkages, avoid a ‘them and us’ division of the town”*

Another subject of concern is the lack of linkages between the different subdivisions and between the subdivisions and the rest of the community. More than 20 residents perceived it as very negative that many of the new subdivisions had only one entrance / exit to the main roads, and that there was a lack of roads, foot paths and cycle ways interconnecting the different subdivisions. More linkages between the different parts of the community were said to be very important for the ‘integration of new areas into the existing town’.

- * *“Avoid appearance of masses of houses without relief; More public open space and plantings.”*
- * *“Learn from Rolleston ‘mistakes’.”*
- * *“More open space, more trees.”*
- * *“Green areas in subdivisions not adequate, current areas must be maintained and preferably added to e.g. Domain.”*
- * *“Larger gardens, larger reserve areas for native plants in subdivision.”*
- * *“Trees, plants and playgrounds.”*

8.3 The development of the business / shopping centre

This section presents the results of two open-ended qualitative survey questions regarding the residents' attitudes towards the growth of Lincoln and a semi-quantitative question regarding the current use of major shopping and service facilities and additional services that the residents would like to have in Lincoln. The major issues that the respondents perceived as important were firstly, the general question whether the business / shopping centre should expand or not, secondly, the kind of additional services that should be available in Lincoln, thirdly, the question whether the business area should remain in the village centre or should be split up, and fourthly, the design and character of the future commercial centre.

8.3.1 *Should the business / shopping centre expand?*

Regarding the major question whether the business / shopping centre should be expanded or not, the community is divided between residents who want commercial development and residents who want to avoid further development in order to preserve the 'village' character. However, the great majority (35) of the respondents who commented on this issue expressed positive attitudes towards development, while only 15 residents expressed apprehension about a further development of the commercial infrastructure.

The residents who would like to see an expansion of the current range of facilities argue that the development of commercial facilities should keep up with the population growth and that the provision of more local infrastructure will avoid travelling. The concerns of the residents who are apprehensive about further development are based on three arguments. Firstly, there are enough shopping and service facilities available in neighbouring sub-centres, such as Rolleston, Hornby, and Halswell, and thus, Lincoln should only accommodate basic amenities, which are already available at the present. Secondly, some residents are concerned that the development of more business and service facilities will undermine the rural character of their community in favour of a more city like atmosphere. And finally, the development of the business / shopping centre will generate more traffic.

Arguments in favour of development:

- * *"Redesign a new shopping centre to accommodate growth of the area."*
- * *"Township is growing, but issues such as business/shops centre not keeping up."*
- * *"With growing population more shopping area needed."*
- * *"[Development] urgently required."*
- * *"Definitely more shops needed."*
- * *"[Business / shopping centre] needs to expand."*
- * *"Cost-effective local shopping so don't have to travel to town."*
- * *"Better facilities locally means less travel."*
- * *"Town is seriously under developed commercially."*
- * *"Lincoln lacks substantial commercial business resulting in travel to Hornby, Rolleston, Halswell."*

Arguments against development:

- * *“Lincoln should remain as ‘emergency needs’ shopping area, only necessities (enough facilities available in Rolleston, Hornby, Halswell).”*
- * *“I think it is fine the way it is; Keep shop fronts country, only necessities, travel for other.”*
- * *“Lincoln should seek to retain its ‘village’ atmosphere with additional services e.g. supermarkets etc. being centred at Rolleston.”*
- * *“[Development of the business / shopping centre] reduces rural aspect of Lincoln and increases pollution.”*
- * *“Currently good range of services on a village scale.”*
- * *“DON’T want to have in Lincoln: supermarket, restaurant, motel, drapery, clothes shop, shoe shop, appliances, lawyer, accountant. If these services are provided, Lincoln will become like the city. I live here because I don’t want to live in the city.”*
- * *“I think the services we have here are sufficient; I don’t know of any others that I would like to have. I would like to see the village atmosphere of Lincoln retained. I don’t want to live in another suburb of Christchurch or a satellite town type environment. All necessary businesses are here in Lincoln and it is only a short drive to others that people may need.”*

Many residents agreed that there had been a lack of commercial planning to date and that the development of the business / shopping centre needs to be “planned and controlled”. There should be an “integrated plan” regarding the kind of businesses and services that Lincoln will need.

8.3.2 Shopping and service facilities: current use and development needs

The respondents of the Lincoln Envirotown Survey were provided with a list of 41 different services and asked how often and where (if not in Lincoln) they used these services, and if they would like to have the respective services in Lincoln. They also had opportunity to list additional services used or sought.

The analysis of the completed questionnaires provided the impression that many respondents had perceived the list of 41 services with a number of single questions about each of them as too excessive and thus, had not been motivated to carefully think about the different options and to provide information to all parts of the question. Though the results presented in this section provide a general picture of the importance of facilities and where they are used and the kind of facilities that many residents would like to have in Lincoln, one should bear in mind that the results might be biased.

Table 7 shows a list of the 20 services that are most frequently used by the residents.

The 20 most important services and where they are used											
Service	frequency of usage				Where the service is used if not in Lincoln (number of respondents)						Number of respondents who use service outside Lincoln
	number of respondents			usage index	Christchurch	Hornby	Halswell	Riccarton	Rolleston	Prebbleton	
	used once	use less than once per month	use more than once per month								
petrol station	3	21	66	243	8	2			1	4	15
pharmacy	4	58	39	237	1		2		1		4
supermarket	1	19	65	234	16	14	26	4	11		71
post shop	2	30	55	227	1	1	1				3
medical centre	5	73	13	190	3	1	3	1	1		9
dairy	4	34	35	177	3						3
banks	1	21	44	175	7	4	1				12
coffee shops	5	38	29	168	11			1			12
hardware	4	48	18	154	9	8		2			19
fish shop	3	32	29	154	6	1	1				8
service station	1	42	17	136	11		1		1	2	15
butcher	8	26	24	132	4	5	7			2	18
restaurant	15	35	12	121	19				1	2	22
hairdresser	7	45	7	118	9	6	1	3	3	2	24
video hire	6	38	12	118	4	1		1			6
stationery/bookshop	3	25	19	110	20	3		3			26
physiotherapy	23	34	4	103	2	1				1	4
gift shop	11	36	6	101	8						8
pub	11	22	13	94	4						4
vet	3	36	3	84	1	2				1	4
flower shop	11	35	1	84	2		1				3

