# Waste Collection Community Perceptions

Prepared for the City of Monash

April 2022



### Contents

Background, objectives and methodology	<u>3</u>
Executive summary	<u>7</u>
Detailed findings	<u>14</u>
REPRESENTATIVE TELEPHONE SURVEY AND QUALITATIVE RESEARCH	<u>15</u>
Attitudes towards waste management	<u>16</u>
General waste behaviour	<u>22</u>
Food waste behaviour	<u>27</u>
Attitudes towards change	<u>38</u>
Concerns	<u>48</u>
Managing change	<u>55</u>
Preferences for Council support pack	<u>62</u>
Reactions to Council's Waste Management Strategy Goal	<u>68</u>
<u>Appendices</u>	<u>72</u>
Representative telephone survey and qualitative research: Appendix A: Demographics	<u>73</u>
Representative telephone survey and qualitative research: Appendix B: Types of rubbish bins at residence	<u>75</u>

OPT-IN ONLINE SURVEY: RESIDENTS WITH INDIVIDUAL BINS	<u>77</u>
<u>Context</u>	<u>78</u>
Food waste behaviour	<u>83</u>
Attitudes towards change	<u>91</u>
Benefits and concerns	<u>96</u>
Managing change	<u>103</u>
Preferences for Council support pack	<u>108</u>
Appendices	<u>111</u>
Online opt-in survey: Appendix A: Demographics	<u>112</u>
Online opt-in survey: Appendix B: Survey completion dates	<u>114</u>

# Background, objectives and methodology



### **Background and objectives**

The City of Monash introduced a food waste recycling service in July 2020, allowing Monash residents to place food scraps along with garden clippings in their green bin. Evidence-based best practice food waste services across Australia show the highest participation and recovery of food when the food and garden waste bin is collected weekly. There are also compelling environmental, financial and service improvements to be gained from switching the food and garden waste bin to a weekly collection and landfill bin to a fortnightly collection.

From August 2022, food and garden waste bins in the City of Monash will be collected every week and landfill bins collected every two weeks.

Council endorsed an 8-week community engagement plan to collect feedback on the change in order to understand how it might affect different types of households in Monash.

The consultation sought to:

- Provide a representative view of the Monash City Council community's perspective;
- Provide an opportunity to anyone who wishes to provide feedback to do so through the Shape Monash survey (hosted by Council).

JWS Research was commissioned to conduct both qualitative and quantitative research, through focus groups and random sample phone survey, and analyse data from the Shape Monash survey hosted by Council.

The main objectives were:

- Identify perceived barriers to recycling food scraps.
- Measure community sentiment relating to the impending change to a weekly food and garden waste bin service and fortnightly garbage service.
- Evaluate the extent to which benefits and concerns regarding the change to a weekly food and garden waste bin service and fortnightly garbage service resonate among the broader community.
- Ascertain likelihood to uptake potential solutions to overcome perceived barriers.
- Identify preferred inclusions for Council to provide in a support pack to residents, to help the community manage the change.

This report presents a compilation of the findings obtained through the three community engagement mechanisms.



### **Methodology and sampling**



#### **Quantitative Telephone Survey**

#### n=800 Monash residents

- Survey quotas on age and gender and weighting applied at the analysis stage to actual age / gender proportions based on ABS census data.
- The maximum margin of error on the total sample of n=800 is +/-3.5% at the 95% confidence level.
- Differences of +/-1% for net scores are due to rounding.
- 10 minutes in length.

Conducted 9<sup>th</sup> to 23<sup>rd</sup> February 2022.

#### **Qualitative Focus Group Discussions**

#### n=4 focus group discussions with Monash residents

- All focus group participants were aged 18 years and above. A mix of gender was represented in each group
- Group discussions were segmented by household size and age (18 to 54 years old and 55 years and above).
  - *Larger households* defined as four or more people
  - Smaller households defined as four or less people.
- 2 hours in duration and 7 to 8 participants in each group. Conducted 18<sup>th</sup> to 19<sup>th</sup> January 2022.

The telephone data collection, focus groups, analysis and reporting of the research was conducted in compliance with AS-ISO 20252. Note: Qualitative research is exploratory in nature. The qualitative findings within this report are indicative only and are not necessarily fully representative of the target populations.

#### Online opt-in survey

- Available through Shape Monash from 31st January to 25th March 2022.
- 10 minutes in length.
- n=4,371 total completed survey responses.

Note: This report only includes analysis of responses by Monash residents with individual bins (n=4,302).

In considering the feedback obtained on the impending change to City of Monash's waste collection cycle, it is important to note the following:

- The quantitative telephone survey (undertaken by JWS Research) provides a representative view of the entire City of Monash community base.
- The online survey (conducted by City of Monash) required people to opt-in to the survey, meaning residents who completed it are likely to have a particular interest in the change to the waste collection cycle. As such, the information gleaned provides valuable insights on the views of these individual cohorts.

### **Definitions**



Following are the definitions of sub-sample segments described throughout the report:

Label	Definition
Put scraps in green bin	Have food and garden waste bin and put food scraps into food and garden waste bin
Use liners	Have food and garden waste bin and use compostable bin liners
Use nappies	Have children at home who wear nappies
Medical condition in HH	Live with someone who has a medical condition that produces waste or rubbish
Home business	Run a business from home
нн	Household
Red bin	Landfill or rubbish bin (red lid)
Yellow bin	Recycling bin (yellow lid)
Green bin	Food and garden waste bin (green lid)
Representative telephone survey	Quantitative telephone survey undertaken by JWS Research.
Online opt-in survey	Online survey available through Shape Monash.

# **Executive summary**



### **Executive summary**

#### The yellow and red bins fill up fastest

Of all Council provided bins, the red and yellow bins reach capacity faster than the green bin.

In the opt-in online survey:

- **35%** say their **yellow bin** is **overfull** on bin night
- 31% say their standard 120L red bin is overfull on bin night

**13%** say their **green bin** is **overfull** on bin night.

Within the same survey, those who have children in nappies are significantly more likely to say their standard 120L red bin is overfull by bin night (52%, compared to 31% on average).

#### Most residents use their green bin for food scraps



62% among the **representative** telephone survey are **putting food scraps into the** green bin

**67%** among the **opt-in online** survey do the same.

In the representative telephone survey, the most common reasons that people do not use their green bin are:

- People already composting food scraps at home / have own compost (33%).
- Concerns of smells with a fortnightly collection of food waste (27%).

Similarly, in the online opt-in survey, smell is one of the top reasons why people do not dispose of their food scraps in the green bin (50% say smell is one of the reasons why they do not) among others:

- Issues with attracting insects / pests (51%).
- Concern of hygiene issues with a fortnightly collection of food waste (47%).



## Smell is a deterrent, though residents have identified some ways to mitigate against it



In the focus group discussions, residents talked to a variety of **methods** they use to **reduce smell** from the green bin including:

- Layering food scraps between grass clippings.
- Using compostable liners.
- Keeping the bin in a shady spot to avoid heat and sun exacerbating smell, or away from house.
- Freezing food scraps before bin collection.

Some of the above methods are also used to avoid attracting pests and insects to the bin.

#### Compostable liners may present a feasible option



- In the representative telephone survey, one in five residents (22%) say they are already using compostable liners.
- 41% in the representative telephone survey say using compostable liners would help them to recycle more food scraps.
- **43%** in the opt-in online survey also say using compostable liners would help them to recycle food scraps.



## Similar levels of both support for and opposition to change in the representative telephone survey

- 37% support (either strongly or somewhat) changing the red bin to a fortnightly collection and the green bin to weekly
- **23%** consider themselves **neutral** on the matter
- **39% oppose** (either strongly or somewhat) the change.

Certain groups have a much higher propensity to *oppose* the change including:

- Households with someone who has a medical condition producing waste (66% oppose).
- Households with a child in nappies (58%).
- Those who run a business from home (57%).
- Larger households with five or more people (52%).

In the online opt-in survey, **80% say they would prefer rubbish is collected weekly.** Agreement with this statement is significantly higher among most of the aforementioned groups.

More than half in the online opt-in survey do not believe a weekly green bin collection will benefit their household in any way (57%).

#### Some people support the change due to environmental benefits and more space for garden waste

In the focus group discussions, some residents welcome the opportunity to be able to do more gardening.

Others in the focus groups appreciated the environmental benefits of the change including:

- Less rubbish going to landfill.
- Encouraging people to think more about what goes into their rubbish bin if it is not collected as frequently.
- The potential for more people to be encouraged to use their food and garden waste bin for food scraps.

In the online opt-in survey, 8% say they will put <u>all</u> food scraps in the green bin as a result of the change. A further 8% say they will at least put <u>some</u> food scraps in the green bin.

## Some residents will continue to put food scraps in the red bin

One in five residents in the online opt-in survey (20%) say they will continue to put food scraps in the red bin.



## Most prevalent concerns regarding the change include smell and capacity of red bin

- 71% of residents surveyed in the representative telephone survey agree (either strongly or somewhat) they are concerned that the red bin will smell after two weeks.
- Similarly, 80% in the online opt-in survey agree (either strongly or somewhat) they are concerned about smells or hygiene issues with a fortnightly rubbish collection.

When it comes to space in the red bin:



- 63% in the representative telephone survey agree (either strongly or somewhat) there will not be enough space in the red bin to last two weeks.
- 76% in the online opt-in survey agree they won't have enough space in their red bin for a fortnightly collection.

Half of opt-in online survey respondents (51%) say that not enough space is the **greatest anticipated challenge** that will affect their household – above all other challenges evaluated.

## Recycling all food scraps is not expected to free up space in red bin

Even if all food scraps were placed in the green bin, the vast majority of respondents in the opt-in online survey (89%) say it will not create more space in their red bin. Some residents in the focus groups say food scraps only make up a small portion of their red bin waste.

## Residents are concerned about potential issues resulting from a lack of bin capacity

In the representative telephone survey:

- 71% agree they are concerned that people may end up putting rubbish into the green bin instead.
- 69% agree they are concerned people may end up putting rubbish into their neighbour's bin.

If residents resort to other methods to dispose of their rubbish, people in the focus group discussions believe the same amount of rubbish may end up being produced anyway.

Some residents in the focus groups say their red bins are already full with a weekly collection, and others have noticed neighbours putting rubbish in other peoples' bins.

## Residents are open to using compostable liners to bag food waste and manage the change

 Just over half of Monash residents in the representative telephone survey (54%) say they are likely (either very or somewhat) to buy compostable liners to bag food waste before putting it into the green bin, in order to manage the change in waste collection cycle.

There is appetite from residents to use compostable liners to help manage the change, however, not all are willing to pay for them.



- In the online opt-in survey, among those who would prefer to access compostable liners through Council (either picked up or delivered), just over half cannot or do not want to pay (53%).
- 38% are willing to pay less than \$50 a year.

Compostable liners are the most preferred inclusion for the support pack among opt-in online survey respondents (42% would like to see them included in the support pack).

Liners are also among the most preferred inclusions in the representative telephone survey (79%). Despite an openness to use compostable liners, some people in the focus groups who use them say:

- They tend to tear and food and liquid seep out.
- They are often too small in size and not practicable for larger families.

## Households who use nappies are more likely to double bag them rather than switch to reusable

Of the two potential solutions related to nappies presented in the representative phone survey, double bagging them before they go into the red bin is preferred over using reusable nappies:

- Just under half of households using nappies (46%) say they are likely (either very or somewhat) to double bag them before putting them into the red bin.
- One in five (21%) say they are likely to make the switch to reusable nappies to manage the change.

For both solutions, there are more households who use nappies that say they are *unlikely* to use these methods to manage the change than there are likely to.



#### Smell concerns are not solely related to nappies

In the focus groups, some residents also expressed concerns about incontinence and female hygiene products being left in the red bin for two weeks.

## Residents are more likely to request an additional or larger red bin than pay for one

In the representative telephone survey:

- When asked if residents would *pay* for a bigger red bin, just 16% say they are likely to (either very or somewhat). This increases however to 28%, when asked if they would *request* one.
- Similarly, 26% say they would be likely to *pay* for a bigger red bin from Council. In contrast, 40% are likely to *request* a bigger red bin.

It is likely that people are interpreting 'requesting' an additional or bigger red bin to mean obtaining one from Council free of charge.

In the opt-in online survey:

- 59% say no, they will not consider getting an extra red bin due to cost.
- A further 8% say no, due to some other reason.

