



Research First

# Invercargill City Council

## 2013 Service Level Survey: Solid Waste Report

Wednesday, 11 December 2013



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## 1 Introduction

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### 1.1 Research Context

In 2013 Invercargill City Council (ICC) contracted Research First to conduct a survey of Invercargill residents. The purpose of this survey is to provide ICC with a measure of how satisfied residents are with seven key areas:

1. Roading;
2. Parks and reserves;
3. Cemeteries and crematorium;
4. Stormwater;
5. Water supply;
6. Sewerage; and
7. Solid waste.

### 1.2 Research Design

The 2013 research involved a mixed-method multi-phase design, which combined qualitative and quantitative research.

#### 1.2.1 The Qualitative Phase

The qualitative part of this research comprised:

1. Interviews with key members of the ICC staff; and
2. Seven focus groups, held among people identified as being informed and relevant to each of the service areas.

The focus groups involved between five and seven participants who were recruited by ICC to reflect the range of views held in the community regarding each issue. The discussion groups were held at ICC's Council Chambers, during August 2013.

#### 1.2.2 The Quantitative Phase

The survey of residents was completed between late August and mid October 2013. The data collection period was an extended one because the survey used a mixed-method design. In other words the 'survey' was actually two surveys - one completed online and one completed by conventional mail return. The process used was:

- A randomised sample was generated from the electoral roll, including both Māori and general rolls;
- A letter was sent to all those randomised into the sample, asking them to participate. The letter was sent out on ICC letterhead and invited participation by accessing the survey website (i.e., an online survey);



**This report  
presents the  
solid waste  
results from the  
2013 survey of  
Invercargill  
residents**

- A follow-up postcard was sent two weeks later, reminding people that they were still welcome to participate, and could do so by the online survey or by telephone if necessary; and
- Two weeks after the postcard was sent, a further follow-up was sent to all non-respondents which included a hard copy of the survey and a reply paid envelope (i.e., a mail survey).

Of the 2,500 invitations sent out, 354 residents responded to the mail survey and 315 residents replied to the online questionnaire\*. This means the results reported here are based on 669 responses.

This document combines the qualitative insights from the focus groups and the results from the survey in regard to **solid waste** in Invercargill.

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\* Note that due to the self-completion nature of the on-line survey, there are some questions that were answered by smaller numbers of respondents. Where there were less than 15 responses to a question these results have not been included.

## 2 Solid Waste Service Levels: The Focus Group Insights

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### 2.1 Front of Mind Concerns

Participants felt that the current kerbside collection was working well. However, the participants felt that there had been a lost opportunity in (i) not introducing the service into the wider area of the city (including rural areas), and (ii) not including a 'green bin' (organic waste) option.

There was a feeling among participants that it had been a long and difficult process to get the wheelie bin system in place. Participants were doubtful whether the Council would want to revisit that. When the system was initiated, a key issue was whether the service would be a three or two bin system. A decision at the time was made to go with a two bin system. The cost of reviewing this to incorporate a third (organic) option could be prohibitive at this stage. A major issue now was contamination of the bins, when rubbish was put in the incorrect bin. Further education was required for residents as to what goes into what bin. Suggestions to improve this were:

1. Use a campaign similar to the campaign used in Christchurch. Participants perceived that this campaign appeared to have been effective;
2. Target houses and spot check bins for contamination. If there was any contamination on an ongoing basis, raise their rates (done in Australia); and
3. Street checks. These were currently in place and bins would be rejected and letters sent if incorrect, but there were no real consequence for people; there needed to be more of a deterrent put in place.

Overall, participants felt that there was a need to reduce the amount of rubbish people were producing. Participants noted that the current action does not fully align with that stated in the annual plan of the Council.

There was also some concern that rural and peripheral areas did not get the same kerbside service, even though they paid the same amount in rates, which some participants felt was unfair.