Table 7

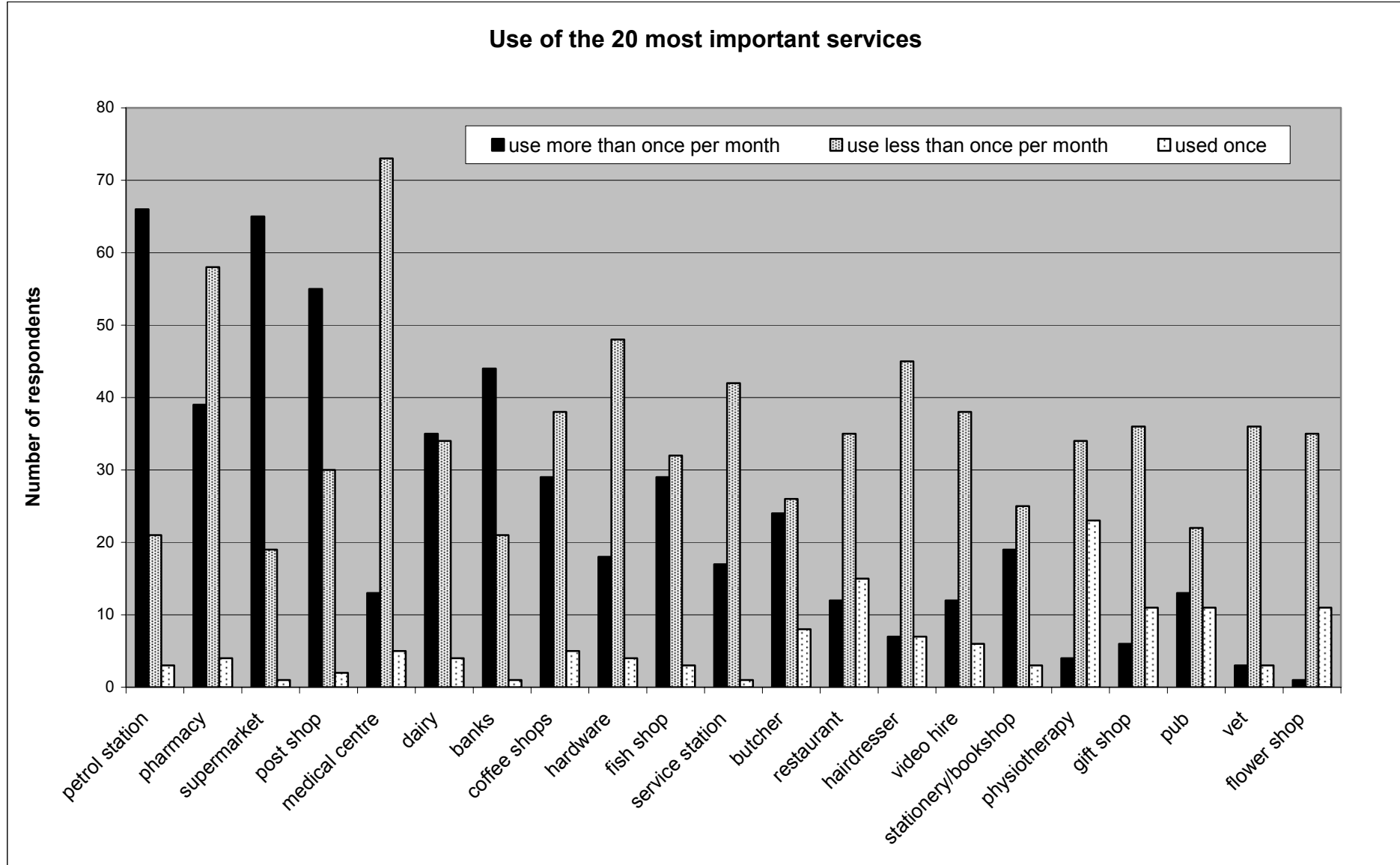


Figure 10

The services in Table 7 are ordered by a usage index¹, which indicates how often a service is used by how many respondents. In addition to the frequency of usage, the table shows where the different services are used if not in Lincoln. The fact that some respondents mentioned Christchurch while others specified municipalities of Christchurch has certainly introduced some bias. Christchurch city, Hornby, Halswell, Riccarton and Rolleston are generally the most important shopping and service centres that Lincoln's residents use. The most important facilities that are used outside Lincoln are supermarkets, stationery/bookshops, hairdressers, and restaurants. Figure 10 illustrates how often the 20 most important facilities are used by how many respondents.

Table 8 lists the top 10 services that the residents would like to have in their community in addition to the existing range of facilities.

The 10 most important services that people would like to have in addition to the existing services	
Additional service people would like to have	Number of respondents
supermarket	37
restaurant	23
motel	22
greengrocer	21
stationery/bookshop	20
health food shop	17
coffee shops	16
other: swimming pool	16
banks	15
drapery	14

Table 8

The demand for a supermarket in Lincoln was mentioned by 37 of 105 respondents. Many residents perceived that the existing 4 Square supermarket did not provide enough choice, was too expensive, and the opening hours were not convenient for some residents. Therefore, they found that a large supermarket would be required. In addition, many residents would like to have a restaurant, a motel, a green grocer and a stationery/bookshop in their community. Some respondents noted that it was not necessary to have specialist shops, like appliances, shoes, clothes, etc, but that it was important to have shopping facilities for daily needs, such as a supermarket or a greengrocer.

¹ The respondents were asked how often they used each service, and had the choice between (1) used once, (2) use less than once per month, and (3) use more than once per month. In analysing the results, the data was coded in the way that points between 1 and 3 reflect the relative frequency of usage. In calculating the usage index, the points were summed up for each service. For example, the petrol station was used once by 3 respondents, less than once per month by 21 respondents, and more than once per months by 66 respondents (see Table 7). Thus, the usage index = 3*1+21*2+66*3 =243. It provides an indicator of how often a service is used by how many respondents, or how 'important' important the different services are.

8.3.3 Commercial area to remain in the town centre or to be split up?

The question whether a possible development of the business / shopping centre should be concentrated in the current centre of the community or whether new land for a second commercial area at the edge of the township should be provided was perceived as an important issue by many residents.

The great majority of them (18 respondents) would like to keep the commercial area in the centre, where new facilities could be developed around the existing shops. They are concerned that a second business area outside the centre would split the community. However, at the same time, many respondents perceived the lack of land for commercial development in the town centre as a bottleneck. Many of them suggested rezoning residential areas for commercial development as a solution. It was suggested that the Selwyn District Council or an investor could buy land in the town centre and make it available for commercial development.

Five residents commented in favour of the development of a new commercial area at the edge of the township. This would provide the advantage of having more space available and of having a (new) commercial area that is not cut by the main road.

Statements in favour of keeping the business area central:

- * *“Keep businesses centralised.”*
- * *“Some expansion, but not ‘satelliting’, not losing a centralised area.”*
- * *“Zoning of commercial land kept together, develop on what exists.”*
- * *“I think the one thing that people like is the community spirit here. So it would be good if the business shopping area could be contained so that it maintains it’s heart while still keeping it aesthetically pleasing. Something that Rolleston for example lacks.”*
- * *“Best contained in one central area.”*
- * *“Do not move centre of Lincoln!”*
- * *“Do not want to see the business centre split.”*
- * *“Avoid fragmentation of the shopping area. Plan commercial around existing shops.”*
- * *“Priority on enhancing current shopping area, eventually a supermarket. Limits on 2nd shop centre near university to avoid 2 town centres developing.”*
- * *“Do not want the village to split up.”*

Suggestions regarding the provision of land for commercial development:

- * *“SDC could buy houses (some houses on Gerald St. are zoned commercial), demolish and sell for commercial development.”*
- * *“Buy land from felix café to service station – keep town together.”*
- * *“Maybe for the future of the township, land has to be compulsory acquired, and people re-housed.”*
- * *“SDC should have secured property for future sale for businesses.”*
- * *“Encourage landlords holding land in the centre to develop it for community good”*
- * *“Lack of commercial land – rezoning land, interested developers needed.”*
- * *“Make Country Club the commercial centre.”*
- * *“Concerned at councils lack of foresight in not buying land for future development of business area.”*

Statements in favour of a new business area:

- * *“When University dairy land beside the Wool Research is sub-divided, a new shopping area should be provided.”*
- * *“Shift community centre.”*
- * *“Move commercial area (or buy houses and demolish).”*
- * *“Develop on green field sites at edge of township [since limited space in centre].”*
- * *“Would like shopping complex away from main street → set area of land aside ”*

8.3.4 Design and character of the commercial area

Many residents are concerned that a development of the business / shopping centre could undermine the ‘village’ character of their community. Not all these respondents do necessarily oppose an expansion of the shopping and service facilities in general, but they would like to see the commercial area planned and designed in a way that fits into the rural community and preserves the ‘village’ atmosphere. That means “organic growth” with “individual shops” is preferred rather than malls, like in Christchurch and Rolleston. The town centre should be kept “small and personal”.

A number of residents perceived the current town centre with the 4 Square supermarket and the Chinese Takeaway building was aesthetically unattractive, and that the aesthetic value of the area should be improved. One respondent suggested only developing “envirofriendly buildings with self-composting waste systems [to] be a model town making a stand.”

