

CITY OF JOONDALUP

WASTE MANAGEMENT STRATEGY 2005

Introduction

The 2000 Waste Management Strategy recognized there were considerable advances being made in waste management technology and that this technology would reduce the community's reliance on landfill. The Mandarie Regional Council was considering a plan to adopt this technology. The costs at the time were unknown although it was recognized that the cost would be considerably higher than landfilling. There was also the outstanding issue of recycling collection formats and single bin recycling technology.

In 2004 the State Government released the strategy 'Towards Zero Waste'. The goal that all Western Australians live in a waste free society, with the following principles:

- Prevention – to avoid the creation of waste;
- Recovery – to efficiently recover, retreat and reuse all waste;
- Disposal – to responsibly manage waste in the environment.

The Mandarie Regional Council has made significant progress towards the introduction of Resource Recovery and is scheduled to be constructed in 2007 and anticipated to accept waste in 2008. In order to provide a smooth transition to resource recovery, gain community feedback on the future directions of waste management and meet community expectations on service delivery and collection formats, a community consultation program was initiated to address these issues.

The following Strategy has been developed from the strategic directions provided by the State, consistency with the City's Strategic plan and the outcomes from the community consultation process. The consultation process addressed the issue of the recycling format and a strong community response was for the introduction of a universal recycling wheelie bin to all residents.

Objective 1 - Statement of Intent

'Towards Zero Waste While Providing A Comprehensive and Sustainable Waste Service'.

The Statement of Intent is consistent within the State's strategic direction on Zero Waste and includes the following principles:

- Prevention – to avoid the creation of waste;
- Recovery – to efficiently recover, retreat and reuse all waste;
- Disposal – To responsibly manage waste in the environment

The Statement of Intent is consistent with the City's Strategic plan. The Plan has a key focus area 'To care for the environment'. The associated strategy is to efficiently and effectively manage the City's waste by:

ATTACHMENT 1

- Further develop and implement recycling strategies; and
- Plan for the development of waste management.

Key Performance Indicator

- Achieve an overall waste diversion rate from landfill in excess of 50% by the 2010.
- Maintain an overall customer service satisfaction rating for the City's waste services in excess of 80%.

Objective 2 - Reduce the tonnages disposed to landfill generated by the City's residences.

Strategy 1 Weekly Household Rubbish Service

Dispose of waste collected by the household waste collection service to the Resource Recovery Facility.

Key Performance Indicator

- Achieve 50% recovery of the waste contained in the green wheelie rubbish bin by 2010.
- Maintain a customer service satisfaction rating in excess of 90%* for the collection service.

Strategy 2 Kerbside Recycling Service

Introduce a universal recycling wheelie bin service to every residence within the City.

Increase the capacity of the Wangara sorting plant to cope with the extra tonnages from the introduction of recycling wheelie bins.

Key Performance Indicator

- Achieve in excess of 17% recovery of kerbside recyclables from the household waste stream.
- Achieve a customer service satisfaction rating in excess of 70%*.

Strategy 3 Bulk Collection Service

Continue with current service consisting of a bulk rubbish collection service and a green waste collection service at nine monthly intervals.

Key Performance Indicator

- Recover in excess of 34% of waste collected from the bulk collection service
- Achieve a customer service satisfaction rating in excess 80%*.

Strategy 4 Greens Facility Drop Off Wangara

Continue with the current service for the drop off of green waste at Wangara

Key Performance Indicator

- Recover 100% of the green waste stream delivered to the site.

Objective 3 - State and Regional Coordination

Maintain and develop links with regional bodies and state agencies to develop policies and programs to achieve the aims of Zero Waste and the City's Statement of Intent.

Strategy 1 State Coordination

City Officers to seek and/or maintain an active role in the Municipal Waste Advisory Committee of the Western Australian Local Government Association.

Key Performance Indicator

- A city officer to nominate each year to become a member of the Municipal Waste Advisory Committee.
- A city officer to attend meetings.

Strategy 2 Regional Coordination

Continue to provide technical support and strategic advice to the Mindarie Regional Council especially in relation to the Resource Recovery Project.

Key Performance Indicator

- A city officer to attend meetings.

Objective 4 - Community Waste Education and Awareness

Develop programs on waste education and awareness consistent with the Statement of Intent and in preparation for the introduction of recycling wheelie bins and the new Resource Recovery Facility

Strategy 1 Schools Waste Education and Awareness Program

The City to further develop relationships with schools to promote waste reduction and recycling by:

- Developing a recycling program in conjunction with the Education Department;
- Developing an excursion program to visit the Resource Recovery Facility after opening.

Key Performance Indicator

- Explore the possibility with the Education Department the introduction of a school's recycling program;
- Develop an excursion program to visit waste facilities.

Strategy 2 Community Waste Education and Awareness Program

Develop with the Mindarie Regional Council a community education and awareness program in preparation for the commissioning of the new Resource Recovery Facility at Neerabup.

Key Performance Indicator

- City Officers to assist in the development of a regional community education and awareness program consistent with the City's Statement of Intent.

ATTACHMENT 1

Strategy 3 Recycling Wheelie Bin Education and Awareness Program

Develop and implement an education and awareness program for the introduction of recycling wheelie bin.

Key Performance Indicator

- Develop an education and awareness program.
- Implement the program as part of the introduction of the recycling wheelie bin service.

*Customer Satisfaction Monitor 2005



Asset Research
Information for Success

Report on the
City of Joondalup
Resource Recovery and Recycling Survey

(November 2005)

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**Report on the City of Joondalup Resource Recovery and
Recycling Survey**

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1.0 INTRODUCTION

In 2005 the City of Joondalup completed a review of its waste management strategy. The City's strategy provides for the introduction of resources recovery, a new facility to process waste, and also to address the issue relating to the recycling collection format. The recycling service has been the subject of criticism due to the expectation that the City may introduce recycling bins to replace the existing bag service.

Waste management services are delivered to every resident. The introduction of resource recovery and a new recycling format is expected to have a major impact on the household rubbish rate charge.

Following the completion of the report the City felt that it was timely to consult with the residents on the implications of the resource recovery facility and seek the community's view of their preferred collection format.

The City wishes to know the community's preference on recycling collection format while understanding of the implications of the introduction of resource recovery.

The City engaged Asset Research to undertake the survey and provide a report analysing and evaluating the data gathered.

2.0 METHODOLOGY

The approach undertaken to complete this project involved three distinct methods of data collection. The stages were:

- Broad community consultation
- Random telephone survey
- Youth feedback

The methodologies used in undertaking each stage were as follows:

- **Community consultation** - The community consultation process was designed to make the majority of the community aware of potential changes to the resource recovery and recycling process and to give them the opportunity to identify their preferred changes. Potential participants were advised of the proposed alternatives through local newspaper advertising, the City website and postal information packages. They were invited to respond using either an online survey, postal survey or brief response sheet that could be cut out of the newspaper. A total of 1,300 responses were received, consisting of 91 full surveys and 1,209 abbreviated responses from the newspaper. Results for this stage are not considered to be as reliable as the telephone survey as only people with the interest in participating (or firm opinions on the subject) were expected to go to the effort of participating. Results may, therefore, include an element of bias. Despite this the process was important to properly consult all interested section of the community.
- **Telephone survey** - The telephone survey was designed to independently gauge the community's opinions on the preferred changes. This process was random in nature, and therefore less likely than the community consultation process to introduce any bias into the final statistics. The sampling approach for the telephone survey involved random sampling from the Electronic White Pages based on the regions comprising the City of Joondalup. A total of 400 completed surveys were obtained from 974 original calls, and 500 people volunteering to look at information on the proposed changes. This resulted in a response rate of 41.07% and provided a sampling error of below +/- 5% at the 95% confidence level.
- **Youth feedback** - The opinions of a limited group of local schoolchildren were also gathered through the conduct of information sessions at their schools and the completion of a survey on recycling preferences.

Asset Research was able to undertake the customer survey on behalf of the City in accordance with standards suggested by the Office of the Auditor General, Western Australia. The research methodology suggested in this

proposal conforms to recommendations made to State Parliament in the “Performance Examination - Listen and Learn - Using customer surveys to report performance in the Western Australian public sector” document dated June 1998.

Consequently, the results quoted in this report are considered to be satisfactory in terms of survey and reporting accuracy and reliability to meet required standards.