Participants discussed the use of private operators in some areas. For example, in Otatara kerbside collection was provided through a private contractor, and was only available for rubbish, not organic or recycling. In other rural areas residents had a choice whether they used a private contractor or not. Some residents in the city chose to use a private contractor.

## 2.2 Collection Areas

Participants identified Otatara, Bluff, the CBD, Kennington and Makarewa as areas where rubbish collection could be expanded. Currently, private companies serviced these areas, but at a cost to residents. As residents were currently being charged by their rates (whether they received the service or not), participants felt that there should be no additional cost to residents if the service was expanded.

## 2.3 Organics Collection

There was a perception among participants that residents found it easier and less expensive to burn organic rubbish (particularly garden cuttings) rather than recycle it. Participants believed that if the Council made the disposal of green waste free at the transfer station, more people would use the facility. This could allow the Council to turn the waste into a saleable asset. Participants believed that it would become cost neutral if the Council sold products from the composted material.

Participants were of the belief that residents either use a private contractor or personally take green waste to the transfer station. Once at the transfer station, waste was composted. The Council currently used this composted material for rehabilitation of the old landfill. Some parks also ran their own green waste facilities.

It was believed that at the transfer station, the green waste section had the highest demand. It was seen as being a fairly basic service, described as a rough shed. It was understood by participants that the amount of compost created was only enough to go back into the landfill, and it was currently contaminated. Due to this contamination, the waste would be unlikely to be saleable.

Participants discussed how kerbside organics could be funded. All agreed that it would be an additional service and as a result, would need additional funding from the Council. A uniform annual charge of \$200 for collection and minimisation was seen as being adequate by participants. Given this, participants felt they would want to be able to choose how many bins they had.

Participants were asked to consider what organics should be included in kerbside collection. The 'red bin' was seen as being designed for good waste. Participants also thought dead animals should be allowed in the red bin. Some participants indicated that they would like to see food waste removed from Otatara collections. Having food waste provided a source for rats and removing it would remove the food source, and hopefully the rats. Compost often brought rats which was also an issue for residents.

Solid waste was currently going into landfills. Participants felt that at present there was a lot of space left in the landfill and therefore

space was not an issue. This was in contrast to other locations, both within New Zealand and internationally, where landfill resources were dwindling. Given the ample space currently available, participants felt that residents had no motivation to change their current waste disposal habits.

Residents were consulted regarding kerbside collection two years ago. Participants felt there were a lot of politics involved at the time and that the outcome was based on action passed by a divided council in an election year, and therefore residents' opinions were not necessarily listened to. Overall, participants agreed that it came down to cost as to what services would be offered, and where.

Odour was identified by participants as a small issue, but it was also noted that historically there had been greater concerns regarding odour. Another concern identified by participants was leaching agents. While participants agreed that the leaching could be mitigated, there was no real mitigation in place at present.

## 2.4 Transfer Station

Participants were asked to consider the transfer station the Council provided. A number of issues were raised in relation to the use of the transfer station:

- Self-sorting was heavily dependent on individuals to sort (plastics, cardboard, glass etc.). Improvements needed to be made with this sorting as there was a lot of cross-contamination occurring;
- Tyres that were taken to the transfer station end up in the landfill;
- Solid fill was taken to a local 'clean fill';
- Residents did not use the hazardous goods shed (for oil, paint, pesticides) effectively;
- OSH - a significant number of people have fallen into the rubbish pit and therefore a barrier was installed. It was now too difficult for some residents to unload their rubbish;
- Some residents drove too fast within the transfer station;
- The odour, but only on some days; and
- The cost of running the transfer station - was it cost effective?

Participants noted that in Invercargill there were a number of other facilities available for rubbish disposal. These were:

- The Garage Reuse Shop: run by an independent operator;
- Private Recycling Centre: had bins available 24 hours a day, seven days a week. Had signs indicating what goes into which bin. Provided bins for polystyrene, glass, paper, plastic and metal. This was a free service for residents;
- E Waste: a fee existed for some televisions and computers, but it was subsidised by the government; and

- MRF (Materials Recycling Facilities).