- * *“Extended shopping CBD area without compromising the ‘village’ appeal.”*
- * *“Retain small town character, support diversity.”*
- * *“Don’t want malls to take place of town centre.”*
- * *“Lincoln could lose its village atmosphere. Don’t want ‘Big Box’ shops.”*
- * *“Organic growth preferable to mall development.”*
- * *“Individual shops.”*
- * *“Keep shop fronts country.”*
- * *“Only moderate growth, not another mall.”*
- * *“Nice to keep small and personal.”*
- * *“Do not want it to look like Rolleston.”*
- * *“Not lose character of Lincoln.”*

8.4 Transport

Many residents are concerned about transport issues. The respondents perceived in particular the increasing traffic through their community including heavy traffic, and the parking issue as problems. They suggested various solutions to improve the situation, including developing a by pass route, providing more parking space, and encouraging walking, cycling and the use of public transport to reduce the reliance on private vehicles.

8.4.1 Increasing traffic through the town centre and possible solutions

Many residents are concerned about the “continually worsening” traffic flow through their community, which generates noise and pollution, poses a safety problem especially for elderly and children, and separates the community. One respondent stated that they “begin to see the change in this one year we’ve been here”. Only few residents perceived the traffic as “not a problem”, “required” or “unavoidable”. 37 respondents suggested developing a bypass route that diverts through traffic and in particular heavy traffic around the town centre:

- * *“Redirect it through North or South Belt or keep big trucks out to Springs Rd.”*
- * *“Reduced through traffic by bypass for all commercial vehicles; Create ring road from Edwards St. to Birchs/Boundary Rd. before it is too late”*
- * *“Direct heavy traffic perhaps down Tancreds Rd.”*
- * *“Round the village a separate road”*
- * *“Needs heavy traffic bypass; force developers to complete this first”*
- * *“Bypass through north/south belt?”*
- * *“Divert heavy trucks off carriageway; perhaps the way Leeston has done”*
- * *“Heavy vehicle bypass”*
- * *“Bypass road (Moffat Drive and West Belt – bridge required between Moffat Drive and South Belt”*
- * *“A bypass is urgently required for trucks”*
- * *“I thought there was supposed to be one [bypass] at the back of Rylands.”*
- * *“Diversion of through traffic away from main street”*
- * *“Trucks should be diverted around Lincoln”*
- * *“Southern bypass to the university”*
- * *“Ring road for trucks”*

Whereas two respondents suggested improving the traffic flow through Lincoln by widening roads, five other respondents recommended slowing the traffic flow through additional speed bumps and speed limits. Two respondents proposed additional access roads to the new subdivisions so that not all traffic is directed to Gerald Street. Other recommendations included the setting up of traffic lights and more policing.

Two respondents perceived the narrowed intersections, e.g. off South Belt and at James St./Edward St. intersection, as dangerous since they created “bottlenecks”.

In addition to traffic issues in Lincoln township, some respondents mentioned issues relating to the traffic flow between Lincoln and Christchurch. They expressed concerns regarding increasing traffic, dangerous roads, and traffic jams on Riccarton, Blenheim and Lincoln Roads.

8.4.2 Parking problems

On the one hand, 15 respondents did not see any problems relating to the parking situation at the present. However, 4 of them were concerned that it could become a problem in the future, given the population growth in their community and a possible development of the business centre. On the other hand, about 30 respondents perceived the current parking situation as a problem, especially at peak times. Therefore, 24 respondents proposed creating new parking areas, for example in the town centre behind the shops.

- * *“Push shops back and open space behind for parking – not in front of shops.”*
- * *“Parking behind shops, enter at back, walk between shops.”*
- * *“Use vacant land Burkes.”*
- * *“An area off the main road.”*
- * *“Need a centralised space specifically with extra parking.”*
- * *“SDC buy houses in shop area and develop land for parking. Planning!”*
- * *“Develop park area around shopping centre.”*
- * *“Council purchase land for parking.”*
- * *“What about sealing and angle parking on West Belt?”*
- * *“Buy spare land behind pub.”*
- * *“New businesses to provide ample parking.”*
- * *“Have a walk zone in CBD with free parking around centre and bypasses.”*

3 respondents perceived time limits at peak hours as appropriate to improve the parking problem. One respondent suggested installing “signs in Gerald St. directing cars to domain, N-Belt, W-Belt car parks”. Another respondent suggested utilizing side streets for parking rather than building anything.

Some respondents perceived that Gerald Street was too narrow to provide parking on both sides of the road. Too many cars would narrow the traffic way and would pose a danger for both through traffic and pedestrians. To improve the situation, 5 respondents proposed discouraging parking on Gerald Street or allowing parking on one side of the road only. Two respondents suggested providing parking only on the north side of the main road and building a cycle track on the south side.

8.4.3 Encourage alternative means of transport

To improve both the traffic and parking problem, many residents suggested encouraging alternative means of transport to reduce the reliance on private vehicles.

7 respondents perceived the improvement of public transport as an important strategy. They suggested, for example, improving the bus service to Tai Tapu; providing shuttle transport from Lincoln to Universtiy, and to Rolleston and Hornby; providing more bus stops near the new subdivisions; and building a light rail from Christchurch.

12 respondents suggested encouraging walking and cycling, especially within the community. This would not only reduce the traffic problem, but could also enhance the socialisation of the community, as one respondent expressed:

- * *“Walking instead of driving “improves socialisation of a community, nurtures a sense of recognition and belonging and attachment. Reduce/restrict traffic flow and car parking to encourage community to become people focussed not detached by traffic. Make it easy for people to walk not drive. Block off or narrow significantly William, Roberts and Gerald St.”*

Some respondents complained about a lack of separate walk and cycle ways. They suggested building cycle ways between the town centre and the university and from Lincoln to Christchurch.

In addition to providing more walkways between the subdivisions, which was suggested by many residents, two respondents suggested building foot paths on both sides of Edwards Street and between High School and Domain. In addition, some residents were concerned

about the quality of some of the foot paths in their community. It was mentioned that some of the foot paths needed to be repaired, that the pathways in Liffey Reserve, Ryelands and Heathridge were not adequately maintained, and that there was a lack of lightening in some areas. One respondent suggested sealing “all foot paths in the area between the 4 belts” and providing a sealed path between Gerald Street and the school.

8.5 Recreation facilities and reserves

Many residents expressed a desire for a public (heated) swimming pool. 16 residents considered this issue important enough to mention in several sections of the survey questionnaire.

Another important issue is the creation and maintenance of reserves and green belts. 13 respondents perceived that the existing reserves should be better managed and that additional reserves should be created. In particular, the walk and water ways in the Liffey area were said to need better maintenance. In addition, one respondent suggested creating a network of walkways around Lincoln:

- * *“Surrounding Lincoln there are so many gravel roads within land owned by Crown research departments and the University that there is fantastic potential for a network of walkways away from the noise, danger and fumes of traffic right on the doorstep of our town. How pleasant it would be to enjoy a walk on a summer evening in such a situation without having to drive to Christchurch’s reserves!”*

8.6 Environment and sustainability

One question of the survey asked the respondents to list the three issues they thought were most relevant for the future of Lincoln. 15 respondents found issues relating to the environment or sustainability important enough to mention.

10 respondents listed issues relating to ways to reduce domestic waste. They perceived that more could be done in terms of separating waste, recycling, and composting, and that more education would be necessary.

3 respondents perceived issues relating to “clean energy sources”, energy use at home, and energy shortages as important for the future development of their community.

3 respondents supported the idea of sustainable housing design and perceived that this would be “the way to go into the future”. One respondent stated that Lincoln “could have better new houses, more eco-design”.

In addition, some residents perceived the following issues as important for the future development of their community:

- * *“Develop sustainable living a top priority.”*
- * *“Maintain and improve the environmental sustainability of Lincoln.”*
- * *“Water pollution: Coes Ford and Selwyn River have been reduced to smelly puddles’ [...].”*
- * *“Climate change: “The more we know about this, the more people will do better to minimise their effects.”*
- * *“Biodiversity.”*
- * *“Proliferation of non-native species.”*
- * *“Stop large trees from being cut down, use them as assets.”*

8.7 Community facilities

In regard to community facilities, the residents commented on the Community Centre, the Lincoln Club Building and the library.

In regard to the Community Centre, some respondents stated that the present facility was too small and needed to be upgraded. In addition, they expressed a lack of understanding about the long decision making process regarding the new Community Centre.