## There is appetite for education and instruction in Council's support pack



A calendar of when bins are collected is top preference for the pack among representative telephone survey respondents (88%) and is the second most preferred item among opt-in online survey respondents (38%).

• A poster or fridge magnet with what can go in each bin is also a notable preference in both surveys.

## Residents are open to advice and tips from Council on how to deal with their greatest concerns

Tips on how to reduce smells when recycling food scraps is among the top preferences in both the representative telephone and opt-in online survey.

### A range of communication methods are desired



Some people in the focus groups say electronic information provision through channels such as email is a better fit for communications aimed at improving the environment.



Others say hard copy information via a letter box drop is a more effective means of getting messaging out in the community.

# **Detailed findings**

# REPRESENTATIVE TELEPHONE SURVEY AND QUALITATIVE RESEARCH



# Attitudes towards waste management



### Section highlights: Attitudes towards waste management

COVID-19 has impacted household waste COVID-19 has affected household waste in two different waste. Some people are accumulating more waste given they are home more and shopping online more, and others are more conscious of what they are buying and taking more time to sort and manage their own waste, even through home composting.

Waste management is everyone's responsibility

There is no one entity who is solely responsible for waste management. Individuals have to sort their waste correctly, Council needs to provide the bins to do so and ensure it is being disposed of at the end point correctly. State and Federal levels of Government need to force businesses and manufacturers to reduce the amount of packaging their products come in.

It is important for people to know what happens to their waste Residents feel they are entitled to transparency from Council on what happens to their waste, given they are paying rates for Council to manage it. They want to make sure their efforts are worthwhile, making a difference and not in vain. People assume their green waste is composted somewhere and are pleasantly surprised when they find out it is done locally in Dandenong.

# The pandemic is believed to have indirectly changed the way people collect and manage their waste



COVID-19 has been a catalyst for change among many people of Monash in relation to waste.

Some residents believe they have been accumulating more recyclable waste since the onset of COVID-19, due to an increase in online shopping and take away food purchases.

Some larger families are accumulating more waste in all bins (red, yellow, and green) with family members being home more frequently.

An increase in time spent at home has been beneficial for some who feel they now have more time to sort waste correctly into each bin – they are more conscious of where waste goes.

Others find they are cooking at home more which means they have changed the way they go about grocery shopping and have now reduced their accumulation of packaged food items.

There are Monash residents who have taken up new hobbies because they feel they have more time on their hands. Composting, worm farms and more gardening are a few of the activities some residents are taking up. Owning a worm farm means that food waste scraps are being separated, accumulated and then fed to worms for the benefit of home gardening. "I have had to get two recycling bins since COVID, because we are just recycling more than before. I don't know what it is, maybe because we are always at home. If you are always at home, you are eating more at home, you are staying at home, everything is home, so I have doubled and have got two bins now." (Older, larger HH)

"I've noticed I've done a whole lot of online shopping, which is a lot of cardboard that is going to be recycled. Other than that, I just have more in the paper bin now because of online orders and stuff like that." (Younger, smaller HH)

"I've been getting a lot more takeaway, meaning a lot more packaging I never used to have, and because there is a lot more time at home, there is more time to sort things better." (Younger, smaller HH)

"I have an issue of getting rid of the waste every week because the bins are so small. We have a family of four adults, and because of COVID and everyone being home, we have a lot more waste." (Younger, larger HH)

"I do find because I've been cooking at home more, I bulk buy a lot of stuff. In a way that's a different form of packaging. Instead of buying something 3 times a week I buy it once." (Younger, smaller HH)

*"My mum started a worm farm, so all our food scraps go into that, and then we separate all our plastics and stuff."* (Younger, smaller HH)

# Many parties have a shared responsibility to manage waste and recycling



"Council could do more if they educate the primary schools as well. These habits that they introduce at an early age could help a lot. Education is the key." (Older, smaller HH) "Council certainly plays a huge part as they're the ones who provide the service and the bins and all of that." (Younger, smaller HH)

#### Council

Council is responsible for providing bins and ensuring that residents' efforts to separate their waste is worth it. People expect Council to be doing the right thing with their general waste, recycling and green waste after it is collected. Council also has a responsibly to educate the community on waste and recycling.

"Council, they are taking stuff from the nature strip, so all the yellow bin stuff, they should be doing something worthwhile with that. I know at the moment they don't, but they should be doing something to recycle." (Older, larger HH)

"It is also up to the local councils to make sure that we have reasonable access to the responsible ways of getting rid of waste." (Younger, larger HH)

#### Individuals

Individual households are responsible for sorting their waste correctly.

*"I guess it really is up to the individual households to really do their part."* (Younger, smaller HH)

"Anybody that has rubbish has to be mindful about what they do with it." (Younger, larger HH) "Companies selling products, because online shopping is getting way more important. They should be more conscious of how much packaging they use because sometimes consumers don't have space to take care of that much packaging when it is not necessary." (Younger, larger HH)

#### **Businesses and manufacturers**

Businesses and manufacturers are the only ones who can create products with less packaging and waste to begin with. Waste starts with the products they produce.

"The packaging is for their [business] convenience and they have a long way to go. If that sector won't do it, I think the government should be legislating to make them do it." (Older, smaller HH)

"When you buy meat products, the amount of packaging just for one steak. Coles, they talk about their plastic bags, but they have a long way to go to get rid of other things." (Older, smaller HH)

#### Federal and State Government

Federal and State Government are responsible for developing legislation that forces business to change how they manufacture and package items, as well as putting schemes in place to incentivise behaviour change.

"The fact that the Victorian government has taken 30 years longer than the South Australian government to put a container deposit legislation is outrageous." (Older, larger HH)

# People are not always knowledgeable on what happens to their waste once collected but are eager to find out more

There is some uncertainty about what happens to waste once it is collected. Residents are somewhat confident about what happens to general waste, but have questions in relation to the final destination of their recycling and green waste.

Many residents understand that general waste goes to a tip or landfill, with specific mentions to Ravenhall Landfill facility in Melbourne's western suburbs. Others believe general waste is incinerated rather than buried in landfill.

Some residents are sceptical about what happens to their recycling once it is collected. Many people recall old reports about recycling going to landfill and being shipped to China and remain unsure whether this is still the case.

People are less knowledgeable about what happens to their food and garden waste once it is collected. There is an assumption that food and garden waste would be composted. When residents learn that their food and garden waste is taken to a facility in Dandenong to be composted, they are pleasantly surprised that it is being locally composted. "I have never considered where it goes after it leaves my house, I am done with it. I am curious now, the only tip I have seen is on Toy Story 3." (Younger, smaller HH)

"Our general waste goes to Ravenhall, that massive place in the western suburbs." (Older, larger HH)

"I thought it gets burnt, incinerated." (Younger, smaller HH)

"They are taking methane from the tip areas and they have a powerplant down there, and the place smells. This landfill is a bit of a mess and a waste of potential resources. They talk about recycling, and the Government, state and local, don't do much about it, which is disappointing." (Older, larger HH)

"I would be interested to know where it actually goes because I read some time back that a lot of our rubbish got shipped out to China and transferred out of the country." (Older, larger HH)

"I've seen reports where they use machines that automatically come and sort stuff out, and then presumably stuff gets diverted to places where it can get recycled." (Younger, smaller HH)

"The tip, the recycling goes to a recycling plant which I know they have had issues trying to sell to China. The disposable garbage goes to the tip." (Younger, larger HH)

### People care about what happens to their waste



Monash residents feel entitled to know what happens to their waste once it is collected, given they pay rates for managing rubbish. People want to make sure waste is being properly managed after it leaves their house to:

- Feel that their efforts to sort waste are worthwhile
- Know that money is not being wasted on waste and recycling efforts.

It appears there are still some trust issues within the community following media reports from years ago when Australians (not limited to Monash residents) realised that we were sending recycling to China, with some recyclable materials ending up in landfill anyway. People are still disheartened by these events and now feel more invested in knowing what happens to waste. Knowing it is being properly managed is seen as a motivator to do the right thing.

Transparency regarding what happens to waste could help encourage more people to take care when sorting household waste.

Other residents hope for an incentive system, where they are rewarded for doing the right thing. "It's more that transparency that we pay rates for managing rubbish. We want to make sure it is going to be recycled and not being dumped in landfill and costing us more and all that kind of stuff." (Younger, smaller HH)

"You hear about a lot of the contents of recycling bins going into landfill anyway. So, I guess amongst the community there is this whole 'why do we bother then?'. Why do we separate them and have numerous bins and drag them out if it all goes into landfill anyway?". I guess there is more transparency and education needed from the Council in terms of what does happen. That in itself would probably motivate people." (Younger, smaller HH)

"We go through a lot of trouble every day to make sure that this goes there and that goes there for the right reason." (Older, larger HH)

"You have the presumption that they are going to recycle, reuse it and repurpose it so it isn't going into landfill, otherwise what is the point of telling us to separate it?" (Older, larger HH)

"I don't need too much detail. I just want to know that my recyclables are being recycled. I don't really care what sort of projects it goes towards. Just that it's being put towards where they say it is." (Younger, smaller HH)

"Wouldn't it be great if we got a bit of transparency, and our rates were reduced? That could be an incentive. There's a balance sheet of what is going on and how it feeds back to the community in a sort of rewards system. Incentivise people." (Younger, smaller HH)

# **General waste behaviour**



### **Section highlights: General waste behaviour**



There is some confusion over what goes into the yellow bin Different sorts of plastics, and whether certain components of certain products are recyclable (such as lids on milk bottles), can create some confusion among residents. Some are also unclear about whether food residue on containers means it cannot be recycled. Anything residents are unsure about often ends up in the red bin.

The yellow bin fills up most frequently Of all bins (red, yellow and green), many residents claim their yellow bin reaches capacity the fastest. Green bins tend to fill fast but only on sporadic occasions, such as when a significant amount of gardening occurs.

Some resident groups have issues with a weekly red bin collection

Families with children in nappies report their garbage bin both filling and smelling over the course of a week. Other residents claim there have been instances where families have put dirty nappies in someone else's bin if their own has been full.

# Some residents are confused by what goes into the yellow bin

People are largely responsible, conscientious and feel knowledgeable when it comes to managing their household waste. They consider themselves aware of what needs to go into each bin and have established habits of separating out and disposing of recyclable and food waste in their respective bins.

The yellow bin causes some difficulty, however, in terms of capacity and confusion over exactly what items can be recycled. Plastics can be a grey area (i.e. soft versus medium-soft plastics), likewise containers and boxes with food scraps and residue (e.g. milk, yogurt, oil). Take-away coffee cups are also a common cause of confusion. Many residents tend to throw all plastics in the yellow bin, while a few separate out soft plastics and dispose of them in designated bins at the supermarket.

Often, residents refer to hardcopy Council provided guidelines and / or information printed on bin lids when they need to clarify what can and cannot go into each bin.

Residents feel in control of knowing what goes in their own bins but find that sometimes other residents can dispose of incorrect rubbish in their bins. "The normal sized yellow bin, green bin and a smaller red bin. We try and put everything we can in the recycling area, but that is a little all over the place. They talk about how you can't put this in, and you can't put that in, I understand you can't put gladwrap into the recycling bin, but sometimes pulling things apart and separating it all, we did that for a bit but then we realised that it all goes in a tip anyway. It is not being reused so the effort you put into it doesn't equate to anything." (Older, larger HH)

"Sometimes if there's food left in a recyclable container do you put it all in the recycling or separate it out? I'm not familiar with all the separation practises and all that. I tend to just put the whole thing in one bin if it's together. It's probably not the right thing to do but I don't know any different." (Younger, smaller HH)

"The area of most confusion is over the soft and medium-soft plastics, and the division about what goes into the red cycle bag to the supermarket and what goes in the Council yellow bin. There is a lot of grey areas between those two." (Younger, smaller HH)

"We put the green bin out every Monday, and when the bin is out there will be people walking with their dogs and they will pick up their dog poo and put it in our bin. I find that is not right." (Older, larger HH)

"I do get confused and I have gone onto Planet Ark and googled and printed out my own list, but I am still confused. It needs clarity, you need a go to place where you can look it up and know exactly what to do." (Older, smaller HH)

# Many residents would like their yellow bin collected more frequently

There are mixed views on frequency of the collection of various bins. Many residents are comfortable with the current cycle, but some would like their yellow bin collected weekly. Often, residents find themselves having to 'store' additional recycling that cannot fit into the bin for collection. There is a perception that everything comes packaged in recyclable material these days, creating more plastics to be disposed of.