3.0 EXECUTIVE SUMMARY

- In September 2005, the City of Joondalup commissioned Asset Research to assist (on the basis of community preferences) in identifying the preferred model for resource recovery and recycling in the City. The identification of community opinion was undertaken using a direct community consultation approach as well as the conduct of a random customer survey.
- The community consultation process was designed to make the majority of the community aware of potential changes to the resource recovery and recycling process and to give them the opportunity to identify their preferred changes. Potential participants were advised of the proposed alternatives through local newspaper advertising, the City website and postal information packages. They were invited to respond using either an online survey, postal survey or brief response sheet that could be cut out of the newspaper. A total of 1,300 responses were received, consisting of 91 full surveys and 1,209 abbreviated responses from the newspaper.
- The telephone survey was designed to independently gauge the community's opinions on the preferred changes. This process was random in nature, and therefore less likely than the community consultation process to introduce any bias into the final statistics. A total of 400 completed surveys were obtained from 974 original calls, and 500 people volunteering to look at information on the proposed changes.
- The opinions of local schoolchildren were also gathered through the conduct of information sessions at their schools and the completion of a survey on recycling preferences.
- The key purpose of the consultation process and survey was to identify which of the 4 listed resource recovery and recycling options was preferred by the general community of residents of the City of Joondalup.
- **Overall Results**

Graph A, presented overleaf, shows that Option 3 is clearly the preferred option by both participants in the community consultation and respondents to the random survey.

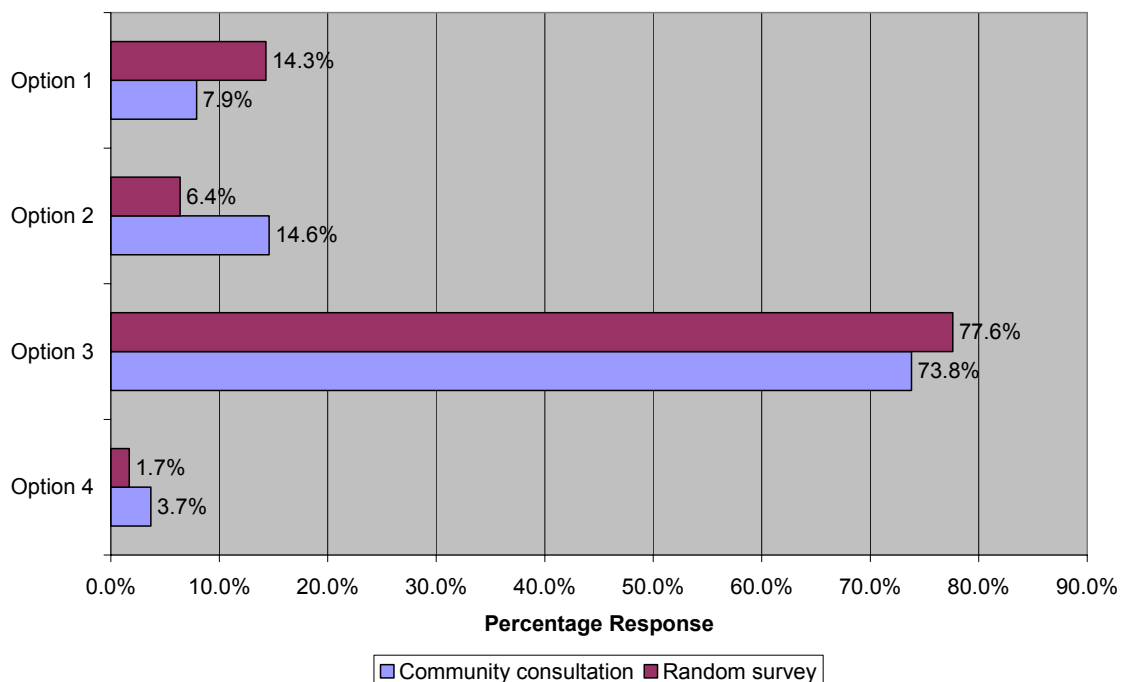
When asked which of the 4 options they preferred, approximately 3 out of every 4 respondents advised that option 3 was their preferred option.

The next preferred option varied depending on whether the results were based on the community consultation process or the random survey.

The community consultation respondents identified option 2 as the next most popular, with 14.6% of respondents, followed by option 1 with 7.9%. 3.7% of respondents preferred option 4.

This situation was partially reversed in the random survey process. While option 3 was still overwhelmingly the preferred option, option 1 was the next most popular with 14.3% of responses, followed by option 2 with 6.4%. It is expected that this is the more reliable set of statistics due to the more random nature of response collection. Participants in the community consultation process were more likely to participate based on a direct interest in the outcome, whereas the random survey is more likely to reflect community opinion, even of those who were less interested in the outcome.

Graph A – Option Preference Rankings



• Community Consultation Results

Community consultation results show that the majority of participants prefer Option 3 (73.1%), followed by Option 2 (14.6%) and Option 1 (7.9%).

Results remain relatively consistent in an overall sense when analysed on the basis of ward, although with some variations. Diverging from the norm, the Whitford and South Coastal wards show a second preference for option 1 and a third preference for option 2. The possibility exists that this is based on a greater proportion of respondents in the over 55 category, therefore minding their expenses to a larger degree than other age demographics (a common basis for preferring option 1).

The Pinnaroo ward also demonstrates an increased proportion of respondents preferring option 2 (26.9%) with a subsequent reduction in the percentage for option 3 (65.4%).

Table A presents the results broken up by ward.

Table A – Community Consultation Preference Rankings by Ward

	Selected Option			
	Option 1	Option 2	Option 3	Option 4
North Coastal	4.8%	14.3%	75.0%	6.0%
Marina	7.4%	16.7%	72.2%	3.7%
Whitford	14.3%	9.5%	71.4%	4.8%
South Coastal	10.3%	10.3%	76.5%	2.9%
South	6.7%	10.1%	78.7%	4.5%
Pinnaroo	5.8%	26.9%	65.4%	1.9%
Lakeside	8.7%	17.4%	72.5%	1.4%
Total	7.9%	14.6%	73.8%	3.7%

Participants were able to provide any general comments they wanted. The responses were clearly defined across the full range and generally related to reasons for choosing the responses they did. A summary of reasons for choosing each option is as follows:

- Option 1 – Participants were either satisfied with the existing system (advising that it met their needs) or did not want to incur additional expense by selecting the more expensive options.
- Option 2 – Participants recognised the need for an additional emphasis on recycling but preferred that it was not compulsory to take the additional bin. Many believed that additional expenses would be incurred by residents/the community and believed that not all people would use the additional bin.
- Option 3 – Participants believed that recycling was important and welcomed the introduction of a separate recycling bin. Many advised that the system was already in operation elsewhere and thought it was about time this was undertaken in the City of Joondalup.
- Option 4 – Few reasons were provided for selecting this option, although some respondents commented on having a lack of space for additional bins.

• Random Telephone Survey Results

The random telephone survey results show that the majority of participants prefer Option 3 (77.6%), followed by Option 1 (14.3%) and Option 2 (6.4%).

Results remain relatively consistent in an overall sense when analysed on the basis of ward. Notable variations to these stats include an elevated preference for option 1 in the Whitford and South Coastal wards. The possibility exists that this is based on a greater proportion of respondents in the over 55 category, therefore minding their expenses to a larger degree than other age demographics (a common basis for preferring option 1).

The Pinnaroo ward also demonstrates an increased proportion of respondents preferring option 2 with a subsequent reduction in the percentage for option 3.

Participants were able to provide any general comments they wanted. The responses were clearly defined across the full range and generally related to reasons for choosing the responses they did. The reasons for choosing each option remained the same as those for the community consultation results.

Other results for the telephone survey included:

- 96.2% of respondents agreed that the goal of the City of Joondalup's waste management service should be 'Towards zero waste while providing a comprehensive and sustainable waste service.' Only 3.8% of respondents disagreed with this.
- 82.2% of respondents advised that they were aware of the recycling service offered by the City with 12.7% advising they were somewhat aware and only 5.1% of respondents advising they were unaware.
- 31.2% of respondents were satisfied with the existing service, 17.5% neither satisfied nor dissatisfied and over half (51.4%) being either dissatisfied or extremely dissatisfied.
- 98.7% of respondents advised that they thought it was important (92.7% - very important) to participate in recycling.
- 81% of respondents currently make use of the City of Joondalup recycling collections. 91.1% of all respondents would like to recycle more than they currently do.
- Respondents were asked how much they would be willing to pay per week for a more effective recycling service. The random telephone survey and the community consultation clearly show a preference for the introduction of the universal kerbside recycling service. In both cases costs were clearly enunciated and had strong associated environmental links of recycling and resource

recovery. However, when asked a bald statement about increases in costs, Question 7, the highest proportion of respondents (33%) were not willing to pay extra. The proportion of respondents who were willing to pay extra to cover the estimated costs was 46%, with 12% of respondents willing to go part of the way. The strong showing for the universal kerbside recycling service at the mid to high seventy percent mark for both surveys signal that when considering the environmental issues in association with bottom line costs, the respondents are willing to pay the extra costs.

- **Local Schoolchildren Survey Results**

- 100% of schoolchildren surveyed felt that it was important to participate in recycling.
- 71% of the children participated in recycling at home.
- 58% of the children believed that more needs to be done in their local area for recycling.