- * *“Present one too small.”*
- * *“Upgraded facilities are needed.”*
- * *“Needs to get sorted.”*
- * *“Initiative needs to be taken by someone.”*
- * *“It’s taken too long to make a decision. I prefer the ‘Country Club’ site.”*
- * *“The decision process has taken too long.”*
- * *“Hall: Council and members waffling, nobody seems to know what is happening apart from rumours.”*

6 respondents commented on the future use of the Lincoln Club Building:

- * *“Other issues are dictated by this decision.”*
- * *“Site is perfect for a park, youth of Lincoln need more open spaces.”*
- * *“This facility is so central and valuable as a site for community activities.”*
- * *“Too good an asset not to be used.”*
- * *“An asset wasting.”*
- * *“What’s happening about Lincoln clubbing?”*
- * *“Keep Lincoln Club site for a park (definitely keep site in public ownership).”*
- * *“What is happening with the now extinct Ellesmere Country Club? Could be a site for a sports hall.”*

7 respondents perceived that the community library should be bigger, provide more resources and have longer opening hours.

8.8 Water availability and quality, wastewater

12 respondents perceived issues about water availability and quality and waste water treatment / sewage important for the future development of their community. The recent public discussion about water issues across the Canterbury region has certainly contributed to an increased awareness about this topic.

One respondent mentioned about sewage facilities: *“some sections have paid 3 times to upgrade sewerage. Will they be asked again and again?”*

8.9 Appearance of the community and development of the town centre

As already mentioned in Section 8.3.4, a number of residents perceived the present town centre was aesthetically unattractive and needed to be enhanced.

- * *“Enhance / beautify streetscape; a lack of initiative by SDC to get on with the job.”*
- * *“Wish the main street looked more attractive (Chinese takeaway is ugly).”*
- * *“Aesthetics of town is [to be] improved esp. town centre; much of the building in village centre is unattractive.”*

In addition, 7 respondents perceived littering, a lack of street cleaning and the inadequate maintenance of drains as problems that needed to be addressed.

- * *“Where will the centre of the community be? We would like to see a social hub for the village”*
- * *“Open-up shopping area as people friendly: More access for seating, movement, relaxation and sense of bringing in people to participate not just stop, buy one item, then leave. Bring back a village feel in shopping area. Open up square again. Allow to open up township for people movement – trees planted, cafés and restaurants open up, shop front like an open mall but village style, encourage resident to spend time, money in village not cater for traffic flowing through who do not spend, just use road and congest our streets. A beautiful landscaped village encourages lingering, encourage people to spend time outdoors. Landscape township into an inviting village atmosphere again”*
- * *Lawn area and greenery: I would like to see the Chinese Takeaway removed (it is an eyesore) and a lawn area put down with picnic tables so that people can eat their purchases from the supermarket/fish’n chips shop etc. and not have to sit on the concrete or congregate around the cars etc. I’d like to see more trees planted in the main street. More greenery. Village feel”*
- * *“Seating for good consumption of Chinese takeaways, fish’n ships; Use the car parks to put in nice areas”*
- * *“Don’t have all businesses in a long strip. Design a village centre that is compact and with some off-street parking. Plan as much pedestrian area as possible with access to shops and open covered seating with trees and wind breaks. Have a market stall area. Make it human friendly instead of exclusively car friendly. Make it possible for older people to enjoy and feel safe in and not always have to buy something”*

Some respondents made constructive suggestions regarding the future development of the town centre. They would like to have a ‘social area’ in the centre of Lincoln that is attractive and “people friendly” rather than “exclusively car friendly”, with a large pedestrian zone, cafés, seating, and trees. One respondent suggested “landscaping the township into an inviting village atmosphere”.

Two residents recommended providing a new up-to-date town map since the current one was out of date and did not include the new subdivisions. In addition, one resident proposed a better place for community notices, since the current board were too small and got “heavily condensed”.

8.10 Education

7 residents were concerned about whether the schools in the community were able to cope with the population growth. Three respondents perceived that the “feeder area” was too large, that schools were already too big and might get “overstretched” and that local children were being “pushed out”. They suggested decreasing the school zone (or opening another school), and capping the size of schools.

One question of the survey queried whether the children in the respondent’s household were educated locally. 28 respondents stated that their children were educated locally. The children of three respondents were not educated locally.

9. Information about the respondents

9.1 Age distribution

Figure 11 illustrates the age distribution of the members of the households who participated in the Lincoln Envirotown Trust survey.

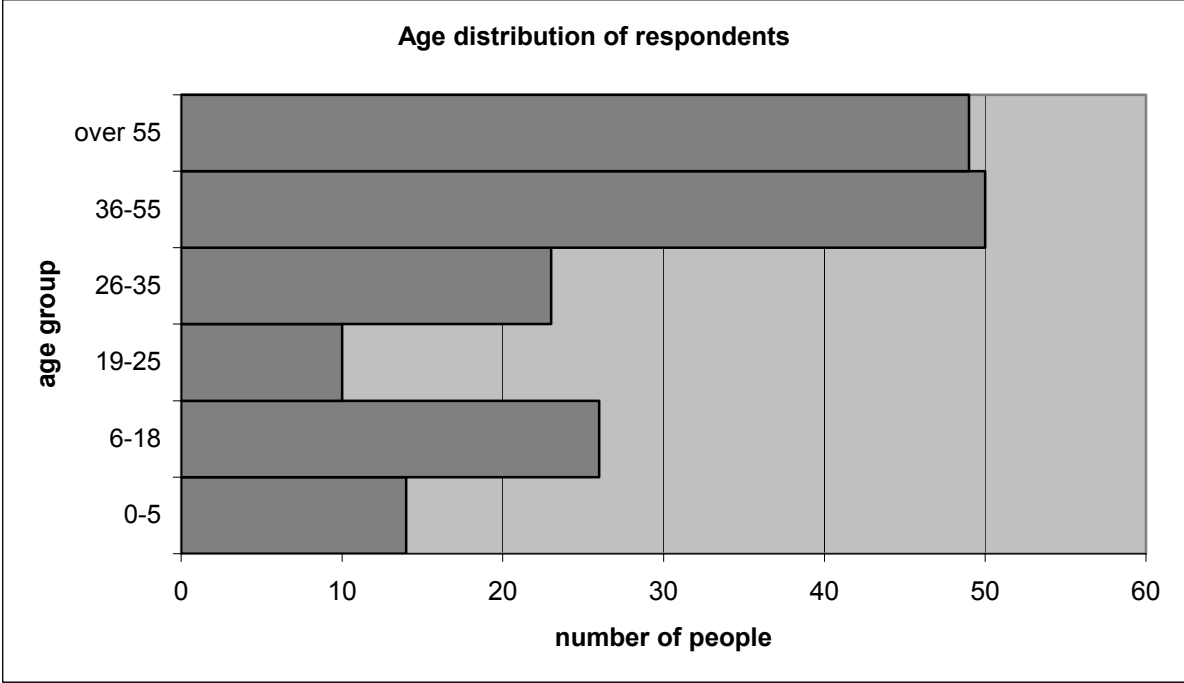


Figure 11

Figures 12 and 13 provide a comparison of the age distribution of the households which were covered by the Lincoln Envirotown Trust Survey and the population of Lincoln as a whole (population census 2001). The classification of age groups that was used for the Lincoln Envirotown Survey (Figure 11) differs from the classification that was used for the National Population Census. Therefore, to provide for better comparability, the data gathered by the Lincoln Envirotown Survey has been re-classified into age groups that are similar to the classification used for the population census (Figure 13).