Fortnightly collection of the green bin is generally not an issue, but can become problematic during summer and holiday times, when levels of food waste increase and hot weather exacerbates smell. Those with large amounts of garden waste report storing excess green waste in other bins. Springtime can also see the green bin filling up more frequently.

For many residents, the 120L red bin is sufficient to manage levels of general waste. However, larger families, and those who previously had children in nappies, report capacity and odour issues with the weekly garbage collection cycle. Some people store waste or share bins with neighbours when their own bins are full. There are reports of residents using the bins of others without their knowledge to dispose of nappies and other general waste if their own bin is full.

Hard rubbish collection frequency, and time of year it is available, is sometimes considered problematic.

"I guess prior to COVID; it was okay every fortnight. During COVID, when you've got more packages and packaging coming, you find out you need that collection on a week to week basis. I was filling that one up faster than I was filling up the red bin." (Younger, smaller HH)

*"I would happily swap the red* [bin] *for the yellow* [bin]. *Yellow every week and red every second."* (Older, larger HH)

"Almost everything you buy from the supermarket comes in packaging you have to deal with." (Younger, smaller HH)

"It's a bit seasonal. The garden flourishes in spring, so that's when you're cutting things back and tidying it all up. Sometimes then you have to shove it all behind a chair and put it in the bin the next fortnight instead." (Older, larger HH)

"Sometimes my recycling bin is so full I have to keep it in a bag for next time. I will put that in the next run." (Older, smaller HH)

*"The amount of plastic is just unbelievable nowadays."* (Older, smaller HH)

"A week worth of nappies can start to stink." (Younger, smaller HH)

"I have had someone use our bin to put nappies in it when we were away and then when we got back it stunk." (Younger, smaller HH)

"I do not know why they [Council] put them [hard rubbish collection] where they do in the year because it rains within a day. I do not know why they are not mid-summer. It is a phenomenal waste, having a lounge that is rained on and ruined." (Older, larger HH)

### **Apartment dwellers have unique issues and challenges**



People in apartments can face unique capacity problems when residents move into buildings. Packaging from new items and disposal of old items can fill both yellow and red bins faster than usual creating sporadic problems.

There are many reports of shared bins not being used correctly, to the dismay of some residents trying to do the right thing. Often, apartment dwellers find renters in the building are not disposing of waste correctly. When people are moving out, it appears they tend to care less about what they do with excess furniture or packaging they do not need anymore.

Those who are more conscientious about recycling make the effort to take soft plastics back to the supermarket.

Other apartment dwellers are unsure when their bins are collected, particularly when they are using rubbish chutes and do not often see where it goes. "We get an influx of recyclables in the bin when new tenants move in. With boxes and yeah, we get an influx." (Younger, smaller HH)

"I live in an apartment so they're only separated by general and recycle. Unfortunately, compost has to go into general, but soft plastics I can take it to the supermarket. They have cardboard." (Younger, smaller HH)

*"I'm not sure* [when the bins are collected], *it's communal. We have a chute we just put the rubbish down."* (Younger, smaller HH)

"The sorting of things, sometimes it isn't done appropriately. We get a lot of temporary renters dumping all their other shit next to the bins, that can't be recycled. And then it's left up to the owners here to work out how to deal with that other hard waste." (Younger, smaller HH)

"We've got signs up clearly saying not to dump stuff, but it still gets dumped there. And then people also then throw stuff into the red bin that shouldn't be thrown in. they're moving out and they want to get rid of it." (Younger, smaller HH)

# Food waste behaviour



### **Section highlights: Food waste behaviour**

Majority of Monash residents putting food scraps into green bin

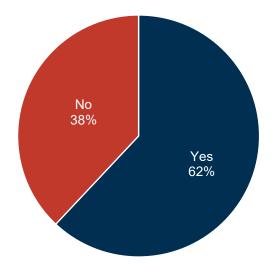
Residents manage to put food scraps in their green bin through a variety of means including compostable bin liners, layering food waste in between food scraps and freezing food scraps before bin collection. Even those who are not putting food scraps in the green bin are instead composting food scraps themselves at home.

Some confusion about meat products Residents have mixed opinions regarding whether meat products go into the green bin or not. Animal faecal matter is another point of confusion. Other residents are not confused as such, but they are deliberately avoiding putting meat products in the green bin because they find it smelly and unhygienic when it is not bagged.

Smells produced by food scraps are concerning and can be hard to avoid Aside from having your own compost at home, concerns of smell with a fortnightly collection of food waste is the most prominent reason why people do not put food scraps in their green bin. Though many try through various means to mitigate the smell of food scraps such as keeping the bin away from the house or in the shade, others are unable to do the same.

# Three in five residents with a green bin use it to dispose of food scraps

Put food scraps in food and garden waste bin Among those who have a food and garden waste bin



### The majority of Monash residents dispose of food waste in the green bin in a variety of ways

Most Monash residents (62%) are using their green bin to dispose of food scraps.

People are aware that food waste can go in the green bin, and some understand and appreciate the value of doing this (i.e. reducing landfill, feeling good about doing something for the environment). Many residents utilise their caddy bins and are separating and disposing of food waste in their green bins, or, in few cases, directly into backyard compost bins.

Those who dispose of food waste in the green bin do so in a variety of ways including:

- Using compostable liners (notwithstanding some identified issues with their use). Those using compostable bags purchase them from the supermarket and awareness of them is largely incidental (rather than being informed by Council)
- · Some residents are using recyclable bags
- Layering food waste in between lawn clippings
- Freezing food scraps before bin collection.

Many residents rinse and clean their caddy and green bin out regularly (sometimes with Bi-carb soda). To keep odours away from the house and worsening over the two-week period, some residents keep the green bin at a distance from the house or in the shade. "We've always done food scraps, but they go in the caddy and then the compost, I wouldn't think of putting them in the green bin because I have a compost here. I just use the caddy in the house to collect it all." (Older, larger HH)

"There is a massive amount of methane output from the actual landfill site because most of the smell comes from organics." (Older, larger HH)

"Ages ago we all received those green buckets, at the beginning I started using it and put it in the green bin, but because we have a veggie patch now I put the veggie scraps in the compost, not in the green bin. When I cut a tree down or a branch I will put it in the green bin." (Older, smaller HH)

"I do it, we used to have one as a child in England, when it came out here I was happy to start that again. I find it easier to be honest, and then my inside bin is not leaking with possible food junk." (Younger, larger HH)

"I have a spare fridge, so I might chuck them in the freezer until it is closer to the date and then take it out, because it does smell." (Older, larger HH)

"At the start I used the dog bags that are recyclable to line it." (Older, smaller HH)

"I used a green bin inside and I would have a recyclable plastic bag inside of it and every time it gets filled up I tie it up and put it into the green bin, so it doesn't spill or smell." (Younger, larger HH)

## There is some uncertainty regarding which bin meat and bone products should go in



The green bin is often considered the bin for 'organics'. People are clear that most food and gardens products go into the green bin.

That said, some confusion does exist regarding whether meat and bone products, as well as animal faecal matter, can go into the green bin. Some residents are putting these items into the green bin and others are not.

Whether wood with nails still in it can go into the green bin is another point of contention.

When people are unsure if something can go into the green bin or not, the product will usually end up in the red bin, instead of contaminating the green bin.

People who feel more certain about what can go into the green have been consulting Council-provided information in the form of a sticker on the bin – which they find useful. Younger people tend to follow in the footsteps of what their parents have traditionally done when it comes to food waste and recycling. "Dog poo is in recyclable bags and I put it in the red bin. Now I am thinking maybe I should put it in the green." (Older, smaller HH)

"We put the green bin out every Monday, and when the bin is out people walking with their dogs will pick up their dog poo and put it in our bin. I find that is not right." (Older, larger HH)

"Mostly vegetation stuff goes in the garden bed, and the rest of the stuff goes in the green bin. There's not a lot of meat stuff. Meat goes in the green bin." (Younger, smaller HH)

"Meat, fat and bones go in the red bin because you can't compost meat products. Certain things shouldn't be put in a compost bin. Onion skin and citrus don't break down." (Younger, smaller HH)

"Fish frames go in the red bin. If it went into the green bin, it would absolutely reek and be full of flies and ants." (Older, larger HH)

*"I just put it in the red if I am unsure. It is more important to try and get the yellow and green correct."* (Older, smaller HH)

"I think there is a sticker on top of it that says what is suitable. Pretty much anything you can eat can be put in there, including bones from meat, fish or eggshells." (Younger, larger HH)

"There was a whole spiel sent out when they introduced the little green bins, which was helpful." (Younger, larger HH)

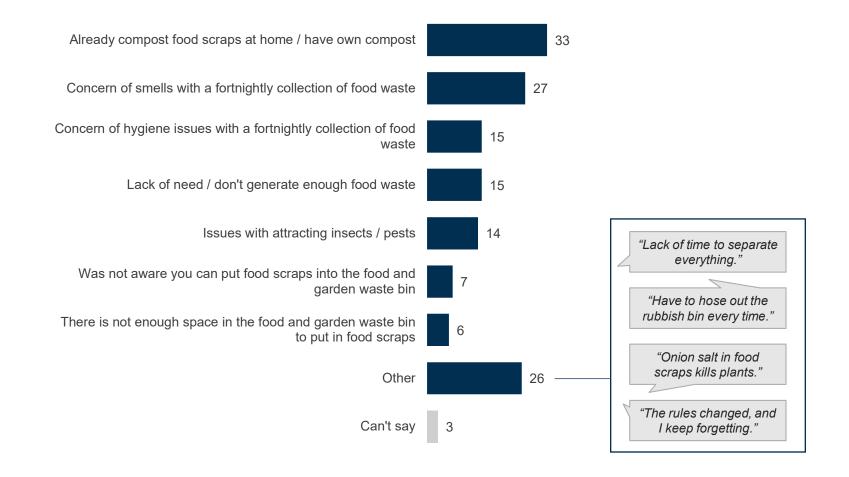
*"In my mind you could put any plant matter in there but I wasn't sure about anything deriving from animals."* (Younger, smaller HH)

"We have a cat. I'm not 100% sure what happens with kitty litter but I'm pretty sure it goes into the red bin." (Younger, smaller HH)

# Already having own compost and odour concerns are the main reasons why people do not put food scraps in bin

#### Reasons for not putting food scraps into green bin (%)

Multiple responses allowed – among those who do not put food scraps into the green bin



### One-person dwellings are significantly more like to believe they do not generate enough food waste to put in bin

#### Reasons for not putting food scraps into green bin (%) (cont'd)

Multiple responses allowed – among those who do not put food scraps into the green bin

	Total	18-34 yrs (n=45)	35-54 yrs (n=88)	55+ yrs (n=147)	Single HH (n=49)	2 person HH (n=85)	3-4 person HH (n=107)	5+ person HH (n=38)	Use nappies* (n=23)	Medical condition in HH* (n=21)	Home business (n=38)	Have pet (n=116)
Already compost food scraps at home / have own compost	33	27	30	45	26	34	28	46	20	50	31	35
Concern of smells with a fortnightly collection of food waste	27	33	26	19	9	21	30	36	44	24	22	21
Concern of hygiene issues with a fortnightly collection of food waste	15	18	16	12	7	12	19	17	26	5	23	14
Lack of need / don't generate enough food waste	15	22	4	15	31	10	15	9	14	6	25	11
Issues with attracting insects / pests	14	20	11	10	10	14	13	20	29	20	22	10
Was not aware you can put food scraps into the food and garden waste bin	7	11	3	5	4	12	5	5	7	0	2	5
There is not enough space in the food and garden waste bin to put in food scraps	6	7	8	3	3	6	7	6	6	10	0	4

Significantly higher / lower than the total at the 95% confidence interval. Q4. And why don't you put your food scraps into your food and garden waste bin? Base: Monash residents who do not put food scraps into food and garden waste bin (n=280). \*Caution: Small sample size (n<30).