4.0 RESULTS OF THE SURVEY

This section summarises the results of the survey. The results are presented in broad category headings representing the general topic areas included in the questionnaire.

Demographic data was obtained from respondents to the survey and an analysis of responses to most questions was undertaken based on resulting demographic categories. This demographic analysis is only stated in the body of this report where it became evident that there were significant differences in the overall statistics quoted based on individual demographics.

4.1 Overall Results

One of the major reasons for conducting the survey and consultation process was to determine the community's preference out of a selection of resource recovery and recycling options. In each of the two processes (community consultation and telephone survey) participants were presented with a series of 4 options from which they would select their preference. The four options were:

- **OPTION 1** - The Council should maintain the current recycle bag system with a user pays optional recycle wheelie bin system at an estimated cost between \$185 to \$195 per household per year.
- **OPTION 2** – The Council should remove the recycling bag service and change voluntary wheelie bin recycling service by absorbing the costs of the service into the rubbish rate at an estimated cost between \$195 to \$205 per household per year. A one-off establishment fee of \$50 would be charged.
- **OPTION 3** – The Council should remove the recycle bag service and make the recycling wheelie bin universal to all ratepayers at an estimated cost between \$195 to \$205 per household per year.
- **OPTION 4** - The Council should remove the kerbside recycling service and only operate the weekly rubbish collection service and provide a bulk collection service based on a six monthly cycle at an estimated cost of \$185 to \$195 per household per year.

The results from both the community consultation and telephone survey show relatively consistent results when the preferred option was calculated. Graph A, presented overleaf, shows that Option 3 is clearly the preferred option by participants in the community consultation and respondents to the telephone survey.

77.6% of respondents to the telephone survey advised that option 3 was their preferred option, compared to 73.8% of participants in the community consultation. In an overall sense this equates to support for option three of approximately 3 out of every 4 participants in this process.

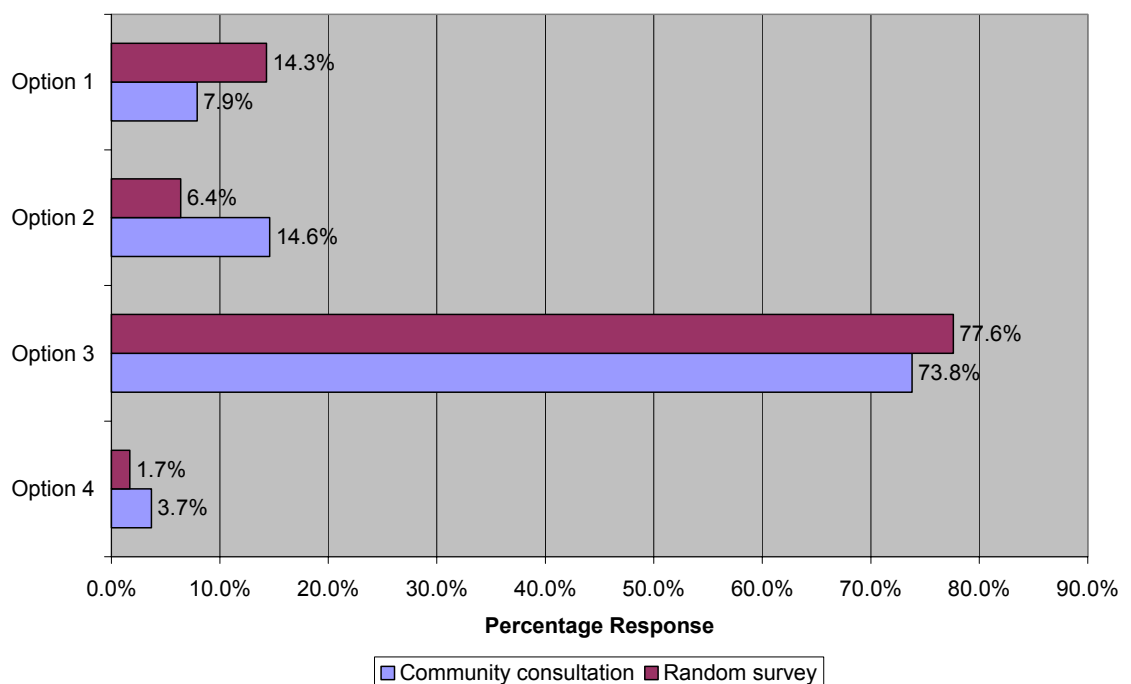
Support for the next preferred option varied depending on whether the results were based on the community consultation process or the telephone survey.

The community consultation respondents identified option 2 as the next most popular, with 14.6% of respondents selecting this option. This was followed by option 1 with 7.9% choosing this option first. 3.7% of respondents preferred option 4.

This situation was partially reversed in the telephone survey process. While option 3 was still overwhelmingly the preferred option, option 1 was the next most popular with 14.3% of responses selecting this option. This was followed by option 2 with 6.4% of survey respondents.

It is expected that the telephone survey responses reflects the more reliable set of statistics due to the random nature of response collection. Participants in the community consultation process were more likely to participate based on a direct interest in the outcome, whereas the random survey is more likely to reflect community opinion, even of those who were less interested in the outcome.

Graph 1 – Option Preference Rankings



4.2 Community Consultation Results

In order to participate in the consultation process, participants were encouraged to obtain and understand information on the background to the resource recovery and recycling project as well as the four recycling options proposed for possible implementation. This information was provided on the City website, in newspaper advertising or by information provided in postal packages upon request. Completed consultation forms were either posted to the City or completed online.

The community consultation process was designed to have many benefits resulting from its implementation. These included:

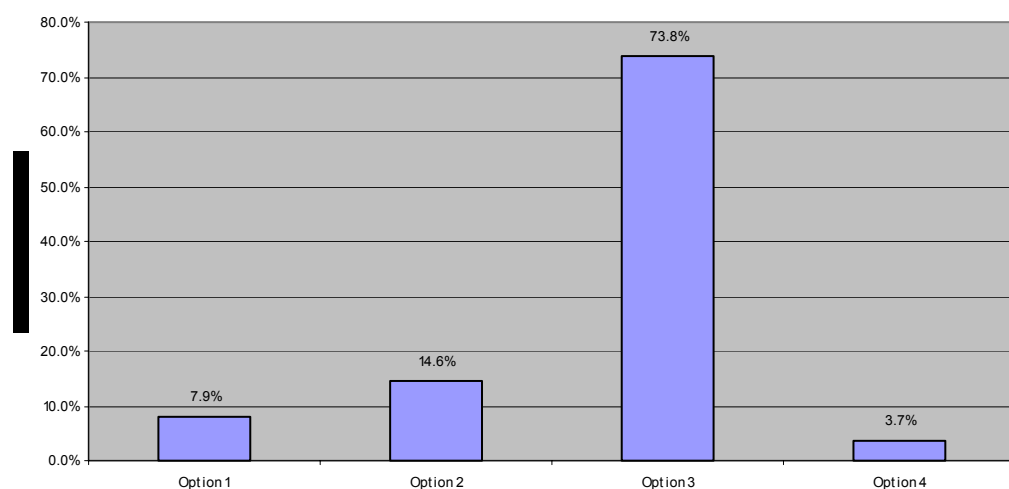
- Obtaining statistics relating to the community's option preferences,
- Advising the community that the City is undertaking action relating to the resource recovery and recycling process,
- Educating the community on the issues involved in resource recovery and recycling, and
- Allowing the community to feel included in the decision-making process.

The completed survey forms were collated and analysed to obtain statistics relating to community preferences.

4.2.1 Results

The community consultation results (detailed in Graph 2) show that the majority of participants prefer Option 3 (73.8%). This was followed by 14.6% of participants preferring Option 2. 7.9% of respondents preferred Option 1, with the smallest proportion of respondents preferring Option 4 (3.7%).

Graph 2 – Option Preference Rankings – Community Consultation



Results remained relatively consistent when analysed on the basis of ward, although with some variations. Diverging from the norm, the Whitford and South Coastal wards show a second preference for Option 1 and a third preference for Option 2 (a reversal of the positioning of these options for all other areas). Due to the brevity of the community consultation survey in the newspaper there are no demographics on which we can base an understanding of these ward results. It is possible that this could be based on a greater proportion of participants in the over 55 category. Respondents in this age category tended to mind their expenses to a larger degree than other age demographics - a common basis for preferring option 1.

The Pinnaroo ward also demonstrated an increased proportion of respondents preferring option 2 (26.9%) with a subsequent reduction in the percentage for option 3 (65.4%).

Table 1 presents the results broken up by ward.