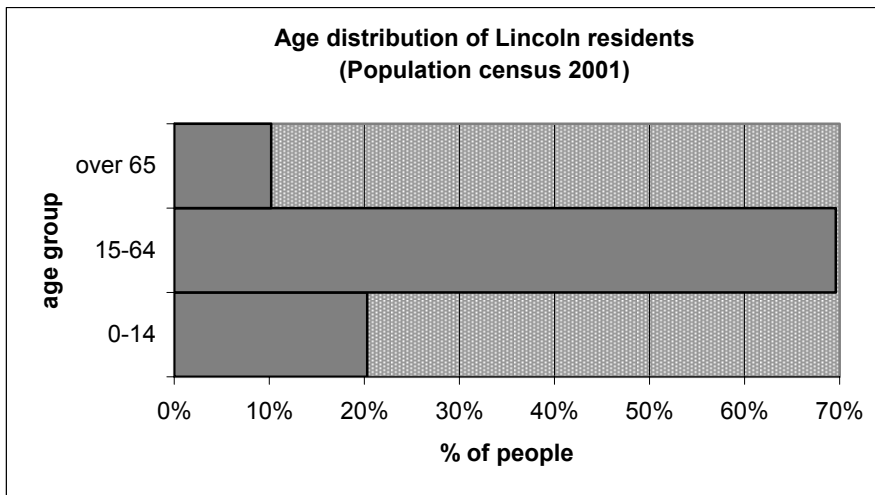


Figure 12¹

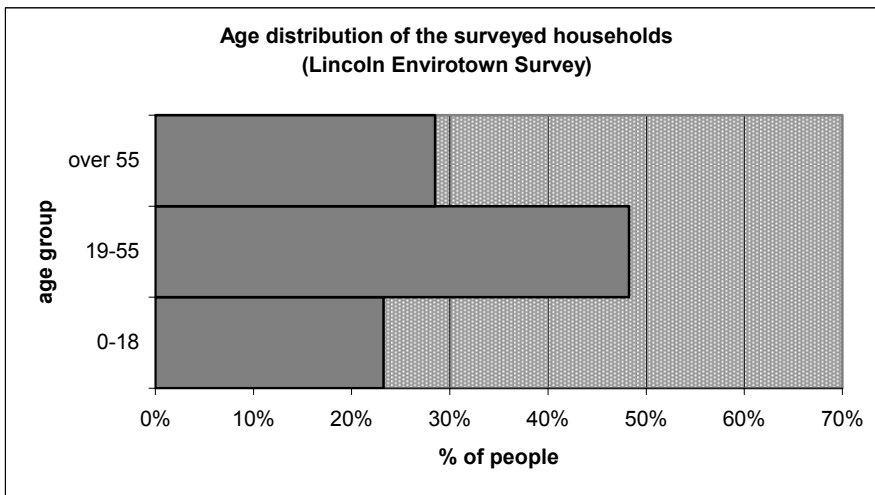


Figure 13

¹ Data source: Statistics New Zealand: Lincoln Community Profile. Population Census 2001. URL: <http://www2.stats.govt.nz/domino/external/web/CommProfiles.nsf/printing/28648633EB9D473FCC256D2B00776485> (assessed on 25.09.06).

9.2 Number of years lived and still expected to live in Lincoln

The respondents of the survey were asked how many years they had already lived in Lincoln and how many years they still expected to live in the community. The results are illustrated in Figures 14 and 15.

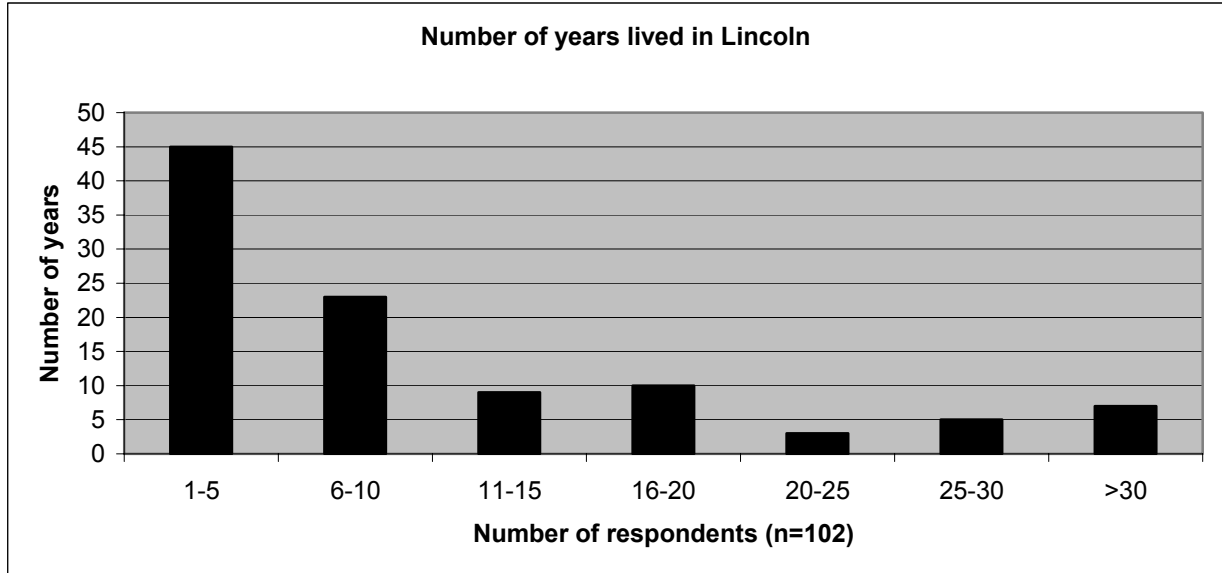


Figure 14

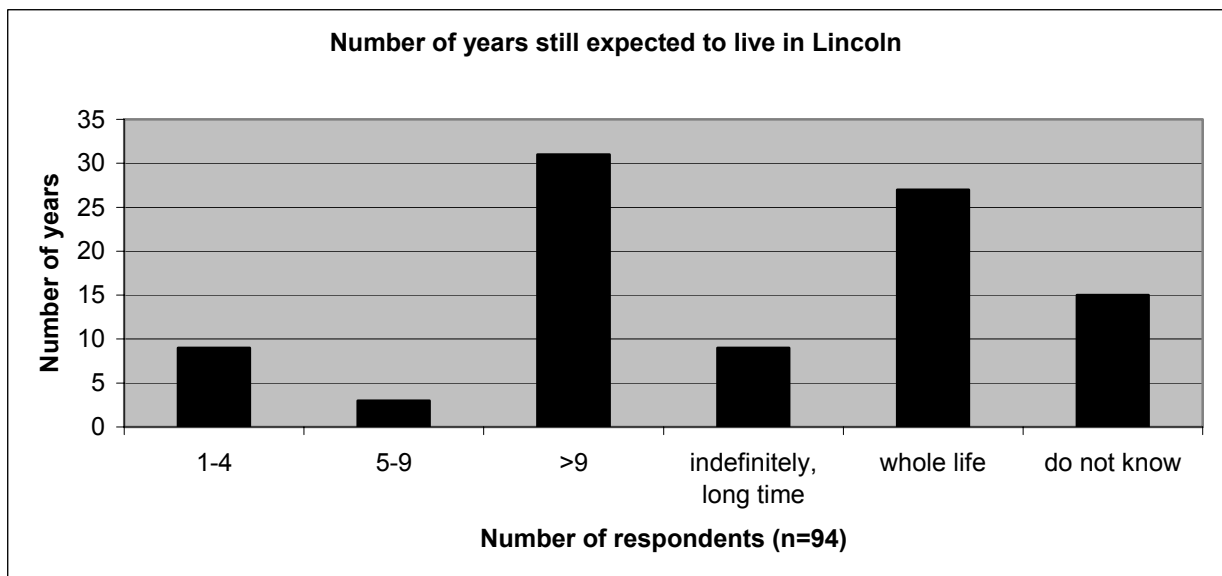


Figure 15

9.3 Number of vehicles

The respondents of the Lincoln Envirotown Trust Survey were asked about the number of vehicles in their households. Figure 16 illustrates the results. Figure 17 provides a comparison of the survey results with the National Census 2001.