# Oakleigh residents are significantly more likely not to recycle food scraps due to concern of smells



#### **Reasons for not putting food scraps into green bin (%) (cont'd)** Multiple responses allowed – among those who do not put food scraps into green bin

	Total	Glen Waverley (n=68)	Mount Waverley (n=77)	Mulgrave (n=61)	Oakleigh (n=74)
Already compost food scraps at home / have own compost	33	33	43	26	30
Concern of smells with a fortnightly collection of food waste	27	21	16	21	43
Concern of hygiene issues with a fortnightly collection of food waste	15	17	7	17	20
Lack of need / don't generate enough food waste	15	20	15	10	12
Issues with attracting insects/pests	14	11	10	12	21
Was not aware you can put food scraps into the food and garden waste bin	7	2	8	9	7
There is not enough space in the food and garden waste bin to put in food scraps	6	5	0	9	9

# Many of those who are not using their green bin to dispose W of food waste are already composting at home

Positively, among those who do not put food scraps into the green bin, a third only say so because they have their own compost at home (33%).

• Older Monash residents aged 55 years and over are significantly more likely to be composting at home instead of using the green bin (45%).

Risk of food scraps smelling after a fortnight can deter residents from disposing of food scraps in the green bin – just over a quarter (27%) label smell as a reason why they do not food scraps into their green bin.

• Interestingly, Oakleigh residents are particularly concerned about smell (43%).

Though cleanliness of the green bin with food scraps and propensity to attract pests are concerns, they are less prominent relative to smell. Comparatively, 15% of residents say they do not put food waste into the green bin because of hygiene issues with a fortnightly collection and 14% for attracting pests.

Even some who use their green bin for food scraps will avoid putting meat, bones and seafood in it, and instead dispose of them in their red bin, for fear of smell and attracting insects. People tend to avoid disposing of such products in the green bin during summer months when the weather is warmer and smells are exacerbated. Weekly collection is spontaneously mentioned as a potential way to mitigate smell. "I just find that when the weather is hot, chicken and turkey over Christmas smells, and the prawns have a terrible smell, and they are collecting it every second week. I am a bit funny when there is hot weather." (Older, larger HH)

*"I think I was for it* [putting food scraps into the green bin], *but as* we're discussing more it's sounding like a hygiene and uncleanliness sort of issue. I don't like the idea of it. It will attract pests." (Younger, smaller HH)

"The problem I have with chop bones in the green bin, is that they smell. So, I don't put them in." (Older, smaller HH)

"I put the whole turkey in the garbage bag and put it in the red bin, I was not putting smelly turkey in the green bin. I couldn't do it." (Older, larger HH)

"Fortnightly collection is too infrequent. They'd want to do it weekly. And cleanliness. I don't have a lot of food waste. Mainly fruit peelings which go in the vegetable and compost beds. I haven't had a need to put scraps in the green bin." (Younger, smaller HH)

"The idea is good, but it stinks when you have to wait two weeks. The green bin isn't collected every week, it is every two weeks. If you have seafood, like oyster shells." (Older, larger HH)

"The problem I have with chop bones in the green bin, is that they smell. So, I don't put them in." (Older, smaller HH)

"It was getting a clean every couple of days [the green bin] and it was not a loveable job." (Younger, larger HH)

# Some residents try to mitigate smell concerns but others are unable to do so

\W)

While many residents are finding ways to minimise the smell coming from the green bin, not all are able to use the same methods.

Some residents will layer food scraps in between grass clippings to dull the smell, but there are residents who have no lawns to mow.

Others will store their bin further away from the house and in the shade so they are not bothered by the smell – though not every has a shady spot for the bins or the ability to keep bins at a distance form the house.

There are households who claim they do not have the time to wash out their bin frequently enough, or they do not have room in their freezer to freeze food scraps.

"I have a spare fridge, so I might chuck them in the freezer until it is closer to the date and then take it out, because it does smell." (Older, larger HH)

"We are pretty spoilt because the bins live 10 metres from our front door. We put everything in there." (Older, larger HH)

*"I found that if I wedge the bits of scraps between bits of grass, it doesn't smell."* (Older, larger HH)

"I'll never put food scraps straight into the bottom of the green bin, I will always have some leaves or clippings in first, then the scraps and then leaves on top. It sucks away the smell." (Older, smaller HH)

### Many residents with shared bins want the ability to recycle W food scraps in a collection bin or communal compost

### Would like to be able to recycle food scraps

	n=
Already do	10
Yes	18
No	5

Preferred ways to recycle food scraps\*

(among those who would like to be able)

	'Like' this idea n=
Put food scraps in a food collection bin	14
Use a communal compost bin or worm farm	11
Have own compost bin or worm farm	8

#### Views from apartment dwellers regarding food waste

"The problem I see is, you're in an apartment complex, and there's 18 apartments, and you've got a bin full of food waste. It's going to stink pretty quickly. I have issues enough with people dragging their rubbish down to the bottom floor and leaving a trail of stuff, and they're adding more complexity where they're separating their food waste and making more mess, which the Council won't be cleaning up. I don't know, I guess at a household level it can be managed easier. When you have multiple apartments, the cleanliness and odour will be a massive problem to deal with." (Younger, smaller HH) "We've got general and recycling for plastics and cardboard. There is no option for food waste at this stage. I remember seeing some sort of Council note being sent out ages ago about changes to the bins, but maybe because we're in an apartment building and the way it's set up, it hasn't arrived, I don't know." (Younger, smaller HH)

"I've got a little bin all the scrappings go into, and that goes into the red bin. If I had something small on my balcony to compost it, I would do that, if the Council could provide it. Even coffee grounds, that can be composted as well." (Younger, smaller HH)

"I don't think living in a big apartment complex is going to be great for hygiene, smell etc. My waste from food scraps and vegetables is minimal. I'd prefer if the Council could help us individually set up something small along the lines of a compost bin." (Younger, smaller HH)

Q9. Would you like to be able to recycle your food scraps? . Q10. I am going to read out some of the ways you may be able to recycle food scraps where you live, and I want you to tell me whether you like the idea or not. Base: Monash residents who have shared bins (n=34); those who would like to be able to recycle food scraps (n=18). \*Caution: Small sample size (n<30).

# Attitude towards change



#### **Section highlights: Attitudes towards change**

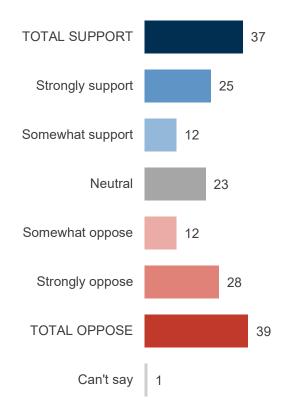
Similar levels of both support for and opposition to change Thirty-seven per cent of Monash residents support the changing waste collection cycle, while 39% oppose it. Almost a quarter (23%) are neutral. Residents aged 55+ years (50%) and two-person households (49%) are significantly more likely to be supportive. Those living with someone with a medical condition (66%) or children in nappies (58%) or run a business from home (57%) are more likely to oppose.

Residents are unsure as to why the change is occurring There is some awareness that Council was contemplating changing the waste collection cycle, but no one knew the decision had been made or why. Misconceptions arise as to why the change is occurring, given the community feels there is not immediate need to collect the green bin more frequently – it is typically not at capacity each week.

Top of mind benefits of change are personal and environmental One of the immediate associated advantages of a weekly green bin collection is personal. Keen gardeners can prune or mow the lawn more frequently. A reduction in the amount of waste going to landfill is noted and appreciated, but there some residents who are against the change argue the *amount* of waste being collected will not change.

### There are mixed views on changes to Monash's waste collection cycle

#### Support for changes to Council's waste collection cycle (%)



Q5. From August 2022, the City of Monash Council is changing its waste collection cycle – so that the red-lidded garbage bin would be collected fortnightly, and the green lidded food and garden waste bin would be collected weekly. The yellow recycling bin would still be collected fortnightly. In principle, do you support, oppose or are you neutral towards this change? Base: Monash residents (n=800).

### Households with a medical condition producing waste, child in nappies or home business are most opposed

Support for changes to waste collection cycle (%) (cont'd)

	Total	18-34 yrs (n=114)	35-54 yrs (n=231)	55+ yrs (n=455)	Put scraps in green bin (n=484)	Use liners (n=166)	Single HH (n=127)	2 person HH (n=293)	3-4 person HH (n=290)	5+ person HH (n=88)	Use nappies (n=59)	Medical condition in HH (n=59)	Home business (n=80)	Have pet (n=329)
TOTAL SUPPORT	37	29	33	50	44	45	43	49	32	25	18	20	30	36
Strongly support	25	17	21	37	32	36	32	34	20	18	15	11	23	24
Somewhat support	12	11	12	13	12	9	11	15	12	6	2	9	6	12
Neutral	23	32	20	16	22	31	27	17	26	23	23	12	13	20
Somewhat oppose	12	14	10	11	11	10	9	11	13	12	16	17	15	12
Strongly oppose	28	25	35	23	23	14	20	28	28	40	42	49	42	32
TOTAL OPPOSE	39	40	45	41	34	24	29	41	41	52	58	66	57	44
Can't say	1	0	1	35	<0.5	1	1	1	1	0	1	2	0	<0.5

Significantly higher / lower than the total at the 95% confidence interval.

Q5. From August 2022, the City of Monash Council is changing its waste collection cycle – so that the red-lidded garbage bin would be collected fortnightly, and the green lidded food and garden waste bin would be collected weekly. The yellow recycling bin would still be collected fortnightly. In principle, do you support, oppose or are you neutral towards this change? Base: Monash residents (n=800).

# Mulgrave residents are significantly more likely to strongly oppose the change to Monash's waste collection cycle

Support for changes to waste collection cycle (%) (cont'd)

	Total	Glen Waverley (n=173)	Mount Waverley (n=213)	Mulgrave (n=178)	Oakleigh (n=236)
TOTAL SUPPORT	37	43	37	32	37
Strongly support	25	29	26	25	22
Somewhat support	12	13	11	7	14
Neutral	23	19	27	19	25
Somewhat oppose	12	13	13	10	12
Strongly oppose	28	26	23	38	26
TOTAL OPPOSE	39	38	36	48	38
Can't say	1	0	<0.5	1	1

Significantly higher than the total at the 95% confidence interval.

Q5. From August 2022, the City of Monash Council is changing its waste collection cycle – so that the red-lidded garbage bin would be collected fortnightly, and the green lidded food and garden waste bin would be collected weekly. The yellow recycling bin would still be collected fortnightly. In principle, do you support, oppose or are you neutral towards this change? Base: Monash residents (n=800).

#### **Reactions to the impending change vary**

There is just as much support (37% total support – including 25% strongly support and 12% somewhat support) for the impending change to waste collection as there is opposition (39% oppose – including 28% strongly oppose and 12% somewhat oppose).

- Older Monash residents aged 55 years and over and two-person households are significantly more likely to support the change compared to average (50% and 49%, respectively). Comparatively, larger households with five or more people are significantly less likely to support the change (25%).
- Residents who live with someone with a medical condition (66%) or children using nappies (58%), and those who run a business from home (57%) are significantly more likely to oppose the change.

When made aware of the impending change, some residents are surprised given there is some knowledge of Council's contemplating a decision, but none were aware a decision had been made. A few are away of other Councils making similar changes.

Many people have no issue with the green bin being collected weekly. It is the change to the red bin frequency that concerns them. Often, there is a sense of disappointed that it is not the yellow bin which is changing to a weekly collection – which many claim would be far more useful. *"I was aware it was being contemplated; I didn't know they made a decision."* (Older, smaller HH)

"I would be more in favour if they did the recycle weekly as well." (Older, larger HH)

"The yellow one weekly would be better." (Older, smaller HH)

"I knew they were threatening it when they dropped off those little green bins, but I was hoping that they would come to their senses. They mentioned it on the form that came with our caddies." (Younger, larger HH)

"The food scraps did not make a huge dent. My first thought is that I have a bunch of friends who will lose their minds because they have a little one in nappies. I would rethink that if I was them. Not even nappies, there are other things that won't be pleasant after two weeks in the red bin that you can't put anywhere else. ." (Younger, larger HH)

*"I didn't even know this was happening, I am a little annoyed."* (Older, smaller HH)

"I'm not super against it either. I'd still rather have the red bin collected weekly as opposed to the green bin, because I hardly have any food waste. I'm not the type of person to scrape my plate at the end of the night. Only things like apple cores, vegetable stalks, very minimal. There would barely be anything in my green bin. I'd have more in my red bin than my green bin. Neither of them would be near full by the end of the week." (Younger, smaller HH)

# There are questions as to why the frequency of waste collection is changing



Many residents claim they do not fill up their green bin every week while others say they are composting their food scraps at home. Given food scraps are either currently being recycled by many or not causing capacity issues, some residents do not understand why there is a need for change.