Participants felt there was a need to educate residents about what to do with their rubbish. One suggestion was to include something in the local paper on a monthly basis. Education was also required regarding how to minimise contamination and the impact on staff if sorting was not undertaken correctly.

The Garage Reuse Shop was gaining awareness within the community. It was described as being a 'great place to go' and 'appears to be well utilised'. It was in a convenient location - next to the transfer station. Participants saw it as a way to make dumping goods cheaper.

## 2.5 Street Recycling

Participants believed that more street recycling bins were needed, and those bins needed to be bigger. However, participants also felt that adding more bins was not necessarily the best solution. By adding more bins, more rubbish would be created. Therefore, education about reducing waste was also important.

The two-bin option provided in some areas was well liked by participants, but it was noted that there was a lot of contamination. Participants thought that the bins needed to be visibly different; and suggested keeping the colour scheme of bins consistent with that of home rubbish bins. A three-bin option was preferred by participants, (recycling, rubbish, organics), but participants thought there was no way to process this. To ensure no large waste was placed in street bins, participants suggested putting control lids on bins. Participants felt that the street recycling should be incorporated in the CBD upgrade and should be implemented 'sooner rather than later'.

Participants felt that kerbside recycling for businesses should not be provided by the Council within the CBD. Businesses should pay for their own recycling.

## 2.6 Waste Management at Events

Participants agreed that the waste collection provided at public events was insufficient for the needs of the events. Despite the bins being in place at events, there were issues with people dropping their rubbish on nearby streets when they were walking to and from events. Participants felt that the Council should be providing rubbish services at:

- Rugby Park Stadium;
- Stadium Southland Velodrome;
- Splash Palace;
- ILT Kidzone Festival; and
- Reserves.

Participants again noted that education was necessary. Residents needed to be encouraged to treat their rubbish as they would at home. While a two-bin service would add value at events, participants felt it would be difficult to process the separated waste. Any design should be for 'zero waste'.

## **2.7 WasteNet**

Participants were aware of the WasteNet brand. They felt it was heavily promoted within the community. Participants felt, that if asked, residents would assume the Council owned the WasteNet brand.

There was a feeling among participants that WasteNet could be used as a means of community education. There should be a focus on reduction of rubbish.

## 3 Solid Waste Service Levels: The Survey Results

### 3.1 Use of Solid Waste Management

Most respondents (88%) had their recycling and rubbish collected by the Council (Table 3.1).

**Table 3.1: Use of Solid Waste Management**

	Number of Respondents	Percentage of Respondents
Collected by the Council	524	88%
Not Collected by the Council	70	12%

Respondents indicated their housing status. Most respondents owned their house (87%), while a further 10% rented.

**Table 3.2: Housing Status**

	Number of Respondents	Percentage of Respondents
Own	517	87%
Rent	57	10%
Other	20	3%

### 3.2 Importance of Solid Waste Management Features

Respondents were asked to rate the importance of the following solid waste management factors. Table 3.3 (overleaf) shows that the results cluster into three groups. These are:

- Tier One: The emptying of the red lid (93%) and yellow lid (90%) bins;
- Tier Two: The disposal of electrical waste and information available for waste services (both 80%); and
- Tier Three: The affordable charge for collection (71%).