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South Coastal	10.3%	10.3%	76.5%	2.9%
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Total	7.9%	14.6%	73.8%	3.7%

Participants were able to provide any general comments they wanted. The responses were clearly defined across the full range and generally related to reasons for choosing the responses they did. A summary of reasons for choosing each option is as follows (full responses are included in Appendix 3):

- Option 1 – Participants were either satisfied with the existing system (advising that it met their needs) or did not want to incur additional expense by selecting the more expensive options.
- Option 2 – Participants recognised the need for an additional emphasis on recycling but preferred that it was not compulsory to take the additional bin. Many believed that additional expenses would be incurred by residents/the community and believed that not all people would use the additional bin.

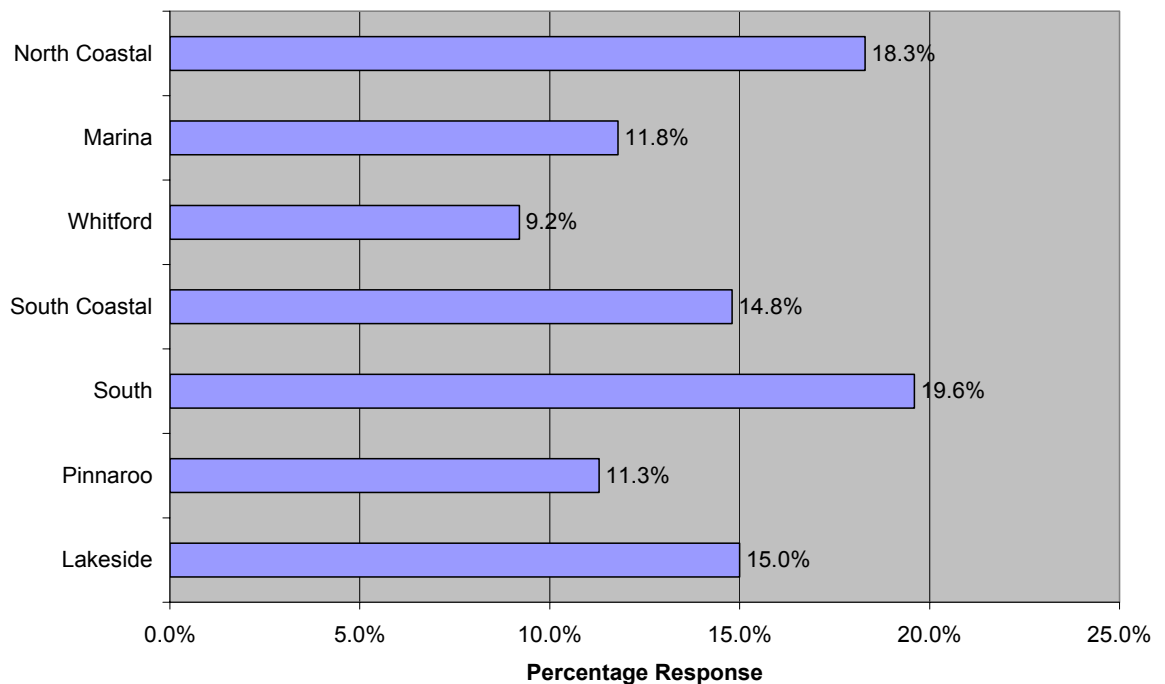
- Option 3 – Participants believed that recycling was important and welcomed the introduction of a separate recycling bin. Many advised that the system was already in operation elsewhere and thought it was about time this was undertaken in the City of Joondalup.
- Option 4 – Few reasons were provided for selecting this option, although some respondents commented on having a lack of space for additional bins.

4.2.2 Demographics

Limited demographics were available from the community consultation results. The only demographic statistics which could be derived were on the basis of locality.

Graph 3 presents the proportionate responses based on the wards in which participants lived. All wards were fairly represented, although with proportionately lower representation from the Whitford, Pinnaroo and Marina wards.

Graph 3 – Ward Response Rates (Community Consultation)



4.3 Telephone Survey Results

In order to respond to the telephone survey, potential respondents were contacted and asked to participate. Those who indicated that they were willing to participate were either directed to the City website or sent a package via post, in order to receive information on the proposed options. Once the respondents had familiarised themselves with this information, they were contacted by an interviewer in order to complete the telephone survey.

The telephone interviewing process was designed to provide a random and unbiased measure of the community's opinions on issues relating to resource recovery and recycling. The results obtained fell within required sampling error parameters to ensure statistical reliability.

The completed survey forms were collated and analysed to obtain statistics relating to community opinion. The results are presented in the order in which they appear in the survey instrument.

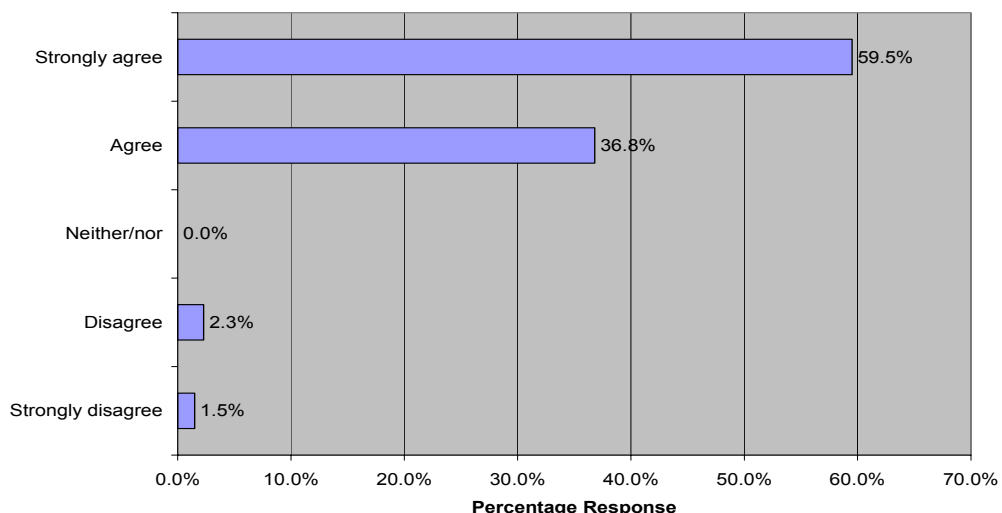
4.3.1 Vision Statement

In **question 1**, all survey respondents were asked:

"The City of Joondalup's vision statement for its waste management service is 'Towards zero waste while providing a comprehensive and sustainable waste service.' Please advise whether you agree or disagree that this should be the goal of the service."

Graph 4 shows that 96.2% of respondents agreed that the goal of the City of Joondalup's waste management service should be 'Towards zero waste while providing a comprehensive and sustainable waste service.' Only 3.8% of respondents disagreed with this.

Graph 4 – Agreement with Vision Statement



Results were analysed on the basis of demographic factors. The results were relatively consistent across all demographic groups although with some variations. The key variations were as follows:

- Single people with children were more likely to disagree with the statement (25%) than other groups.
- Respondents from the North Coastal ward were more likely to disagree with the statement (17%) than other wards.
- Respondents in the 25 – 29 age category were more likely to disagree with the statement (14.3%) than other age groups.

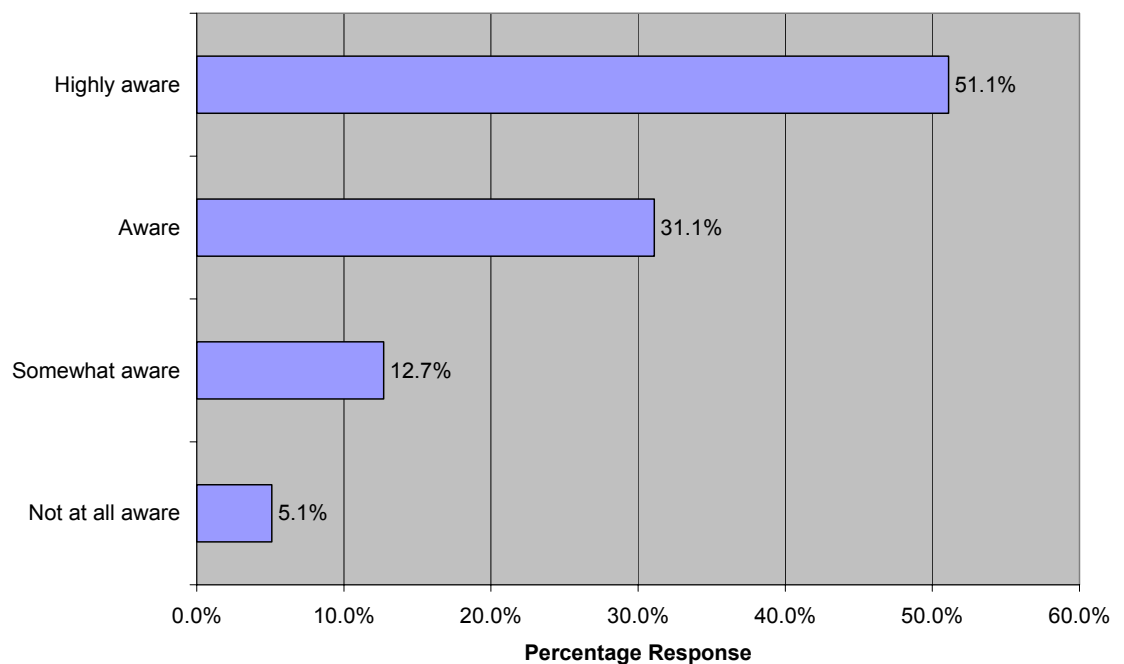
4.3.2 Awareness of the City's Recycling Service

In **question 2**, all survey respondents were asked:

“How aware are you of the recycling service provided by the City of Joondalup.”