Residents may benefit from being informed as to why the change is happening. Currently, there are some assumptions being made about why the change is occurring and there is room for misconceptions to fill the knowledge void. Some residents are assuming that Council is trying to save on costs by reducing trips to landfill. Those who believe Council's motivation for changing the waste collection cycle is economic question whether 'cost savings' will be passed on to residents.

Others who are concerned by the change want to know if residents will be offered larger bin sizes free of change. "They are trying to cut back on costs because it is all about the money." (Older, larger HH)

"I don't think it changes the cost, but maybe they need to tell people what happens with the green bins and why they need to increase the collection. Like are they just collecting it and just dumping it in landfill anyway?" (Older, larger HH)

"I would like to know why they want to change it. What is their logic?" (Older, larger HH)

"Why are they changing the frequency?" (Older, larger HH)

#### **Reasons why people support or oppose the change**

### 37% of Monash residents <u>support</u> the change in waste collection cycle because:

- They will have more room in their green bin for additional gardening
- It will mean less is going to landfill. There is some awareness that organics in landfill cause methane gas to be released into the atmosphere when breaking down
- There is a perception that it will save Council money because less is going into landfill – but residents want to see the cost savings
- It could encourage more conscientious purchases with less room in the red bin for excess packaging
- Some residents are not filling their red bins weekly
- There are hopes that it will encourage people to use their green bins more
- Residents may have access to free compost from Council (created by their green bin contents).

### 39% of Monash residents <u>oppose</u> the change in waste collection cycle because:

- The red bin will smell after two weeks
- The red bin fills up more than the green bin capacity will not last two weeks. Larger families say they cannot control what their children or others in the household put in the red bin so they cannot reduce the amount that goes in there. Even those without children in nappies in their household sympathise with those who do
- Incontinence and female hygiene products being left in the bin for two weeks is also concerning
- There are concerns that people will just put excess rubbish in any bin or other peoples' bins or anywhere they see fit, meaning and not reduce general waste overall. They do not understand how changing the frequency of the red bin collection will reduce how much waste is created
- Some residents do not understand why there needs to be a change, so they simply oppose it.
- Some people do not believe meat food scraps can be processed at the composting facility, meaning they will still put meat in the red bin and it would need to stay in there for two weeks.

# Rationale for why residents support the change: select verbatim comments



"It will **take care of the smell and flies**. It means **I can weed every week rather than every fortnight**. You can mow your lawns every week." (Older, larger HH) "For me, personally it works because I have a garden and I've got trees in pot plants, so it works because **I do a lot of gardening and I could fill it every week**." (Older, smaller HH)

"I have a strong opinion that all the bins should not be collected weekly at all. They should all be collected every fortnight; **it will force people to think about it and reduce their waste.**" (Older, smaller HH) "I would definitely consider emptying the caddy in the green bin, it will be easier when I know that it will be collected every week. It will make me do gardening far more regularly than I do now. That would be an advantage. I suspect that the caddies are probably not used anywhere near its limit, and perhaps this is a way to get people to use it more." (Older, larger HH)

"I have only got an average size block, but I have tonnes of trees and the tree falls are terrible. Selfishly, having the bin green bin collected once a week would be great for me, also getting rid of smelly food scraps, also lawn clippings. With taking a few participants points about incontinence and pharmaceutical and medicinal waste, sitting around in the red bin is a real problem, I can't see any solution to that one." (Older, smaller HH) "More conscientious purchases, maybe don't do all the online shopping because of all the excess packaging. **You will be a more conscientious shopper if you have less space in your bin**." (Older, larger HH)

*"It will encourage people like me who don't use the green bin to actually use it."* 

"I hope that it would change people's actions." (Older, smaller HH) "I think it will be good for people who don't already have their own compost system. They'll probably be a bit more switched on to putting it in the green bin now." (Younger, smaller HH)

# Rationale for why residents oppose the change: select verbatim comments

"Unfortunately, the packaging that we

get our products in is not going to

change. That is not food, that is

rubbish. I don't know the logic behind it.

Food scraps is a percentage of it. Unless the

"The stuff that goes into the red bin, like the fish frames, they reek. The red bin, more smelly stuff goes in there and I imagine that if left in the sun, it would smell more. I don't think it is safe to throw different meat products into the compost or green waste because of disease, it depends on how they process it back at the Council plant." (Older, larger HH)

"Sometimes **you don't have control over the rest of the family**, our bin is only small, so if you have a family of four or five, you need the red bin." (Older, larger HH)

"Maybe I should put the dog waste in the green bin instead of the red bin because that would really smell." (Older, smaller HH)

"That is my problem too, **I wouldn't fill up that green bin every week.**" (Older, smaller HH)

of d "I would be against it, especially if you have young kids in nappies, that would be a nightmare." (Younger, larger HH)

> "It is adding so much pressure to consumers already when we are trying our best." (Younger, larger HH)

"There is a lot of stuff that goes into red bins. And if you are in a household and it is full, **you might have to improvise and put stuff into the yellow bin**. At the moment, it is fine with this, having the red bin every week." (Older, larger HH)

*"I don't see how the frequency of collection impacts how much stuff is in* 

**the bin.** I don't think it changes the landfill. What may change is the cost involved of trucks going down to the landfill place, it would halve that." (Older, smaller HH)

#### "Food scraps won't fill up that green

**bin in a week**, it is not like twigs and branches. If you collect every week, it might just be like half a bin every week." (Older, larger HH)

> "You might even get rubbish on the streets. Might be a hygiene thing." (Older, smaller HH)

"We have the larger red bin, and **we are just getting by, so there is no way we will manage having a fortnightly collection**, even with the food scraps taken out." (Younger, larger HH) "I don't understand what will change by changing it to the green bin, the rubbish is still there." (Younger, larger HH)

### Concerns



#### **Section highlights: Concerns**

Most concerns resonate among most residents Smell, capacity and hygiene issues are considered the greatest concerns of changing the collection cycle so that the red bin is collected fortnightly and instead the green bin weekly. Concern regarding smell, hygiene and capacity issues is strongest among those who have a child that wears nappies in the household.

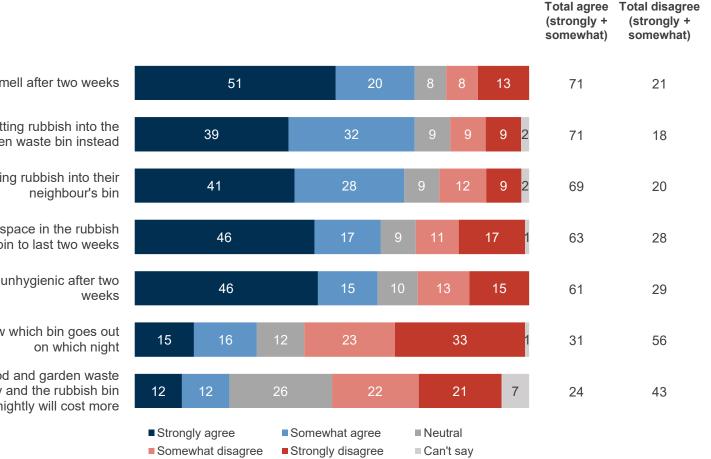
The implications of lack of red bin capacity are concerning

Majority of residents (63%) agree there will not be enough space in the red bin to last two weeks. However, the *consequences* of a lack of capacity in the red bin resonate even more strongly. Around seven in ten residents agree it is concerning that people may end up putting rubbish into the green bin instead (71%) or into their neighbour's bin (69% agree).

Residents feel for others who would be impacted Even those who admit they will not have any issue with the new waste collection cycle sympathise with others who will struggle. Residents who have no issue with the changing waste collection cycle *do* however have concerns about what others will do with their excess waste.

### Smell, capacity and hygiene issues are the greatest concerns

#### Agreement with concerns about changes to the waste collection cycle (%)



The rubbish bin will smell after two weeks

People may end up putting rubbish into the food and garden waste bin instead

People may end up putting rubbish into their neighbour's bin

There will not be enough space in the rubbish bin to last two weeks

The rubbish bin will be unhygienic after two weeks

It will be confusing to know which bin goes out on which night

I am worried having the food and garden waste bin collected weekly and the rubbish bin collected fortnightly will cost more

Q6. Some people have said that having food and garden waste collected weekly, and rubbish collected every two weeks, will be challenging. I'm going to read about some concerns people have. To what extent do you agree or disagree that each of the following is a concern of having the green lidded bin collected weekly, and the red lidded bin collected fortnightly. Base: Monash residents (n=800).

### Concerns are higher among households using nappies, and Wallower among single person households and over 55s

#### Agreement with concerns about changes to the waste collection cycle

	Total	18-34 yrs (n=114)	35-54 yrs (n=231)	55+ yrs (n=455)	Put scraps in green bin (n=484)	Use liners (n=166)	Single HH (n=127)	2 person HH (n=293)	3-4 person HH (n=290)	5+ person HH (n=88)	Use nappies (n=59)	Medical condition in HH (n=59)	Home business (n=80)	Have pet (n=329)
The rubbish bin will smell after two weeks	71	78	72	60	68	66	50	66	76	77	85	79	77	73
People may end up putting rubbish into the food and garden waste bin instead	71	78	74	59	69	67	50	70	74	77	80	79	81	74
People may end up putting rubbish into their neighbour's bin	69	71	71	65	70	70	64	68	71	68	72	85	79	74
There will not be enough space in the rubbish bin to last two weeks	63	78	68	42	61	59	45	50	71	75	81	70	73	68
The rubbish bin will be unhygienic after two weeks	61	63	68	53	57	59	48	57	64	70	78	75	64	62
It will be confusing to know which bin goes out on which night	31	35	28	28	28	29	28	31	29	36	41	37	31	28
I am worried having the food and garden waste bin collected weekly and the rubbish bin collected fortnightly will cost more	24	26	25	23	23	22	23	23	25	26	28	38	24	18

Total agree (strongly + somewhat %)

Significantly higher / lower than the total at the 95% confidence interval.

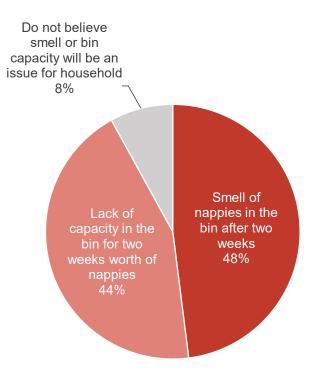
Q6. Some people have said that having food and garden waste collected weekly, and rubbish collected every two weeks, will be challenging.

I'm going to read about some concerns people have. To what extent do you agree or disagree that each of the following is a concern of having the green lidded bin collected weekly, and the red lidded bin collected fortnightly.

Base: Monash residents (n=800).

#### **Capacity and smell issues are considered equally problematic for households using nappies**

**Biggest anticipated problem for households using nappies (%)** 



# Smell of the red bin after two weeks is the greatest concern among all residents including those using nappies

Seven in ten residents agree the red bin will smell after two weeks (71%) – including 51% *strongly* agree.

 Not surprisingly, those with children in nappies feel even more strongly in relation to concerns of smell. Almost nine in ten (85%) residents that have children in nappies agree that the red bin smelling after two weeks is a concern they have after the change.

When weighing up whether smell or capacity would be the bigger issue in households using nappies, both are problematic although smell slightly moreso:

 Almost half of residents using nappies say smell would be the bigger issue after two weeks in the red bin (48%), just outweighing the 44% who claim that lack of capacity is the greater issue.

For some residents, food waste is not always what smells most in their bins. Other residents raise concerns in relation to female hygiene and incontinence products being left in the red bin for two weeks.

Hygiene concerns are linked to aforementioned products too, though smell is the greatest issue. Six in ten agree the red bin will be unhygienic after two weeks (61%) – rising to almost eight in ten among nappy users (78%).

Even residents who do not face the same issues sympathise with people who will find it challenging.