**Table 3.3: Importance of Solid Waste Management Features**

Features	MTI	Very Important	Important	Neutral	Unimportant	Very Unimportant
Red lid rubbish bins are collected weekly	93%	59%	34%	3%	1%	2%
Yellow lid recycling bins are emptied fortnightly	90%	49%	42%	7%	1%	2%
Disposal of electrical waste TV computers household appliances	80%	35%	44%	17%	1%	2%
Information available for waste services	80%	26%	53%	18%	0%	2%
Affordable charge for collection (Average residential rate per year \$200)	71%	28%	42%	27%	1%	1%

### 3.3 Solid Waste Management Facilities

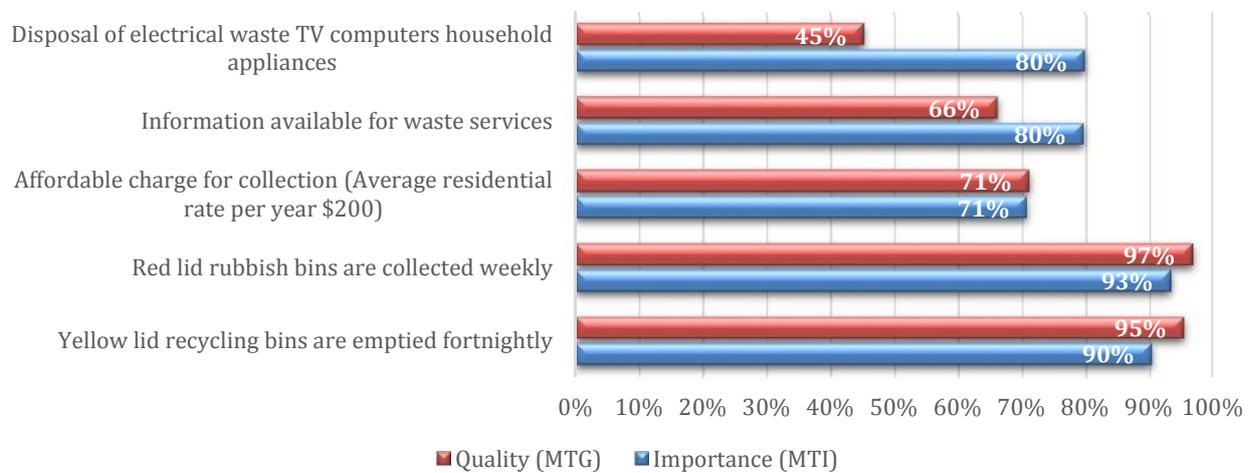
Respondents were asked to rate their satisfaction with the performance of the following solid waste factors. Red lid (97%) and yellow lid (95%) bins collection were rated the highest. The disposal of electric waste was rated the lowest (45% MTG).

**Table 3.4: Solid Waste Management Facilities**

Aspect of Solid Waste Facilities	MTG	Very Good	Good	Average	Poor	Very Poor
Red lid rubbish bins are collected weekly	97%	64%	33%	3%	0%	0%
Yellow lid recycling bins are emptied fortnightly	95%	63%	33%	4%	0%	0%
Affordable charge for collection (Average residential rate per year \$200)	71%	26%	45%	26%	2%	1%
Information available for waste services	66%	21%	45%	28%	5%	1%
Disposal of electrical waste TV computers household appliances	45%	12%	33%	31%	19%	5%

Figure 3.1 (overleaf) shows the importance (MTI) of aspects of Invercargill’s solid waste management system relative to its quality (MTG) rating. Figure 10.1 demonstrates that Invercargill’s solid waste management system does not perform to expectations when it comes to disposal of electrical waste and information available for waste services.

**Figure 3:1: Importance vs. Quality of Invercargill's Solid Waste Management System**



Respondents were informed the collection of red lid rubbish bins occurs weekly and yellow lid recycling bins occurs fortnightly. They were asked how often they would prefer the bins to be collected. Almost a tenth did not have an opinion as to how often the bins should be collected. Among those that did, most indicated that the current frequency of collection was adequate for both the red lid (86%) and yellow lid (74%) bins. One-tenth (12%) would have preferred the yellow lid recycling bin to be collected weekly.