Graph 5 shows that 82.2% of respondents advised that they were aware of the recycling service offered by the City with 12.7% advising they were somewhat aware and only 5.1% of respondents advising they were unaware.

Graph 5 – Awareness of the City's Recycling Service



Results were analysed on the basis of demographic factors. The results were relatively consistent across all demographic groups although with some variations. The key variations were as follows:

- Mature families (with children over 15 at home) and single people with no children were less likely to aware of the service (28.9% and 28.6% 'somewhat aware' or less respectively) than other groups.
- Respondents from the South ward were less likely to aware of the service (37.1% 'somewhat aware' or less) than other wards.
- Respondents between the ages of 50 – 59 were less likely to aware of the service (35% 'somewhat aware' or less) than other age groups.
- Respondents who rent or lease their homes were less likely to aware of the service (33% 'somewhat aware' or less) than other age groups.

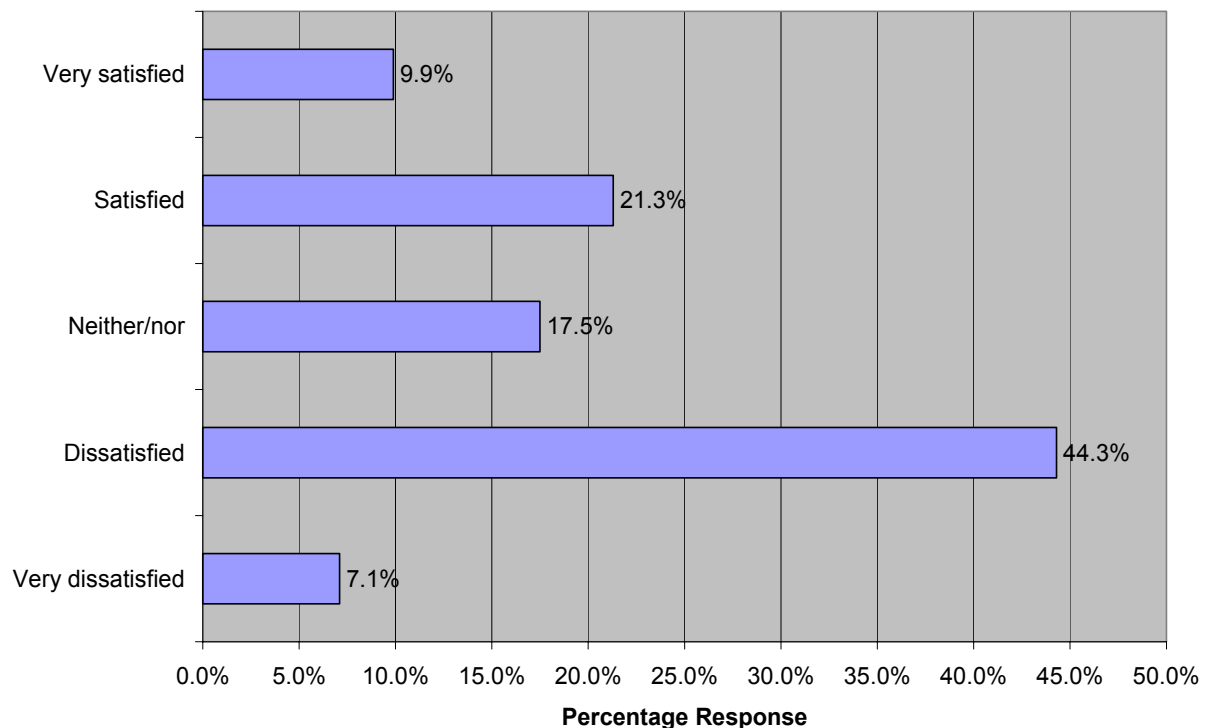
4.3.3 Satisfaction with the Current Service

In **question 3**, all survey respondents were asked:

“How satisfied are you with the current service.”

Graph 6 shows that 31.2% of respondents were satisfied with the existing service, 17.5% were neither satisfied nor dissatisfied and over half (51.4%) were either dissatisfied or extremely dissatisfied.

Graph 6 – Satisfaction with the City’s Recycling Service



Results were analysed on the basis of demographic factors. The results were relatively consistent across all demographic groups although with some variations. The key variations were as follows:

- Mature families (with children over 15 at home) and older couples with no children were more likely to be satisfied with the service (49.2% and 41.7% ‘at least’ satisfied respectively) than other groups.
- Respondents from the Marina ward were more likely to be satisfied (52.4%) with the service, and respondents from the North Coastal ward (8.2%) less likely to be satisfied than other wards.
- Respondents above the age of 65 were more likely to be satisfied with the service than were respondents in other age groups.

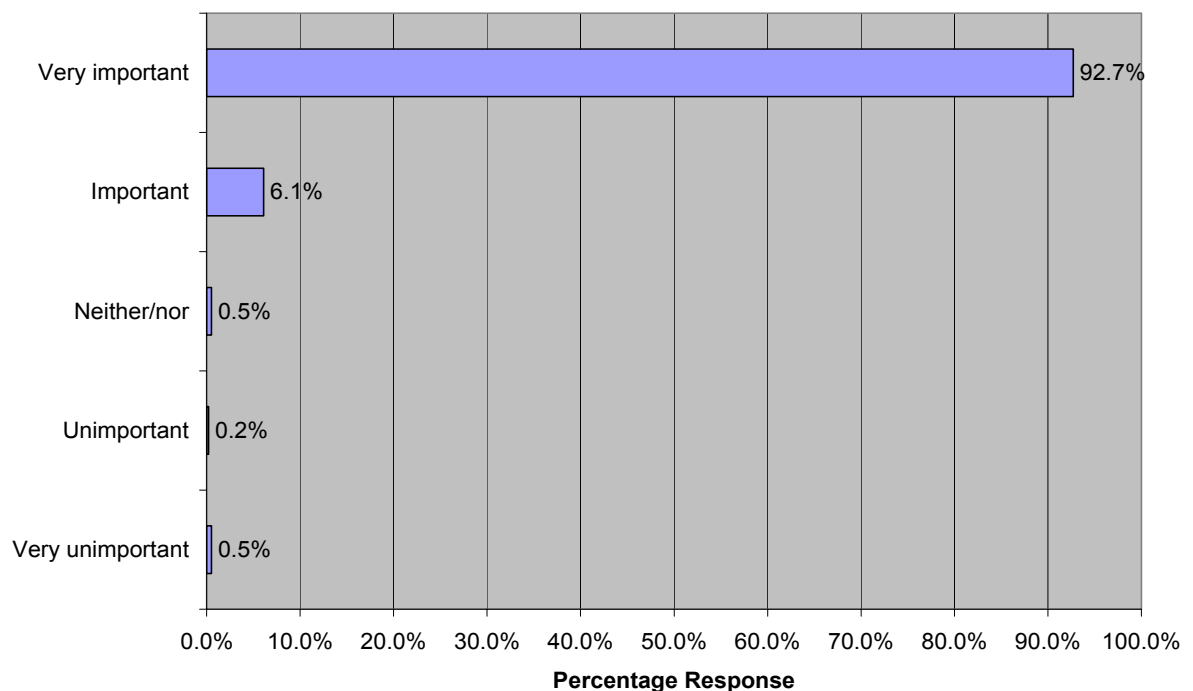
4.3.4 Importance of Recycling

In **question 4**, all survey respondents were asked:

“How important do you believe it is to recycle?”

Graph 7 shows that 98.7% of respondents advised that they thought it was important (92.7% - very important) to participate in recycling. Only 5 survey respondents believed that recycling is ‘less than’ important.

Graph 7 – Importance of Recycling



Results were analysed on the basis of demographic factors. The results were relatively consistent across all demographic groups although with some variations. The key variations were as follows:

- A slightly larger proportion of older couples with no children (20.8%) believed that it was less important to recycle than were respondents in other groups.
- A slightly larger proportion of respondents between the ages of 50 – 54 (11.1%) believed that it was less important to recycle than were respondents in other age groups.