"I think we would be fine with the red one being picked up fortnightly, but somebody made the point earlier of it not working for every household with different needs and I am accepting of that. I would be fine with it, but I can see how others might not be." (Older, smaller HH)

"It would affect us, just things like ladies might put in the bin that I wouldn't want to sit in the bin for two weeks. Just things that I would throw out that I wouldn't want to open after a week and get smacked in the face with it." (Younger, larger HH)

"My view is that it just doesn't work, older people living in their homes, if you're looking at independence but they have incontinence, it doesn't work. And it is not going to work for young families either. I just can't see how you can make a switch and not really take in 40% of the population." (Older, smaller HH)

"When my red bin was full, I would attract those black birds, they could smell it. I couldn't stand it." (Older, larger HH)

"I'm also thinking about other scraps that go into the red bin that you wouldn't want sitting there for two weeks. I think about lids of yoghurt containers that have still got food waste on it and has to go in the red bin. And stuff that is contaminated and would have to go in the red bin. Even things like baking paper with salmon juices on it, for example. In the ideal world I'd want all the bins picked up weekly." (Younger, smaller HH)

# Over capacity bins are expected to cause people to incorrectly dispose of rubbish



Majority of Monash residents (63%) agree they are concerned that there will not be enough space in the red bin to last two weeks.

• Agreement is significantly higher among those using nappies (81%), residents aged 18 to 34 years (78%) and three to four person households (71%).

The implications of the red bin capacity not lasting two weeks are even more concerning:

- 71% agree it is concerning that people may end up putting rubbish into the green bin instead; and
- 69% agree that people may end up putting rubbish into their neighbour's bin, as a result of the red bin being collected fortnightly.

Families with children claim they are already struggling with capacity of the red bin despite being collected weekly. Some residents have had their red bin reduced in size over the past few years and so have already tried their best to produce less waste. They do not know how to reduce their waste even further.

Even people who do not have children in nappies, or any other medical issues that would generate waste, sympathise with young families and those suffering from a medical condition. Despite sympathising, some people do fear that families will begin to put dirty nappies in others' bin to deal with a lack of capacity. "I think you have to be mindful of people who have incontinence or young children with the red bins. My dad had incontinence and that really filled up our bins. I think when you are looking at extending the period between bins, you either have to come up with other solutions for those people or something has to happen. It has to be fair because it is a real problem, and that is a real issue for landfill which is expanding with the aging population." (Older, smaller HH)

"My red bin doesn't get filled up so it won't bother me too much but if I had little kids I could understand that it would be a bit hard." (Younger, larger HH)

"What you will find is people will start putting their stuff in other people's bins." (Older, larger HH)

"It could be an issue for nappies. Two weeks worth of nappies in a red bin, I don't think that will be good. They might end up being put in the wrong bin." (Younger, smaller HH)

"Because that green bin will go every week, other people might throw other stuff in it." (Older, smaller HH)

*"I feel bad for the big families, where do they put their nappies?"* (Younger, smaller HH)

"With the red bins, if mine is full and my neighbours is half empty, I will throw a box of our stuff in theirs." (Older, larger HH)

"Parents already tell me they don't have enough room in red bins for nappies. They'll probably just use the green bin for nappies." (Younger, smaller HH)

### **Managing change**

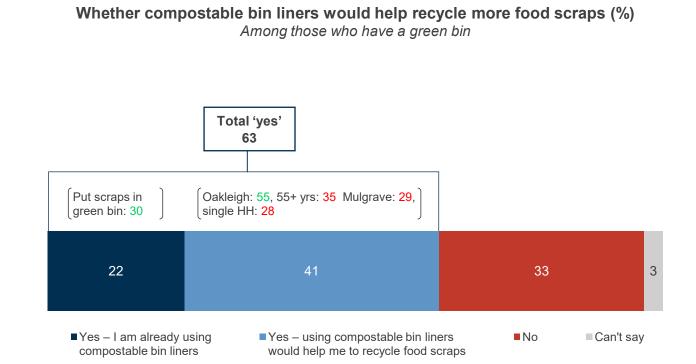
#### **Section highlights: Managing change**

Majority of residents are likely to use compostable liners Fifty-four per cent of Monash residents say they are likely (either very or somewhat) to buy compostable liners to bag food waste before putting it into the green bin, in order to manage the change. That said, people do have quality and capacity concerns regarding compostable liners.

Residents are unlikely to pay for a larger or additional bin Some people are however open to requesting a bigger red bin instead (40% say they are likely to do this, compared to 26% who would *pay* for a bigger bin and just 16% who would *pay* for an additional bin). It is important to note that there are members of the community who feel either requesting or paying for an additional or larger red bin from Council would be counterintuitive to reducing landfill.

Reusable nappies do not appear to be an option for many Of the two potential solutions relating to nappies, double bagging them before they go into the red bin is preferred over using reusable nappies. Just under half of those who use nappies say they are likely (either very or somewhat) to double bag nappies before putting them into the bin (46%) compared to just 21% who say they would switch to reusable nappies to manage the change.

### Most residents with green bin think compostable liners would help them recycle more food

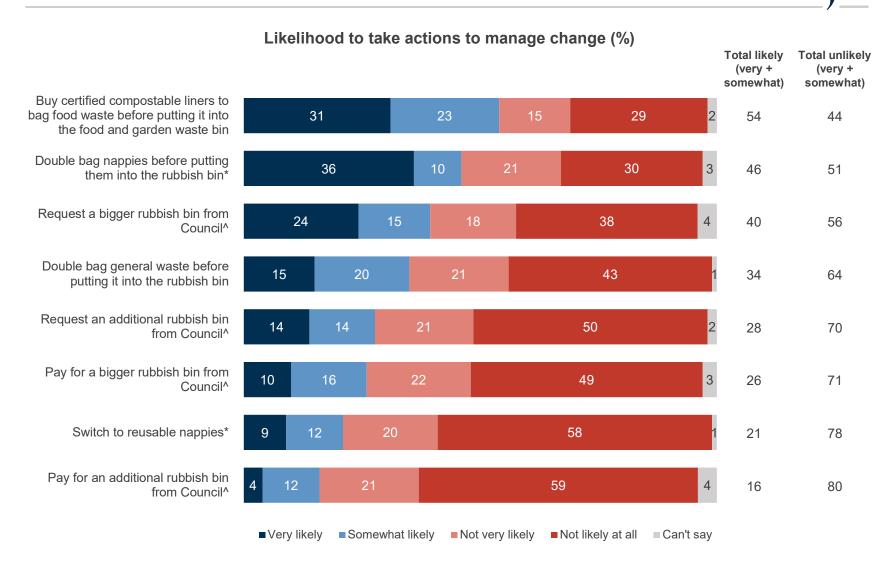


Significantly higher / lower than the total at the 95% confidence interval. Q3. Do you think using compostable bin liners would help you recycle more food scraps? Please say so if you are already using compostable bin liners. Base: Monash residents who have food and garden waste bins (n=764).

#### JWSRESEARCH 57

57

### Majority of residents claim they are likely to buy compostable liners to waste to manage the change



Q7. I'm going to read out some of the different ways people have said they will manage the change to a weekly food and garden waste

collection and fortnightly rubbish collection. How likely are you to do each of the following in order to manage the change?

Base: Monash residents (n=800); ^split sample (n=400); \*those with children at home who wear nappies (n=59).

Please note half the sample (n=400) were shown both statements about likelihood to 'request' an additional or bigger rubbish bin, and the

other half of the sample were shown both statements about likelihood to 'pay' for an additional or bigger rubbish bin.

JWSRESEARCH 58

#### Compostable liners may help people manage the change and increase food recycling but issues remain

Majority of Monash residents (54% - including 31% very likely and 23% somewhat likely) say they are likely to buy certified compostable liners to bag food waste before putting it into the green bin, in order to manage the change. Managing food and garden waste through compostable liners is the more likely behaviour change compared to double bagging general waste before putting it into the red bin (34% are likely to do the latter).

One in five residents (22%) say they are already using compostable liners and a further 41% say using the liners would help them recycle food scraps. That said, there are identified issues with compostable liners:

- They tend to tear and allow food and liquid to seep out, meaning people still clean their bins out. People want to bag waste so that leakage does not occur
- Given the bags tend to tear, smells caused by food waste can still exist
- They are small in size and not practicable for larger families in particular.

Residents who are reticence to purchase compostable bags feel as though they are being forced to buy something because Council has made a change. There is a perception that more environmentally friendly products are more expensive. "You still need to clean it every now and again because they kind of leak a little bit, if you have some left-over porridge and cereal, it kind of leaks through it." (Younger, larger HH)

*"We put prawns in the other day and the sharp edges of the prawns ripped the bag."* (Younger, larger HH)

"When the caddies first arrived, the Council said to not line it, just put stuff in and wash it out." (Older, smaller HH)

"They aren't as good as normal plastic bags, but they are better than not putting them in. I just smell it when I open the green bin, but it is not as bad as if you put it straight in." (Younger, larger HH)

"An issue my mum has though, she finds that the size of the compost food bags are a bit small. They could easily be filled up cooking 3 or 4 meals. In one or two days we could use about three bags" (Younger, larger HH)

"I buy those biodegradable ones; you have to line it with something. That is a huge issue as well. Some of them you take it to the bin and it breaks, they are so thin." (Older, smaller HH)

"Normally, biodegradable things cost more so I definitely won't be partaking in that. if the Council is pushing us to do this then they should cover the cost of these bags." (Younger, smaller HH)

"We pay enough with rates and fees as it is. I'm hoping the Council doesn't want to introduce something, make out it is our problem and add an extra cost. I don't want the council to introduce something and then guilt us. If the council provided me with bags I'd do it on my bench, all the scraps tied up and thrown out. There has to be some sort of give and take." (Younger, smaller HH)

#### Additional bins or larger sized bins can be seen to defeat the purpose of trying to reduce landfill



Though many residents are aware that you can purchase a larger or additional red bin if required, some people argue that doing so would be counterintuitive to what the change is trying to achieve.

It is clear that residents do not want to have to *pay* for an additional or larger bin, but they are open to *requesting* one from Council instead.

- Just 16% of Monash residents say they are likely (either very or somewhat) to *pay* for an additional bin from Council to manage the change. Eight in ten (80%) say they are unlikely to do so, including 59% who are not at all likely.
- Similarly, 26% say they would be likely to *pay* for a bigger red bin from Council. Seven in ten are unlikely to do so (71%).
- In contrast, 40% are likely to *request* a bigger red bin, though 56% are still unlikely to.
- *Requesting* an additional red bin is less likely to occur (28% say they are likely to), although it is still more likely compared to paying for one.

On an unprompted basis, some residents question whether Council would be offering to upsize red bins or residents who are unable to accommodate the change.

Others look to Europe for solutions to reduce landfill, such as paying for waste removal based on weight.

"Will they be upgrading the size? I think if the red bin collection is fortnightly, having a larger bin will help larger families. Because now those bins are small." (Younger, smaller HH)

"Isn't that defeating the purpose of what the Council is trying to do? They are trying to reduce rubbish not just have double the bins. They are trying to give us incentive to reduce." (Older, larger HH)

"I think if they made the option of getting a second bin more apparent and while it changes cut the fee to get us to move over. That would help. It won't help everyone; people are still going to be lazy and chuck it in the green bin." (Younger, larger HH)

"I think if it was an option of having two red bins and they were picked up, we would be less strife than we would be." (Younger, larger HH)

"Sophisticated countries like Germany and France, the weight of your waste influences your rate, so that incentivises you to create less waste." (Older, larger HH)

# Those using nappies are far more likely to double bag used was nappies than switch to reusable ones

Residents who have children in nappies find it difficult to see how they will manage the change to a fortnightly bin collection. Of the two potential solutions relating to nappies, double bagging them before they go into the red bin is preferred over using reusable nappies.

 Just under half of households using nappies say they are likely (either very or somewhat) to double bag nappies before putting them into the bin (46% including 36% who are very likely to and a further 10% who are somewhat likely to). More people claim they are unlikely to do so (51% - including 30% who say they are not at all likely to).

Even if nappies are double bagged, warmer whether is still expected to exacerbate the smell of nappies sitting in the red bin for two weeks.

There is a great deal of reluctance to switch to reusable nappies. For many, they are simply not an option, whether it be due to cost or time required to wash them.