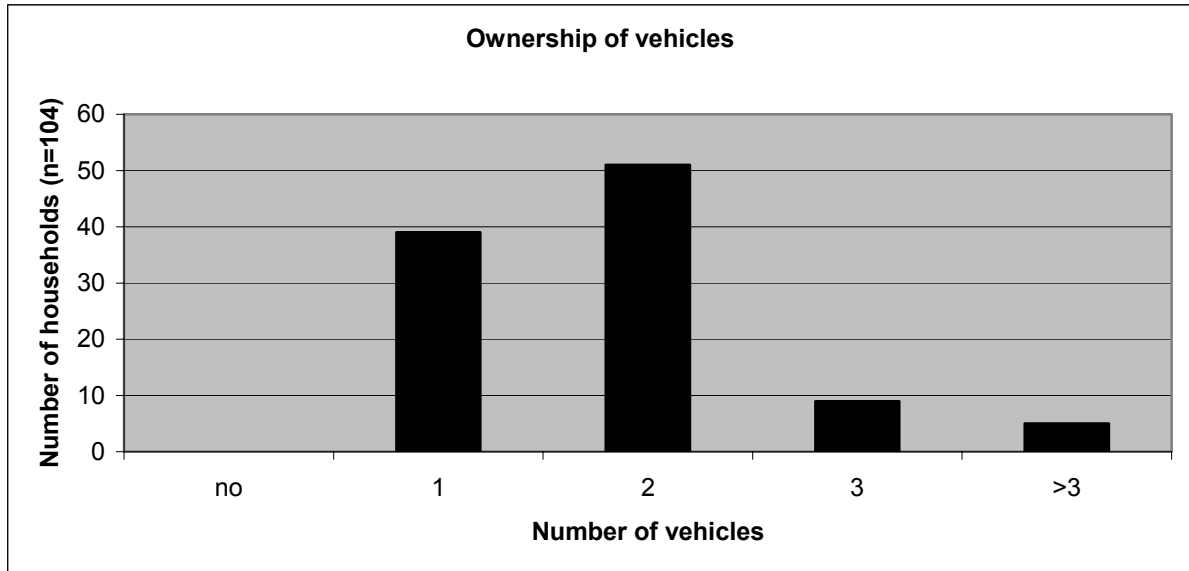


Figure 16

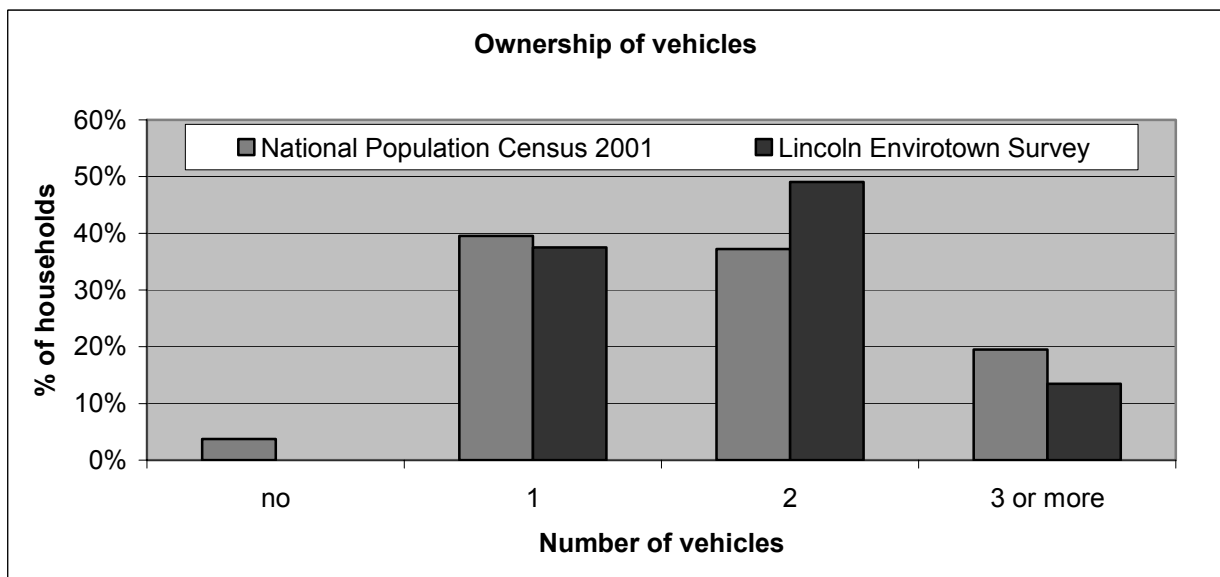


Figure 17¹

¹ Data source: Statistics New Zealand: Lincoln Community Profile. Population Census 2001. URL: <http://xtabs.stats.govt.nz/eng/TableViewer/wdsview/dispviewp.asp> (assessed on 25.09.06).

10. Conclusion

The majority of the surveyed residents have a positive attitude towards living in Lincoln. The rural character of the community, the small size, quietness and friendliness of the town, the community feeling, the Liffey Reserve with its walkways, the relatively good air quality, the low levels of crime, the good range of commercial and community facilities including schools, the good bus service, and the ideal distance to Christchurch and other sub-centres were described as the major strengths of Lincoln.

These qualities of the community attract increasing numbers of people, and thus, Lincoln is currently undergoing rapid housing development. Many residents are concerned that the population growth could undermine the community feeling and that the quiet, rural character of their community could get lost in favour of a busier, more anonymous, suburban like atmosphere. A majority of the respondents assessed the growth of their community as too extensive, too rapid and unplanned or not carefully enough adapted to the character of the existing township. The new high-density subdivisions were perceived as befitting to a city but not a rural town like Lincoln. Many residents argued in favour of larger section sizes and more public space. There was also general agreement that more linkages between the new subdivisions were needed to better integrate them into the community.

Contrary to the development of new subdivisions, a majority of the respondents expressed positive attitudes towards a possible development of the business / shopping centre in the centre of the township. They argued that the development of commercial facilities should keep up with the population growth and that the provision of more local infrastructure would avoid travelling. However, some residents perceived the existing range of facilities as sufficient and were concerned that commercial development would undermine the rural character of their community. As a 'compromise', many residents would like to see the commercial area planned and designed in a way that fits into the rural community and preserves the 'village' atmosphere. A number of residents suggested developing a 'social area' with a large pedestrian zone, cafés, seating, and trees in the town centre.

Another subject of community concerns are transport issues, especially the increasing traffic through the town centre and parking issues. The respondents suggested various solutions to improve the situation, including developing a by pass route, providing more parking space, and encouraging walking, cycling and the use of public transport to reduce the reliance on private vehicles

Regarding the future development of Lincoln, many residents argued that the planning process to date had too one-sidedly focussed on the design of new subdivisions, while the broader issues and development perspectives of the community as a whole had been ignored. There was general agreement that the growth of Lincoln should be planned in a way (or restricted) so that the rural character, the 'village' atmosphere, and the community feeling are maintained. Several residents suggested that planning decisions should primarily be made by the Council and / or the community.

Some residents were concerned that the growth of their community would place additional pressure on the environment (green areas, air quality) and generate more traffic. In particular, the preservation and maintenance of reserves was perceived as important for the future development of Lincoln. A number of residents proposed ways to enhance the environmental sustainability of their community. Most importantly, they commented on issues like waste management, clean energy sources, sustainable urban design principles, and sustainable housing design.

In addition to their perceptions regarding the future development of Lincoln, the respondents were asked about their current level of knowledge about and further interest in a number of

environmental issues, their involvement in various 'environmental activities' and their preferred sources of information.

The survey shows that there is a positive correlation between the residents' environmental knowledge and their involvement in 'environmental activities', or in other words, that knowledge about environmental issues promotes 'environmentally friendly' lifestyles.

The top issues most respondents were conversant in were domestic energy use, climate change, waste separation, and water availability across Canterbury. Rather limited was the knowledge about sustainable housing design, sustainable urban planning, biodiversity, Lincoln waste water treatment, and the quality of Lincoln water supply.