**Table 3.5: Frequency of Bin Collection**

	Rubbish Bins		Recycling Bins	
	Number of Respondents	Percentage of Respondents	Number of Respondents	Percentage of Respondents
Once a week	265	62%	49	12%
Once a fortnight	16	4%	219	52%
Twice a week/bigger bin	2	0%	1	0%
Monthly	1	0%	17	4%
OK as is	104	24%	93	22%
Don't know	37	9%	39	9%

### 3.4 Transfer Station

Respondents were asked which transfer station they used and how frequently they used it in a year. Most used the Invercargill transfer station (88%). Table 3.7 shows that 17% used it once, 30% used it two to three times, 31% used it four to six times and 23% used it more than six times a year.

**Table 3.6: Most Used Transfer Station**

	Number of Respondents	Percentage of Respondents
Invercargill	529	88%
Bluff	18	3%
None	51	9%

**Table 3.7: Frequency of Using Transfer Station**

	Number of Respondents	Percentage of Respondents
Once	95	17%
Twice	93	17%
Three times	71	13%
Four times	72	13%
Five times	38	7%
Six times	61	11%
More than 6 times	129	23%

Respondents were asked to rate the importance of factors relating to transfer station features. Of greatest importance was the hours of operation (81% MTI) and of least importance (but still rated as being important) was the location of the facility (73% MTI).

**Table 3.8: Importance of Transfer Station Features**

Features	MTI	Very Important	Important	Neutral	Unimportant	Very Unimportant
Hours of operation	81%	28%	53%	16%	2%	1%
Green waste garden waste charges	79%	37%	42%	17%	1%	3%
Customer service	79%	28%	51%	19%	1%	1%
Rubbish charges	77%	33%	45%	19%	2%	2%
Location of facility	73%	22%	51%	23%	3%	1%

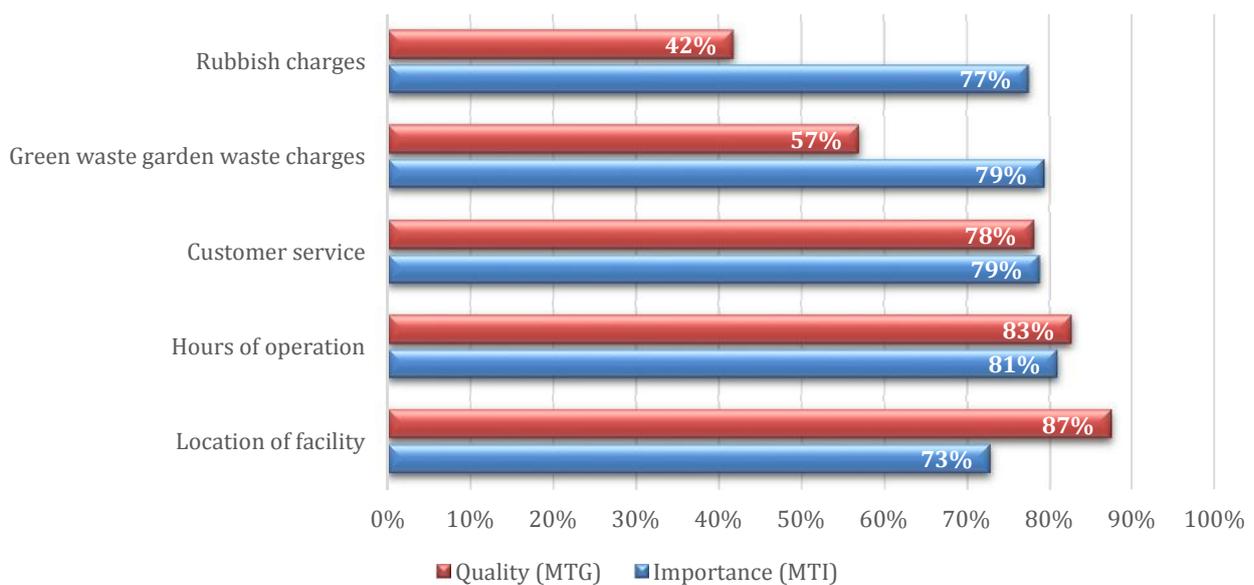
Respondents were asked to rate their satisfaction with the performance of the following factors relating to transfer stations. The location of the facility (87%) and its hours of operation (83%) were rated highest. The aspects rated the lowest were the charges relating to green garden waste (57%) and rubbish (42% MTG).