 Over three quarters of Monash residents who have children in nappies say they are unlikely to switch to reusable ones to manage the change (78%) – including 58% who say they are not likely at all to. Just one in five (21%) say they are likely to make the switch to reusable nappies to manage the change. "Unless your child explodes, for the most part it [bagging up nappies] does a decent job in covering what you are trying to cover." (Younger, larger HH)

"There is no way getting around it. That is going to be a no go for a lot of people." (Younger, larger HH)

"You have to come up with incentives for manufacturers to come up with easily self-disposal, more absorbent nappies so they are not as thick. We have got to become better." (Older, smaller HH)

"Fortunately, I don't have any experience of adult incontinence, but I do recall that when my kids were babies we had cloth nappies that we washed. It didn't generate the landfill. Society seems to have moved away from that completely." (Older, smaller HH)

### Preferences for Council support pack

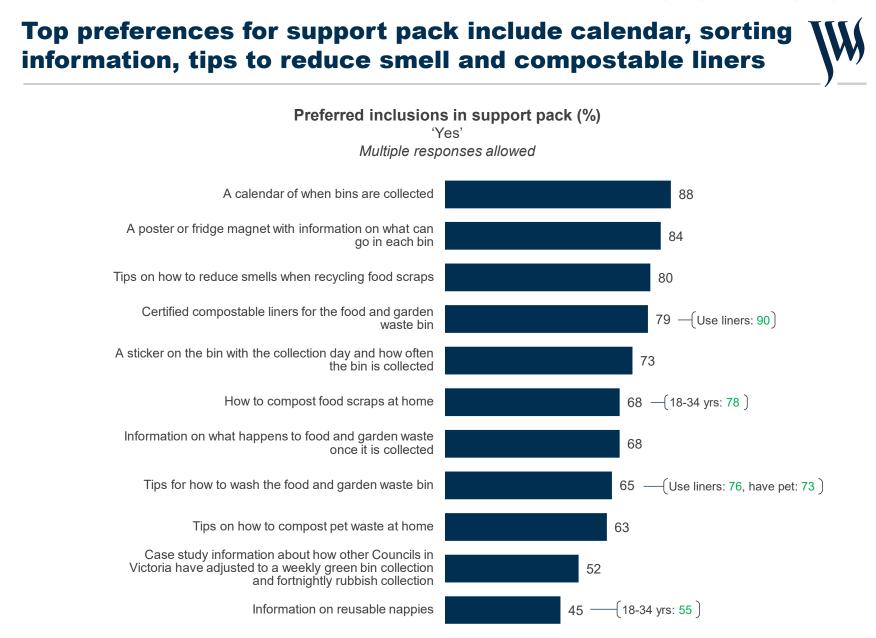


#### **Section highlights: Preferences for Council support pack**

Education and instruction will be an important part of the support pack There is a desire for information from Council about when and how to dispose of waste correctly. A calendar of when bins are collected (88%) and a poster or fridge magnet with information on what can go in each bin (84%) are the most preferred inclusions in the support pack from Council. Many residents (79%) would also like Council to provide certified compostable liners to help them dispose of food waste.

Pictures and diagrams are seen to be effective and helpful Visual information conveying when bins go out, and what goes in them, is considered highly effective. Residents find visual cues can help simplify what is often a topic fraught with confusion (sorting waste). Further, some people argue visual communication can be understood by all regardless of English language proficiency.

Residents seek tips and advice from Council There is great appetite within the community for Council to provide tips and advice on how to reduce smells when recycling food scraps (80% would like to see this included in Council's support pack), how to compost food scraps at home (68%), how to wash the green bin (65%), and how to compost pet waste at home (63%).



Significantly higher than the total at the 95% confidence interval.

 $Q\hat{8}$ . To help residents adjust to a weekly food and garden waste collection and fortnightly rubbish collection, Council will be putting together a support pack. I am going to read out some things they could include in this pack, and I would like you to tell me whether that should be included or not.

## Reminders of how and when to dispose waste are believed to best be accompanied with pictures and diagrams

Compared to other concerns, not knowing when bins are due out for collection is salient. That said, some residents feel they will struggle to break habits, or simply not understand what is happening when the change occurs. In the support pack, it is clear people would like education and instruction from Council on how and when to dispose of waste:

- Almost nine in 10 residents (88%) want a reminder in the form of a calendar of when bins are collected to be included in the Council support pack
- 84% would like to see a poster or fridge magnet with information on what can go in each bin included.

There is appetite for the poster or fridge magnet to include pictures and diagrams that clarify what goes in which bin. Imagery is considered an effective form of communication because it can aid with memory, and it does not rely on proficient language knowledge.

Help to be able to dispose of the waste is also desired. Some feel that Council should be bearing the cost of compostable liners given residents have to cope with the change to the bin collection cycle.

 Almost eight in 10 (79%) feel that Council should include certified compostable liners for the green bin. "A cheat sheet to stick on the fridge. A picture of the bin and the items that can go in each one." (Younger, smaller HH)

"Education with leaflets and booklets. Monash Council is quite good at doing this." (Older, smaller HH)

"Stickers with images on the bins, that's a good reminder that doesn't rely on language." (Younger, smaller HH)

*"It would also be good if they put pictures on each bin, like a visual clue for people."* (Older, smaller HH)

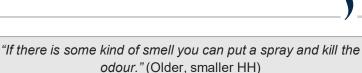
"Education and instruction, as clear as possible. Pictures and different languages to cater for all groups of people." (Younger, smaller HH)

*"If it's going to be really expensive* [compostable liners], *it's an extra burden. It depends on how big you are on the green agenda."* (Younger, smaller HH)

"I'd do it and then if they provide bags to apartments to tie their waste up. But if they're pushing on a cost as well, then no." (Younger, smaller HH)

"One way would be for Council to supply those biodegradable plastic bags. But they will raise our Council rate." (Older, larger HH)

#### Tips and advice from Council should form a part of the support pack



Smell caused by food scraps in bins as well as general rubbish in the red bin for two weeks is one of the most prominent concerns among Monash residents – they want strategies on how to manage and kill odours.

• Eight in 10 residents (80%) would like to see tips on how to reduce smell when recycling food scraps included in the support pack provided by Council.

Majority of residents would also like to see tips and advice from Council on:

- How to compost food scraps at home (68% say yes, they would like this see this included in Council's support pack. There is significantly more interest in tips on how to compost food scraps at home among younger residents aged 18 to 34 years (78%)
- How to wash the green bin (65%)
- How to compost pet waste at home (63%).

Educating people on what happens when food and garden waste is collected may also encourage people to diligently dispose of food scraps. People want to know the benefit of Council recycling food scraps more frequently with a weekly collection. Some even hypothesise the compost produced may result in more community gardens. Just over two thirds of the Monash community would like information of what happens to food and garden waste once it is collected (68%). *"It would be great to receive advice on how to keep it hygienic."* (Younger, smaller HH)

"They should tell us the reasons and the benefits, and if it is better for the environment we will feel better about it." (Older, smaller HH)

"Being transparent, show benefits that we will be able to see." (Older, smaller HH)

"Show benefits that we will be able to see." (Older, smaller HH)

*"I want to know how they measure how much landfill is made up of food scraps."* (Younger, smaller HH)

"They could use the compost to have more community gardens, with veggies, that would be a very positive move." (Older, smaller HH)

#### There is an argument for both hard copy and electronic communications



When it comes to how Council should distribute information within the support pack, residents want a range of different communication methods.

Some people believe community newspapers do not generate enough community interest these days to get the message out to everyone.

There are mixed opinions as to whether hard copy mail out the community is effective or not.

On one hand, a mail out would ensure each household receives the support pack and relevant information relating to the change. Residents do admit sometimes throwing out generic communications received in the mail box, and stress the need for a personalised letter to accompany any communications to ensure the material does not end up in the bin.

On the other hand, some residents consider a mail out to be counterintuitive to trying to reduce waste. Among these people, opting in to electronic communications such as email or even opting in to mail outs (to prevent information going to everyone) is considered a more environmentally friendly approach – though perhaps less effective.

A sticker on the bin with information about the incoming change is suggested as an effective means of getting a message across. "Letter. Email too but not everyone checks. Maybe a few different ways." (Older, smaller HH)

*"Email us this communication, not send us another piece of paper."* (Older, smaller HH)

"Considering the lack of interest in community newspapers anymore, a letter drop, or a mail drop is still the best way, even though it does create more rubbish." (Younger, larger HH)

"That newsletter could go out via email as well rather than a copy, people should have the option to opt in. That is a green thing to do." (Older, smaller HH)

"A personalised letter. If it is just to the household it would go to the bin." (Younger, larger HH)

"A sticker maybe on top of the bin when they do the last bin round. So, when you collect your bin, you can see the changes." (Younger, smaller HH)

Reactions to Council's Waste Management Strategy Goal



#### Section highlights: Reactions to Council's Waste Management Strategy Goal



The Waste Management Strategy Goal is positive but ambitious Council's Waste Management Strategy Goal of diverting 75% of community waste from landfill by 2027 is largely supported by Monash residents. Despite support for the goal, scepticism also exists as so how Council intends to achieve the goal. The change to Monash's waste collection cycle, however, is seen to fit within the broader waste management goal.

External factors make it difficult to reduce community waste Many residents claim they are doing all they can at the moment to reduce household waste. In order to achieve Council's goal of diverting 75% of community waste from landfill by 2027, residents look to businesses and manufacturers to reduce the amount of packaging they produce, to make it easier for consumers to avoid.

### Whilst highly optimistic, residents feel the goal is simply unachievable with current living standards and behaviours

Council's Waste Management Strategy goal is largely supported but is often perceived as a 'motherhood' statement lacking credibility and substance. Evidence about how Council plans to achieve the goal of diverting 75% of community waste from landfill are needed to increase believability. A lack of believability comes about due to:

- People feeling that broader changes are needed for the goal to come into fruition. Some doubt that the current living standards make it near impossible to achieve such a goal. Manufacturers and businesses need to reduce the packaging the put their products in. Many residents feel they are personally doing all they can to reduce the amount of waste they accumulate
- The scale of the goal. Diverting 75% of community waste from landfill is seen as overly ambitious, particularly within a five-year timeframe.

*"If it is possible, it sounds really good. It feels very optimistic and forgetting human nature."* (Younger, larger HH)

"It sounds ambitious because it is a big number, but I am hoping that with these changes and more, we will be able to achieve it." (Older, smaller HH)

"Right now, listening to the percentages, I think it is unachievable with the way we are living at the moment. The way we live has to change to get to that number." (Younger, larger HH)

"Motherhood statement, nice, touchy feely. To me it doesn't sound like there is a strategy in place." (Older, larger HH)

"For about 10 years I have been working to have no waste out of this house and I couldn't go a lot further than what I already have." (Older, larger HH)

"In order for that to happen, we have to purchase less and consume less. Unfortunately, business wants us to purchase more, buy more, throw more away, then replace it with more. No one has thought about what to do with the rubbish." (Older, smaller HH)

*"Audacious, 5 years to divert 75% of it. We'll see."* (Younger, smaller HH)

#### More information is needed for the goal to be perceived as credible and achievable

Though residents struggle to believe that the City of Monash could divert 75% of community waste from landfill by 2027, they do agree that the proposed change to the collection cycle is seen to align with this goal.

Information, such as the proportion of food waste that ends up in landfill, would help validate the change to the waste collection cycle as well as frame it in the context of Council's broader Waste Management Strategy. Currently, residents are unaware of how much community waste goes to landfill, so they would not be able to corroborate whether it has reduced by 75% in five years or not.

Further, what Council's strategy or 'action plan' is to achieve the goal would help increase credibility.

Though the change to the waste collection cycle is 'forced', on residents, some do admit that the forced change may result in behaviour change and help contribute to achieving the goal.

Others do admit that while they feel it sounds like a positive goal to pursue, they do not exactly understand what it means in practical terms or how Council will ensure targets can be achieved.

Regardless, residents do not want Council's pursuit of the goal to come at a financial cost to residents.