The top issues the residents would like to know more about are sustainable urban design, the quality of Lincoln water supply, and sustainable green housing design. The residents' high levels of interest in sustainable urban design and green housing design, together with the fact that Lincoln is currently undergoing rapid developments in terms of population growth and housing development, provides tremendous opportunities for the Lincoln Envirotown Trust to shape the future development of the community.

Most common among the various 'environmental' activities are those that are related to individual households, such as the separation of waste, the reduced use of electricity, the cultivation of fruit and vegetables, the responsible use of tap water, and the composting of garden and kitchen scraps. Less common are the activities that go beyond the level of the own household, such as participation in an environmental organisation, the planting of native species, or participation in a project to improve the natural environment.

More than three quarters of the respondents stated that they had obtained some type of environmental information over the course of the past year. Most of the residents who had not obtained any environmental information might in the future be interested in doing so. Only 5 respondents did not show any interest in obtaining environmental information at all.

The three most commonly used sources of information are the internet, books/magazines and asking friends. Less important are community oriented sources of information, such as discussion meetings, evening classes, demonstrations, projects, videos, and field-days. The younger age groups as well as residents who have already been engaged in interest and community groups or who have attended evening classes are clearly more open minded towards community oriented sources of information than average.

Epilogue

From these survey findings, there is clearly scope for the Lincoln Envirotown Trust to provide environmental sustainability education for householders and perhaps also businesses, and beyond this, to engage the town's population in debate over development directions and quality as Lincoln grows. There may be scope in 2006-7 to influence decisions on infrastructure, land subdivision, building design, and commercial facilities - moving some of these towards greater sustainability - an opportunity that will not be repeated for many years. This survey provides a strong starting point for further community engagement by the Trust.

Appendix 1: Survey questionnaire

Lincoln Envirotown Survey



My Lucky
Number:

Write your lucky number that is on the back of the survey only if you are entering the prize draw.

Go in to the draw to win a prize!! See the details at the end of the survey! Hand your survey in by the 11th July. Be in to win!

Dear Lincoln Community Member,

The Lincoln Envirotown Trust wants to help the people of Lincoln to make informed decisions about environmental sustainability in Lincoln and work together to plan for a sustainable future.

This survey has been produced voluntarily by a team, which has collated suggestions from the Lincoln Envirotown Trust, Lincoln Community Committee and the Lincoln Business Association. We also appreciate the support given by Lincoln University and Landcare Research in developing the survey.

In order to plan for a sustainable future we need your input. Please take the time (10-15 minutes) to complete and return the survey. We will use the information you provide to make our activities in 2006/2007 more relevant and useful to Lincoln. Landcare Research will also use the collated results of the survey for research purposes.

This is designed as an anonymous questionnaire and you will not be identified as a participant.

By completing the questionnaire it is implied that you have consented to participate in the project and to subsequent publication of the collated results of the project.

You may decline to answer any questions.

If you have any questions or comments please contact Sue Jarvis on 325 2811 extension 8901.

The collated results will be disseminated to the community through the newsletter, web and public meetings.

Thank you for your interest,

Sue Jarvis
(Chair of the Lincoln Envirotown Trust)

For each question please indicate your answer by ticking the appropriate box(es) or writing in the space provided.

- 1 Why have you chosen to live in Lincoln?
Please comment about what you like or don't like about living here.

- 2 Please tick the boxes to indicate whether in the last 12 months you or a member of your household has done any of the following:

	Occasionally (at least once a year but less than once a month)	Regularly (at least once a month but less than once a week)	Frequently (at least once a once a week)	No (but might like to in the future)	No (not interested)
attended an evening class in your spare time					
attended an interest group in your spare time					
been involved in community, church or voluntary groups					
used a bus to get to work or study, sports or shopping					
used formal or informal car-pooling (ride-share) to get to work, study, sports or shopping					
reduced, or limited your use of electricity					
reduced, or limited your use of tap water					
bought products marketed as certified organic or environmentally friendly					
Separated glass, plastics, steel & paper for recycling, from household waste					
composted garden and kitchen scraps (or used a worm-farm)					

been involved in a project to improve the natural environment					
grown garden vegetables or fruit					
obtained information about the environment from any source					
participated in an environmental organisation					
been active in restoring natural environments with native plant species					
made a donation to a non government environmental organisation.					

3a. How much do you know already about these environmental issues? Tick one or two boxes for each issue. Please add other issues you think are important in the empty boxes at the end of the table.

	I know something about this issue	I know nothing about this issue	I would like to know more about this issue	Where would you go to find out more, e.g. internet, library etc
The quality of Lincoln water supply				
Water availability across Canterbury				
Lincoln Waste water treatment (what happens to it)				
Energy use at home -e.g. electricity and fuel use				
Ways to reduce domestic waste going to landfill				
Biodiversity				
Climate change and its effects				
Sustainable urban design/planning				
Sustainable (green) housing design				

My extra topics are below:	I know something about this issue	I know nothing about this issue	I would like to know more about this issue	Where would you go to find out more, e.g. internet, library et

3b Please list the 3 issues you think are most relevant for the future of Lincoln, in order of importance (or necessity for action) and give your reason.

Top Issues	Reason for priority?	Would you like to know/learn more about this issue? (tick for yes)
1		
2		
3		

4a Lincoln township has been rapidly increasing in size (100 homes annually) and this growth is projected to continue over the next few years. Please comment on issues that this may produce.

Issue	Comment	Possible solution?
The development of the business/shopping centre		
Increasing traffic through the town centre		
Parking problems		
Planning decisions such as sub-division design		
Write other issues relating to the increase in the size of Lincoln township below:		

4b The Lincoln Business Association would like to plan for Lincoln community needs in terms of services as the township grows.

Service	What services do you need?	What services would you like to have?	What services do you already use?			If you don't use this service in Lincoln, where do you go?
			Used once	Use less than once per month	Use more than once per month	
Supermarket						
Medical centre						
Pharmacy						
Schools, preschool etc						
Physiotherapy						
Stationery/bookshop						
Hairdresser						
Coffee shops						
Restaurant						
Pub						
Motel						
Petrol station						
Service station						
Dentist						
Health food shop						
Greengrocer						
Butcher						
Drapery						
Clothes shop						
Shoe shop						
Appliances						
Hardware						
Video hire						
Real estate						
Antique shop						
Post shop						
Banks						
Vet						
Fish shop						
Gift shop						
Flower						
Shop						
Dairy						
Beauty parlour						
Lawyer						
Optician						
Podiatrist						
Public toilets						
Accountant						
Electrician						
Art and crafts						
Feedstock agent						
Other						

Comments						

4c *This question has been suggested to us by Lincoln High School students: Many people would like to see the number of plastic shopping bags going to landfill reduced as they are made from fossil fuels and they don't decompose.

What would encourage you to reduce your use of plastic shopping bags? Please tick the boxes that apply to you.

A charge per plastic shopping bag	The provision of inexpensive reusable bags by retailers	The provision of free reusable bags by retailers for their regular customers	I already minimise my use of plastic shopping bags	I don't see any reason for reducing my use of plastic shopping bags	I have another suggestion (write in here):

5 The Lincoln Envirotown Trust is planning to provide useful information on topics that people want to know about. How do you usually prefer to get information or advice when you need to know something? Tick some or all that apply to you.

Books/magazines I buy or borrow from library	use the internet	ask my friends	attend a discussion, meeting or evening classes	Be shown how e.g. demonstration projects, video, field-day	Other (name/describe)

6a

How many years have you lived in Lincoln?	How many years do you expect to be in Lincoln?	If there are children (18 and under) in your household, are they being educated locally?	Number of vehicles (cars, utes, etc) used by your household

6b How many people in your household fit into each age group?

Age Group	0-5	6-18	19-25	26-35	36-55	Over 55	I'd rather not say
Number in each age group							

Thank you very much!