**Table 3.9: Satisfaction with Transfer Station Facilities**

Aspect of Transfer Station Facilities	MTG	Very Good	Good	Average	Poor	Very Poor
Location of facility	87%	33%	55%	12%	0%	0%
Hours of operation	83%	31%	52%	17%	1%	0%
Customer service	78%	28%	50%	20%	2%	0%
Green waste garden waste charges	57%	20%	37%	26%	11%	7%
Rubbish charges	42%	11%	31%	39%	13%	7%

The following graph shows the importance (MTI) of aspects of Invercargill’s transfer station relative to its quality (MTG) rating. Figure 3.2 demonstrates that customer service and opening hours meet respondents’ expectations, while the locations of the facilities exceed them. Invercargill’s transfer station does not perform to expectations when it comes to rubbish and green waste garden charges.

**Figure 3.2: Importance vs. Quality of Invercargill’s Transfer Station System**



### 3.5 Rubbish

Respondents were asked to indicate the relative importance of each factor relating to rubbish collection. Twin bin street recycling, annual inorganic collection and kerbside green waste collection were the most important (70% to 74%). Extending the opening hours of the transfer station was of least importance (31% MTI).

**Table 3.10: Importance of Rubbish Features**

Features	MTI	Very Important	Important	Neutral	Unimportant	Very Unimportant
Twin bin street recycling	74%	37%	37%	22%	3%	1%
Kerbside green waste collection	73%	39%	34%	20%	4%	4%
Annual inorganic collection	70%	34%	36%	25%	3%	2%
Extend opening hours of transfer stations	31%	12%	19%	54%	12%	4%

### 3.6 Invercargill City Council's Solid Waste Management Service

A minority (5%) of respondents had made a request for service or lodged a complaint with the Council about recycling and rubbish collection and transfer station services within the last two years (Table 3.11). In most cases (72%) the response time for attending to the request was as expected (Table 3.12). Over half of the requests were resolved as expected (57%), while 11% were resolved better than expected. In a third of cases (32%) the request was not resolved (Table 3.13, overleaf).

**Table 3.11: Request for Service or Complaint Lodged**

	Number of Respondents	Percentage of Respondents
Yes	27	5%
No	562	95%

**Table 3.12: Response Time**

	Number of Respondents	Percentage of Respondents
Faster Than Expected	2	7%
As Expected	21	72%
Slower Than Expected	6	21%

**Table 3.13: Resolution of Complaint**

	Number of Respondents	Percentage of Respondents
Yes, Better Than Expected	3	11%
Yes, As Expected	16	57%
No/ Unsatisfactory	9	32%

A small number (n=133) of respondents made suggestions to further improve the Council’s recycling and rubbish collection and transfer station service. An extensive list of suggestions are outlined in Table 3.14. A third of comments were about residents wanting green waste collection and a further 8% wanted free drop-off for green waste. One tenth wanted kerbside collection in Otatara and other outlying areas.

**Table 3.14: Suggestions for Improvement to the Recycling & Rubbish Collection and Transfer Station Service**

	Number of Respondents	Percentage of Respondents
Green waste bin/ collection	41	31%
Lessen cost for Transfer Station	17	13%
Kerbside collection in Otatara/ Outlying areas	12	9%
Free green waste drop-off	11	8%
Safety rail and kerb at Transfer Stations are a poor design	10	8%
More information on recycling/ rubbish	8	6%
More encouragement for recycling/ rubbish	7	5%
Doing a good job	6	5%
Extend/ change Transfer Station operating times	4	3%
Larger/ Heavier rubbish bins	3	2%
E-Waste disposal facilities	3	2%
Lower cost for kerbside collection	2	2%
Other	9	7%