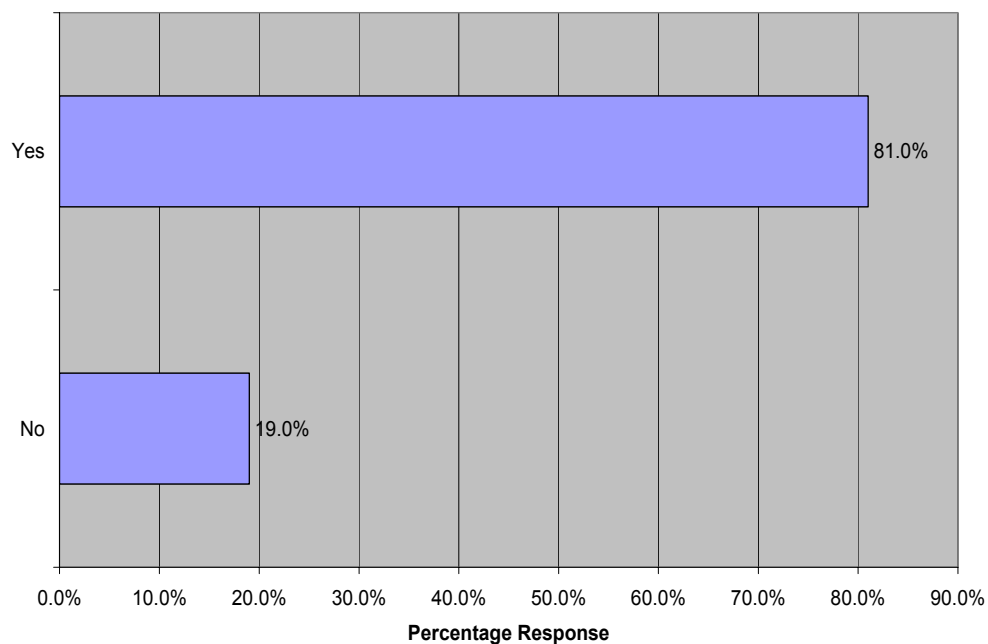
4.3.5 Use of Existing Service

In **question 5**, all survey respondents were asked:

“Do you currently make use of the City of Joondalup recycling collections?”

Graph 8 shows that 81% of respondents currently make use of the City of Joondalup recycling service compared to 19% who did not.

Graph 8 – Use of the Recycling Service



Results were analysed on the basis of demographic factors. The results were relatively consistent across all demographic groups although with some variations. The key variations were as follows:

- Single people with no children were less likely to use the service (42.9%) than other groups.
- Respondents from the North Coastal and South wards were less likely to use the service (36.7% and 29.0% respectively) than other wards.
- Respondents between the ages of 50 – 54 (33%) and 25 – 34 (29.7%) were less likely to use the recycling service than were respondents in other age groups.
- Respondents renting or leasing their homes were less likely to use the service (33%) than were other groups.

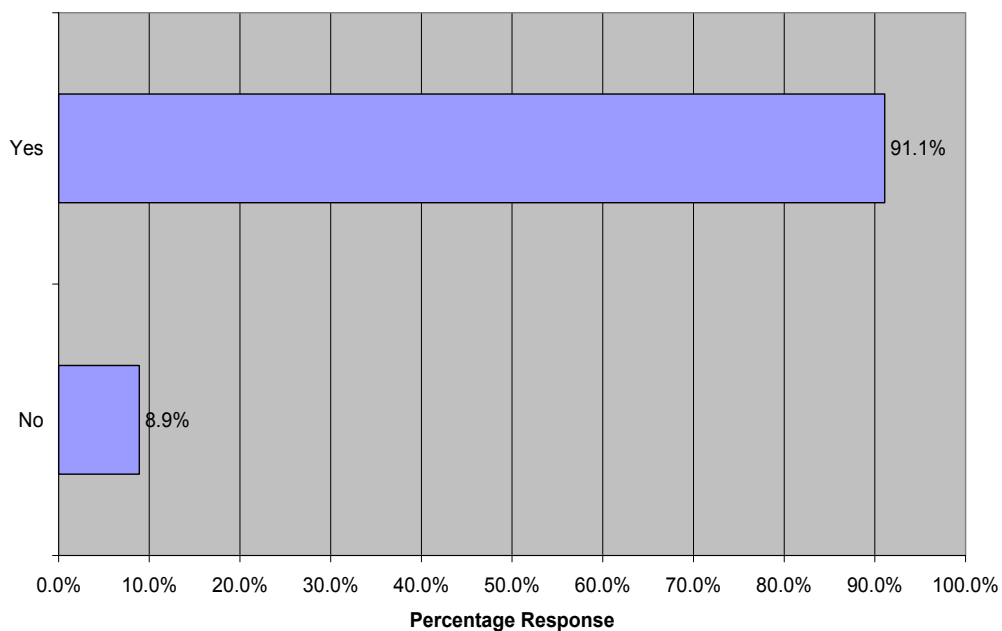
4.3.6 Desired Recycling Level

In **question 6**, all survey respondents were asked:

“Would you like to recycle more than you currently do?”

Graph 9 shows that 91.1% of respondents would like to recycle more than they currently do.

Graph 9 – Desire to Recycling More



Results were analysed on the basis of demographic factors. The results were relatively consistent across all demographic groups although with some variations. The key variations were as follows:

- Older couples with no children (41.7%) and young couples (33%) were less likely want to recycle more than they currently do than were respondents in other groups.
- Respondents from the Marina (21.3%), North Coastal (16.3%) and South (14.5%) wards were less likely want to recycle more than they currently do than were respondents in other groups.
- Respondents between the ages of 55 – 59 (35.7%) were less likely to want to recycle more than they currently do than were respondents in other age groups.

4.3.7 Additional Expenditure Willingness

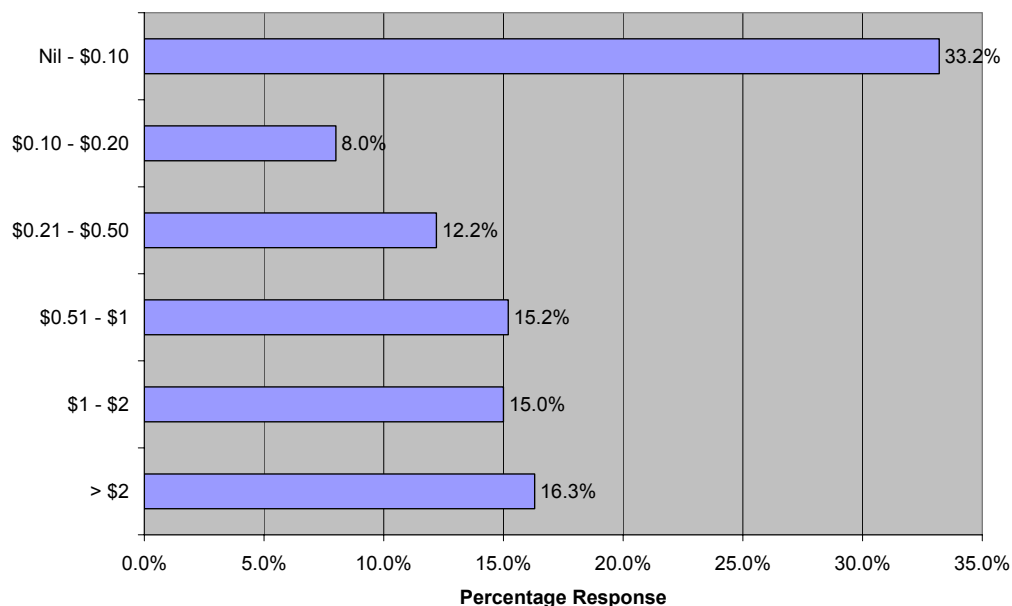
In **question 7**, all survey respondents were asked:

“How much more would you be willing to pay per week to have a more effective recycling service?”

The random telephone survey and the community consultation clearly show a preference for the introduction of the universal kerbside recycling service. In both cases costs were clearly enunciated and had strong associated environmental links of recycling and resource recovery. However, when asked a bald statement about increases in costs, Question 7, the highest proportion of respondents (33%) were not willing to pay extra. The proportion of respondents who were willing to pay extra to cover the estimated costs was 46%, with 12% of respondents willing to go part of the way.

The strong showing for the universal kerbside recycling service at the mid to high seventy percent mark for both surveys signal that when considering the environmental issues in association with bottom line costs, the respondents are willing to pay the extra costs.

Graph 10 – Desire to Recycling More



Results were analysed on the basis of demographic factors. The results were relatively consistent across all demographic groups although with some variations. The key variations were as follows:

- Male respondents were less likely to be willing to pay more than the proposed increase (48.6%) than were females (34.9%).

- Older couples with no children (78.9%) and young couples (66.7%) were less likely to be willing to pay more than the proposed increase than were than were respondents in other groups.
- Respondents from the Marina (47.7%) and North Coastal (43.8%) wards were less likely to be willing to pay more than the proposed increase than were than were respondents in other wards.
- Respondents over the ages of 55 were less likely to be willing to pay more than the proposed increase (45.2%) than were than were respondents in other age groups.