Return your survey by the 11th July to drop boxes at the Lincoln Selwyn District Council Service Centre (Lincoln Library) or the Lincoln Supermarket or by mailing it to: Lincoln Envirotown Trust c/- Stuart Westoby, Lincoln Service Centre, 18 Gerald Street, Lincoln. OR if you would like us to collect your survey ring Melissa Brignall-Theyer on 325 3485

This section will be separated from your survey form

The survey forms are numbered. All numbers returned will go in the draw. If you attach your name and contact details to your response, your name will be detached from your responses before they are analysed. If you have chosen to not attached a contact and your number wins in the draw, we will publicise it in the local papers - so you may wish to make a note of the questionnaire number now, somewhere safe

This is optional:

Name	Phone number or other means of contact such as email

Your Lucky
Number is:

Remember to put it on the
questionnaire front page

1828

Appendix 2: Social research ethics checklist and application

**Application to
Landcare Research Social Ethics Committee
for Ethical Approval for Research Involving
Human Participants**

This form is to be completed in conjunction with, and after reference to, the material on the Landcare Research ethics webpage <http://staffroom.landcareresearch.co.nz/ethics/social/>. Please check each time you submit an application to ensure you are using the most up-to-date version.

It is advisable for researchers to routinely check their projects to ensure they are meeting ethical requirements. Checklists both act as an aide memoire and are frequently required procedure prior to seeking approval from ethics committees. Such protocols are likely to be increasingly employed as standard datasets to ensure compliance with research governance requirements. Governance is facilitated by the standardising of information “fields” about individual research projects. The following checklist and information form is intended to support ethical considerations throughout a project. Such a checklist prompts the making of clear statements of intent, mechanisms of approach and consideration of hazard arising from research in a manner which can be understood by the public and research professionals alike. While some of the items appear to be beyond the scope of ethics alone, any matter that may affect the success of research is of indirect ethical interest if it may expose respondents to exploitation or risk.

Please type in the white boxes below each question. All boxes are to be completed. Those that don’t apply to your project should be completed with N/A.

1. Project Name
Lincoln Envirotown Survey
2. Name of Applicant(s)
Lincoln Envirotown Trust
3. Expected Date of Completion [Gives some indication of commitment required of subjects and time given by researcher.]
July 31 st 2006

<p>4. Identity of field researchers and organisational base: [A list of names, positions, qualifications and functions in the proposed research of all those holding responsible positions and who might be in direct contact with subjects. Include larger affiliated research programmes. This offers an estimate of competence together with a chain of responsibility and accountability.]</p>
<p>Sue Jarvis, PhD, Chair of Lincoln Envirotown Trust, presently the recipient of The Sir Peter Blake Environmental educator award, working with Lincoln University and Landcare Melissa Brignall-Theyer, Landcare Research Rhys Taylor, self-employed Social Researcher, contracted by Landcare Research</p>
<p>5. Purpose of study: [Aims and objectives might indicate hypothesis testing, policy evaluation, and any potential “value” added to the subject group and/or society in general.]</p>
<p>To gain information about the actions, knowledge and requirements of Lincoln community as related to the progress of Lincoln towards being a sustainable township. This knowledge will help Lincoln Envirotown Trust provide the information, resources etc. Information may also be used by Landcare for research purposes.</p>
<p>6. Sources of funding: [The organisation, individual or group providing the finance for the study.]</p>
<p>Sustainable management Fund (MfE) with help of Landcare Research and Lincoln University</p>
<p>7. Explain the investigator’s and Landcare Research’s financial interests, if any, in the outcome of the project:</p>
<p></p>
<p>8. Scientific background: [Some rationale for conducting the study should be offered. If this investigation has been done previously, why repeat it? What research methods are being employed? Why and how was the subject/respondent chosen? What broad sampling techniques have been deployed?]</p>
<p>A survey (see attached) will be mail dropped to Lincoln residents, businesses and other community members. This survey will gain information about the knowledge base and requirements of Lincoln community members with regard to environmental sustainability. Lincoln Envirotown will use this information to focus its efforts on what the community wants.</p>
<p>9. Design of the study: [Describe briefly what will be done and how the subjects are to be expected to participate. What will be required of them? All procedural matters should be clarified. Depending on the methodology, steps may be detailed in advance, or set out through a process-led framework. Time commitments and data-collection settings should be revealed. Data analysis methods and procedures should also be clarified.]</p>
<p>The participants will fill out a survey form. They will then send or put the survey form in deposit boxes at various locations. These will be collected by Lincoln Envirotown members. If there are names on the forms – they will be removed before any analysis takes place.</p>

10. State here the date by which a decision on this application is required in order that the project can proceed as planned, if approval is given:
15/05/06
11. Will the project require ethical/cultural approval by other bodies? If yes please name the other bodies: [Approval may be by iwi and/or community groups and organisations]
No
12. Has this or a similar application / project been conducted elsewhere? If yes please provide details and include the decision of the reviewing authority:
Not sure
13. Types of persons taking part as participants: [Who will take part? Outline selection method, including stakeholder analysis where appropriate.]
Residents, business owners, landowners, people working in Lincoln and other people with interests in Lincoln
14. Potential benefits and hazards: [What risks to the subject are entailed in involvement in the research? Are there any potential physical, psychological or disclosure dangers that can be anticipated? What is the possible benefit or harm to the subject or society from their participation or from the project as a whole? What procedures have been established for the care and protection of subjects (e.g. insurance, medical cover) and the control of any information gained from them or about them? Are the target group or community in any danger of being over-researched?]
None
15. Recruitment procedures: [Is there any sense in which subjects might be “obliged” to participate – or are volunteers being recruited? If participation is compulsory, the potential consequences of non-compliance must be indicated to subjects; if voluntary, entitlement to withdraw consent must be indicated and when that entitlement lapses.]
Voluntary survey, delivered to mail boxes, businesses etc. People only participate if they want to.
16. Informed consent: [How are participants being provided with information about the project, and how can they demonstrate their consent. Consent may be provided in a number of forms depending on the research context. These can include written, oral, and proxy. Justification must be provided on what form is appropriate and why. Where written information is being provided, and written consent is required model forms must be provided.]
The survey has a cover letter (see attached) that describes the project, what is required of the participants and that they will remain anonymous.

<p>17. Data protection: [Consideration must be given to ownership of the information, and this should be documented. Particular care must be taken to identify where local and traditional knowledge are being provided, and how their owners rights are protected. The project should comply with the requirements of current data protection legislation and how this is accomplished should be disclosed to participating subjects and those monitoring the research procedure. This should include proposed data storage arrangements, degree of security etc. and whether material facts have been withheld (and when, or if, such facts will be disclosed).]</p>
<p>18. Confidentiality and anonymity: [The steps taken to safeguard the confidentiality of records and any potential identifying information about the subject must be revealed.]</p>
<p>Names will be removed from the survey form, and will only be required if the participant wants to go in the draw for a prize.</p>
<p>19. How much time will participants have to give to the project?</p>
<p>10-15 minutes</p>
<p>20. Provide details of any compensation and, where applicable, the level of payment to be made to participants</p>
<p>None</p>
<p>21. Is deception involved at any stage of the project?</p>
<p>No</p>
<p>22. Are there any plans for future use of the data beyond those already described?</p>
<p>23. How and where will the consent forms and data be stored until project completion?</p>
<p>At Landcare and perhaps at Lincoln University</p>
<p>24. Dissemination of findings: [What is the anticipated use of the data, forms of publication and dissemination of findings etc? In areas where information is jointly owned by participants as co-researchers attention should be paid to how they want to use the data.]</p>
<p>Data to be used by the Lincoln Envirotown Trust to decide how best to provide environmental information and education for the town, by Landcare Research. The results of the survey will be part of a report to the MfE and may also be part of a published report of the progress of Lincoln towards sustainability. A summary of the results may also be placed on the Lincoln Envirotown web site.</p>
<p>25. Is there any other information, which you think would be relevant to the Committee's consideration of this application?</p>
<p></p>

26. Would you like to receive any feedback that committee members may have on your methodological or research design?

DECLARATION The information supplied above is to the best of my knowledge and belief accurate.

Signature of Applicant:

Date:

Please send one signed hard copy of the completed application form and attachments to:

Please send one electronic version to: social-ethics-committee@landcareresearch.co.nz