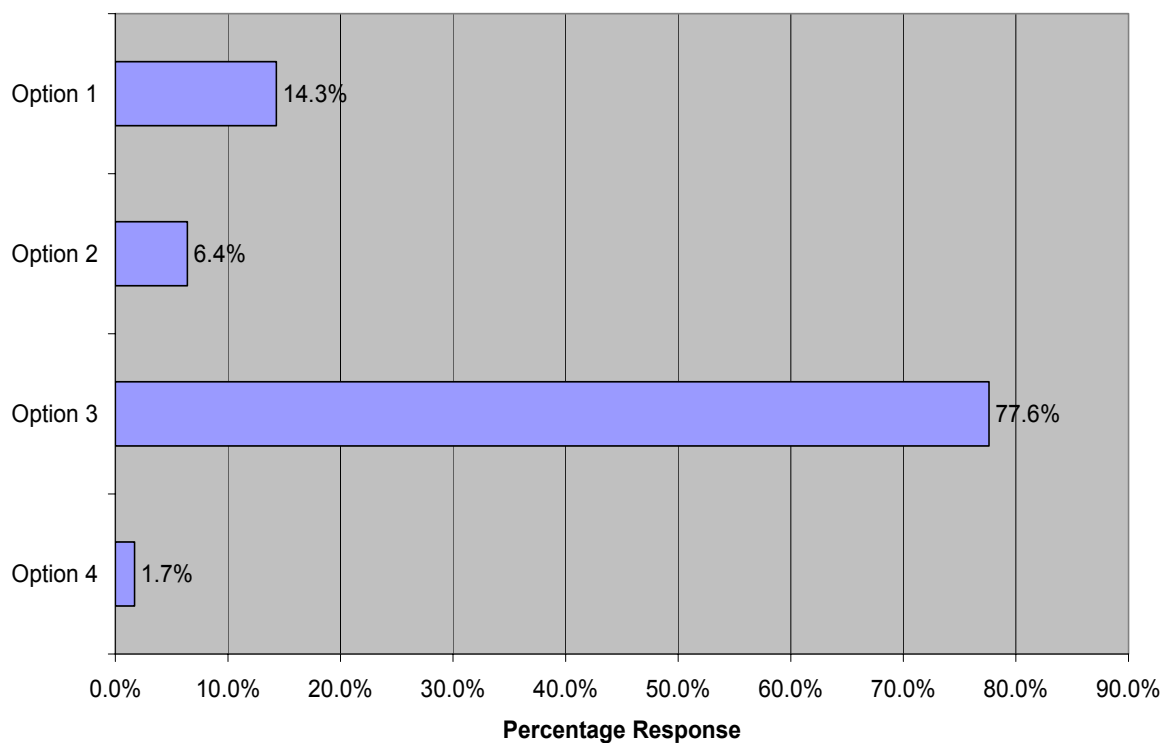
4.3.8 Option Preference

In **question 8**, all survey respondents were asked:

“We have listed the four options for the introduction of a resource recovery and recycling system in the City of Joondalup. Which of the four options is your preferred choice for introduction?”

Graph 11 shows that the majority of respondents to the telephone survey prefer Option 3 (77.6%), followed by Option 1 (14.3%) and Option 2 (6.4%). 1.7% of respondents selected option 4 as their first preference.

Graph 11 – Option Preference (telephone survey)



Results were analysed on the basis of demographic factors. The results were relatively consistent across all demographic groups although with some variations. The key variations were as follows:

- Females (84.6%) were more likely than males (67.5%) to choose option 3 as their first preferred option.
- Respondents over the age of 75 (100%) were more likely to choose option 1 as their first preferred option.
- Older couples with no children (41.7%) and mature families with children over 15 still living at home (29%) were more likely to choose option 1 as their first preferred option.

- There was an elevated preference for option 1 in the Whitford (14.8%) and South Coastal (13.6%) wards. The Pinnaroo ward also demonstrates an increased proportion of respondents preferring option 2 with a subsequent reduction in the percentage for option 3.

Participants were able to provide any general comments they wanted. The responses were clearly defined across the full range and generally related to reasons for choosing the responses they did. The reasons for choosing each option remained the same as those for the community consultation results and are as follows:

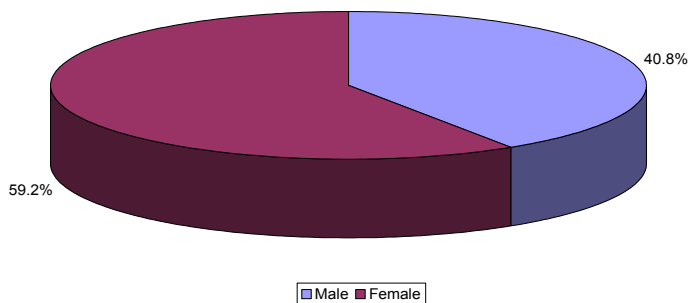
- Option 1 – Participants were either satisfied with the existing system (advising that it met their needs) or did not want to incur additional expense by selecting the more expensive options. Older couples also indicated that they found it difficult to take the bin to the kerb.
- Option 2 – Participants recognised the need for an additional emphasis on recycling but preferred that it was not compulsory to take the additional bin. Many believed that additional expenses would be incurred by residents/the community and believed that not all people would use the additional bin.
- Option 3 – Participants believed that recycling was important and welcomed the introduction of a separate recycling bin. Many advised that the system was already in operation elsewhere and thought it was about time this was undertaken in the City of Joondalup.
- Option 4 – Few reasons were provided for selecting this option, although some respondents commented on having a lack of space for additional bins.

4.3.9 Demographics

4.3.9.1 In **question 9**, interviewers noted the gender of all survey respondents.

59.2% of survey respondents were female compared to 40.8% male respondents. This disparity is acceptable from a statistical point of view and simply reflects the greater likelihood of females answering the telephone within a household than males.

Graph 12 Gender of Respondents

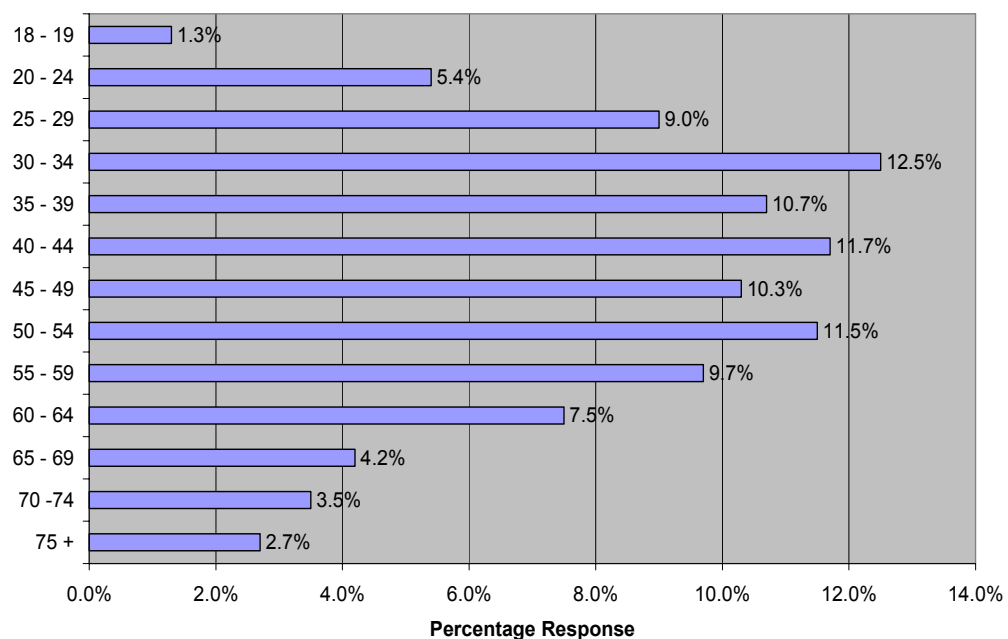


4.3.9.2 In **question 10**, all survey respondents were asked:

“Which of the following groupings best represents your age?”

Graph 13 reflects a relatively normal distribution of ages across the community in line with expectations. This adds validity to the reliability of the results provided by the survey.

Graph 13 Age of Respondents

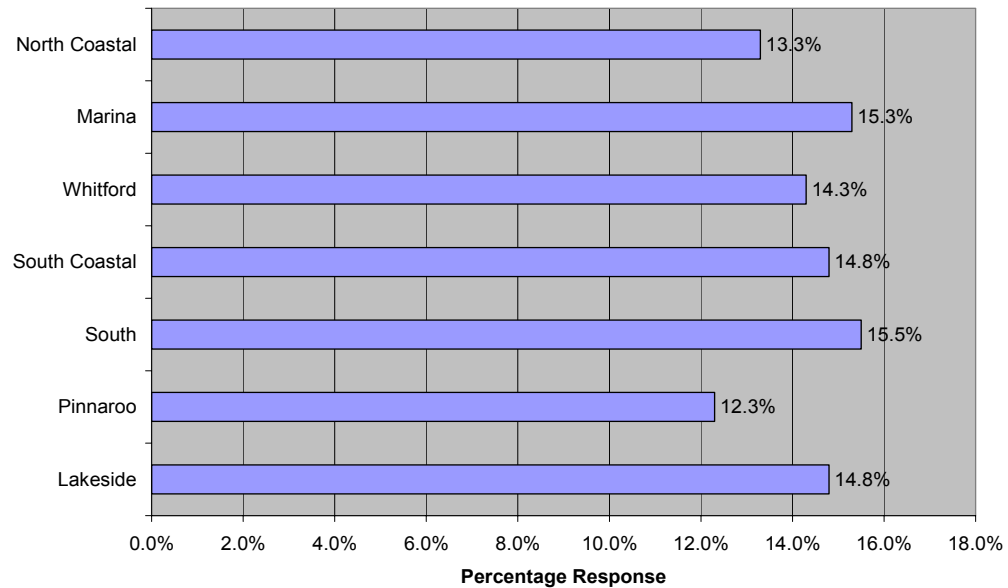


4.3.9.3 In question 11, all survey respondents were asked:

“Which suburb do you live in?”

Results were converted from suburbs to wards due to the large number of suburbs surveyed. Graph 14 shows the distribution of responses across the suburbs – with similar weight allocated to each.

Graph 14 **Wards**

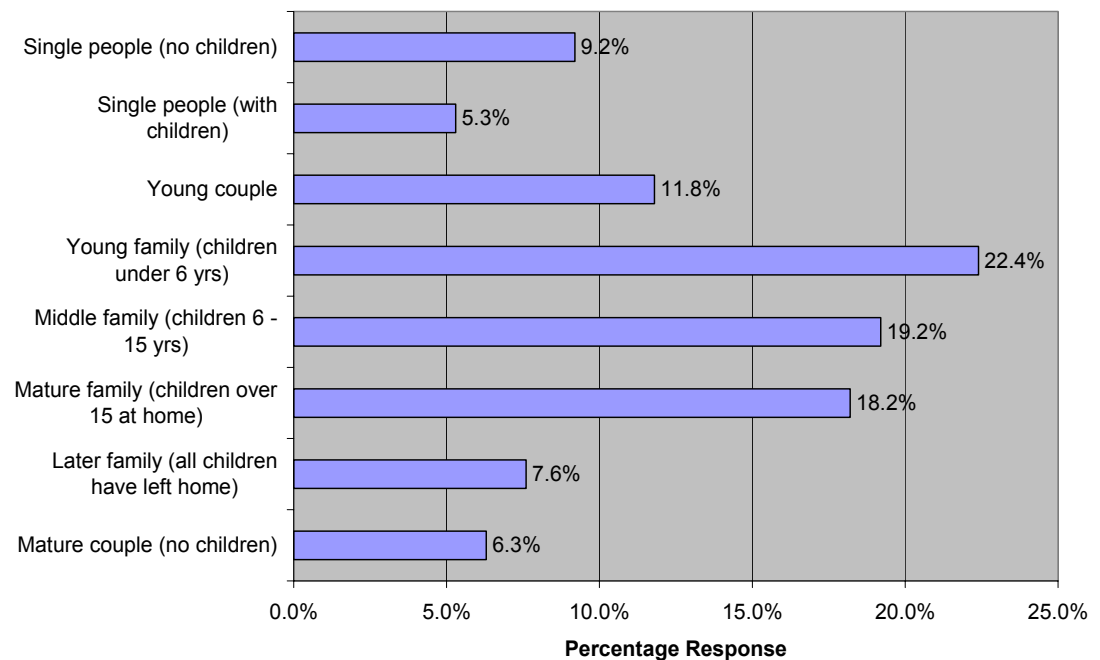


4.3.9.4 In **question 12**, all survey respondents were asked:

“Which of the following groups best describes your household structure?”

Graph 15 shows the statistical results for household structure. It should be noted that there is a broad representation of household structures allowing analysis of results for this area at a demographic breakup level.

Graph 15 Household structure

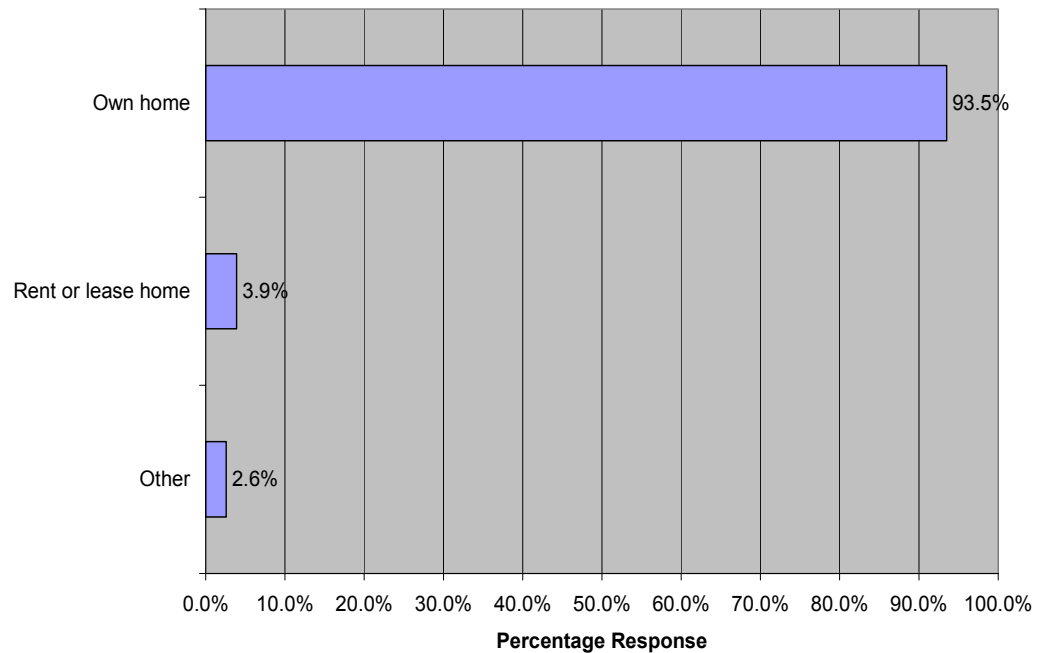


4.3.9.5 In **question 13**, all survey respondents were asked:

“Which of the following best describes your housing arrangements?”

Graph 16 shows the statistical results for respondents’ housing arrangements.

Graph 16 Housing Arrangements



4.4 Local Schoolchildren Survey

In order to consider the opinions of all sectors of the community it was decided to canvas the opinions of youth living in the City in relation to resource recovery and recycling. Information sessions detailing the background to the resource recovery and recycling project and related issues were held at a variety of schools within the area. Participants in these sessions were then asked to complete a survey gathering their opinions on these issues.

24 completed surveys were received. These have been analysed and the results included in this report. Due to the low number of surveys obtained, the results cannot be quoted with any degree of statistical reliability. They are expected, however, to be confidently indicative of the opinions of youth within the City of Joondalup.

The results received from the schoolchildren tended to correspond with the results received from the broader community in relation to comparable issues.

- 100% of the schoolchildren surveyed believed that it was important to recycle (71% - very important and 29% important).
- 71% of the respondents recycled at home compared to 29% who did not.
- 50% of respondents used the bag recycling system at home, 16.7% used wheelie bins and a further 33.3% did not undertake any form of recycling at home.
- 16.7% of respondents thought that they would prefer the bag system, compared to 83.3% who advised that they would prefer to use the wheelie bin system.
- 95.8% of respondents advised that they recycled at school, with only one respondent (4.2%) advising that they did not.
- Respondents were asked who they felt is responsible for the recycling that they do:
 - 36% of respondents felt that recycling is the responsibility of the individual, with each person deciding whether to do so or not.
 - 32% believed that it is the responsibility of the local council.
 - 16% believe that it is the responsibility of their school.
 - 12% believe that it is the responsibility of their parents.
 - 4% believe that it is the responsibility of the broader government.

- 58% of respondents believe that not enough is being done in their local area in relation to recycling. 42% were satisfied with the current level of recycling being undertaken.
- Respondents were asked what they believed could be done to encourage people to recycle more. The responses were:
 - 56% believed that educating people on the benefits of recycling and ways they can recycle would encourage recycling participation.
 - 17% believed that the provision of additional recycling facilities (ie. recycling bins, etc) would encourage further participation.
 - 14% believed that rewards should be offered for recycling (ie. lower rates, etc)
 - 13% believed that recycling should be made law.