"It needs a comprehensive action plan that covers all aspects of Council operations. And also, community engagement. The figure was probably plucked out of the air, but it is better than not picking out a figure. If that is the goal, it is better than a lower number. It is more about a comprehensive action plan for how this is going to be brought about." (Older, smaller HH)

"I want to know how they measure how much landfill is made up of food scraps." (Younger, smaller HH)

"I would like to know what is in the definition of waste. It sounds quite descriptive, but how much of it is our normal waste. If this is the only part of their strategy, I would say it is completely unrealistic. I read a report done in 2019 which was done in all Australian Councils, and this is their biggest problem, unless they are going to address nappies, it is going up." (Older, smaller HH)

"I am not sure what they mean by 75%. If you have three bins, two of those bins are 66% of your waste. Or are they talking about 75% of the waste currently in your red bin. They are two very different 75%. It sounds good and nice, We only have a certain amount of area to have landfills. It is a finite space and landfills are finite, so I understand where they are coming from, but that is a massive reduction in a short period of time." (Younger, larger HH)

"If it's not going to impact us cost wise, then you do it. But if it's going to be a financial burden then it's not going to happen. If we feel like we're part of a community that is doing it together, the feel good factor." (Younger, smaller HH)

*"I support it, provided it doesn't have a cost implication for rent payers."* (Younger, smaller HH)

### **Appendices**



Representative telephone survey and qualitative research Appendix A:

**Demographics** 



### **Demographics**



Gender

Female 51%	Male 49%	
Age		%
18-24 years		8
25-29 years		14
30-34 years		17
35-39 years		8
40-44 years		8
45-49 years		8
50-54 years		6
55-59 years		5
60-64 years		7
65+ years		20

Ward	%
Glen Waverley	19
Mount Waverley	25
Mulgrave	20
Oakleigh	34

Number of people in household				
Live alone	10			
2	29			
3	19			
4	25			
5	9			
6 or more	8			
Prefer not to say	<0.5			

Type of bins allocated to property	%
Individual bins	95
Shared bins	5

Other household characteristics	
Run a business from home	11
Have a pet	42
Children at home who wear nappies	12
Live with someone who has a medical condition that produces waste or rubbish	7

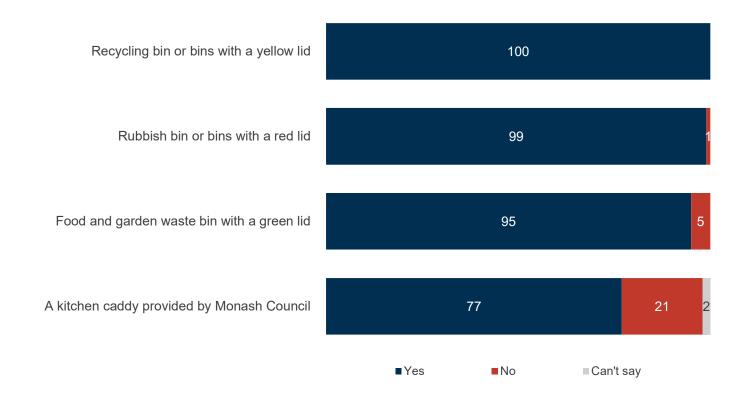
S1. Recorded gender. / S2. Could you please tell me how old you are? . S3. Auto record ward. / D1. Including yourself, how many people live in your household? . S4. At your home, do you have your own individual bins allocated to your property or do you share bins with other properties? . D2. Do you have children at home who wear nappies? . D4. Do you live with someone who has a medical condition that produces waste or rubbish? . D5. And do you ... Base: Monash residents (n=800).

Representative telephone survey and qualitative research Appendix B: Types of rubbish bins at residence



# Three quarters of residents say they have kitchen caddy provided by Council

Types of rubbish bins at residence (%)



# OPT-IN ONLINE SURVEY: RESIDENTS WITH INDIVIDUAL BINS





### **Section highlights: Context**



Red and yellow bins fill up the most

Typically, red (120L) and yellow bins in Monash are three quarters full or overfull when they are put out on bin night. The exception being one-person households, where most red bins are less than 50% full on average by bin night, and most yellow bins are less than 75% full.

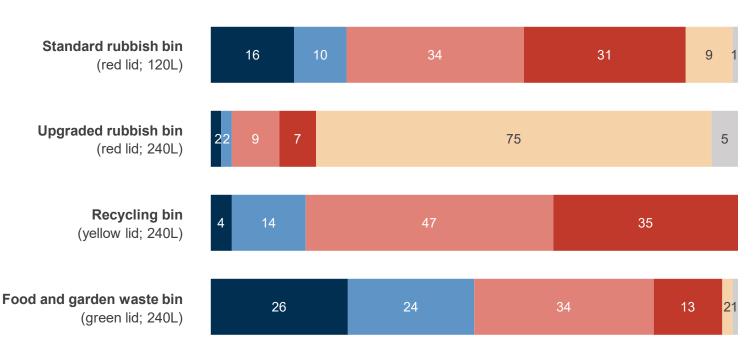
Green bins are least full Of all Council bins provided to Monash households, green bins are least full on bin night, with only half being up to 75% full when they are put out. Just 13% say their green bin is overfull on bin night, compared to 35% who say the same for their recycling bin, and 31% for their 120L rubbish bin.

Nappy-using households producing more rubbish

Among households with children who wear nappies, red and yellow bins are significantly more likely to be overfull by bin night, and green bins are significantly more likely to be at *less* than 50% capacity.

# Majority of residents' red and yellow bins are at least three WM quarters full by bin night

How full bins are when they are put out on bin night (%)



■ Less than 50% full ■ 50-75% full ■ 75-100% full ■ Overfull ■ Don't have this bin ■ Don't know

# More than half of Monash households using nappies have overfull 120L red bins by collection night

#### How full bins are when they are put out on bin night (%) (cont'd)

	Total	Single HH (n=254)	2 person HH (n=913)	3-4 person HH (n=2,166)	5+ person HH (n=969)	Use nappies (n=590)	Have pet (n=2,097)	Medical condition in HH (n=532)
Less than 50% full	16	54	32	10	4	3	13	5
50-75% full	10	18	15	9	5	5	8	6
75-100% full	34	19	35	38	28	30	33	33
Overfull	31	6	14	34	47	52	34	41
Don't have this bin	9	2	4	8	15	9	11	14
Don't know	1	1	<0.5	1	1	1	1	1

#### Standard rubbish bin (red lid; 120L)

#### Upgraded rubbish bin (red lid; 240L)

	Total	Single HH (n=254)	2 person HH (n=913)	3-4 person HH (n=2,166)	5+ person HH (n=969)	Use nappies (n=590)	Have pet (n=2,097)	Medical condition in HH (n=532)
Less than 50% full	2	8	3	1	<0.5	<0.5	1	1
50-75% full	2	4	2	2	2	1	2	2
75-100% full	9	3	5	9	13	9	10	12
Overfull	7	1	2	7	16	11	9	14
Don't have this bin	75	79	83	76	65	74	74	67
Don't know	5	6	5	5	4	4	4	3

Significantly higher / lower than the total at the 95% confidence interval. Q1. On average, how full are your bins when they are put out on bin night? Base: Monash residents with individual bins (n=4,302).

### Majority of households with five or more people have overfull yellow bins by collection night

#### How full bins are when they are put out on bin night (%) (cont'd)

	Total	Single HH (n=254)	2 person HH (n=913)	3-4 person HH (n=2,166)	5+ person HH (n=969)	Use nappies (n=590)	Have pet (n=2,097)	Medical condition in HH (n=532)
Less than 50% full	4	21	7	2	1	<0.5	2	2
50-75% full	14	41	26	10	5	8	10	8
75-100% full	47	31	53	50	40	43	47	47
Overfull	35	6	13	38	55	48	41	43
Don't have this bin	<0.5	1	<0.5	<0.5	0	<0.5	<0.5	<0.5
Don't know	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5

### **Recycling bin** (yellow lid; 240L)

#### Food and garden waste bin

(green lid; 240L)

	Total	Single HH (n=254)	2 person HH (n=913)	3-4 person HH (n=2,166)	5+ person HH (n=969)	Use nappies (n=590)	Have pet (n=2,097)	Medical condition in HH (n=532)
Less than 50% full	26	23	24	27	26	33	26	28
50-75% full	24	22	22	26	23	26	26	24
75-100% full	34	43	39	31	33	27	33	31
Overfull	13	9	11	13	17	12	13	15
Don't have this bin	2	2	3	1	1	2	1	2
Don't know	1	<0.5	1	1	1	1	<0.5	1

Significantly higher / lower than the total at the 95% confidence interval. Q1. On average, how full are your bins when they are put out on bin night? Base: Monash residents with individual bins (n=4,302).

### Food waste behaviour

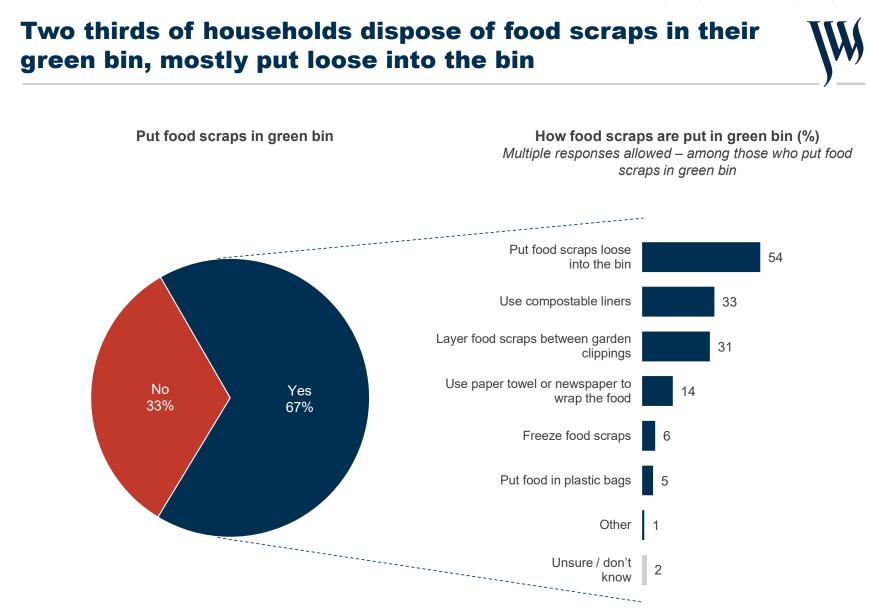


### **Section highlights: Food waste behaviour**

Most Monash households put food scraps in their green bin Two thirds of households with individual bins dispose of food scraps in their green bin (67%), the majority of whom put their food scraps loose into the bin (54%). Other common ways of putting food scraps into the green bin include use of compostable liners (33%) and layering food scraps between garden clippings (31%).

Reducing waste to landfill the leading benefit, odour the leading challenge Reducing the amount of waste sent to landfill (29%) and doing something simple that helps the environment (25%) are considered the best things about being able to put food scraps in their food and garden waste bin. A smelly bin is by far the most challenging aspect (54%). Households with children using nappies are significantly more likely to find this the most challenging aspect (60%).

A third <u>do not put</u> food scraps in their green bin Issues with attracting insects or pests (51%), concerns of smells (50%) and hygiene issues (47%) are the most common reasons why food scraps are not put into the green bin. Contrary other household sizes, among single-person households, the top reason for not putting food scraps in the designated bin is that that they do not have a lot of food waste.



Q3. Does your household currently put food scraps in your food and garden waste (green lid) bin? / Q4. How do you put food scraps in your food and garden waste (green lid) bin? (please select all that apply) Base: Monash residents with individual bins (n=4,302) / put food scraps in food and garden waste bin (n=2,890).

# Reducing landfill waste considered the best thing about putting food scraps in green bin

Best thing about being able to put food scraps in green bin (%) Among those who put food scraps in green bin

### Reducing the amount of waste we send to 29 landfill Doing something simple that helps the 25 environment Being able to recycle food scraps that we 14 cannot compost at home Not needing to compost food scraps at home 7 How easy it is to recycle food scraps 4 Other 5 Unsure / don't know 16

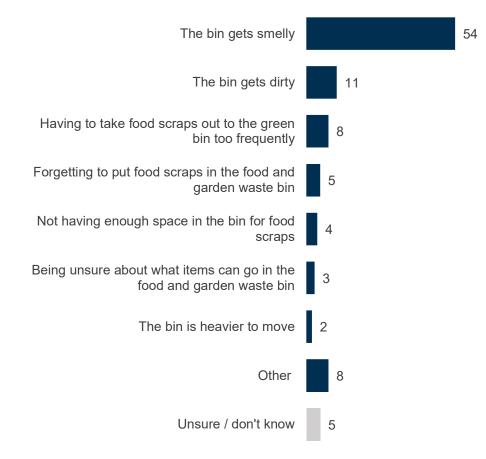
Q5. What has been the best thing about being able to put food scraps in your food and garden waste (green lid) bin? Base: Monash residents with individual bins who put food scraps in food and garden waste bin (n=2,890).

J01175 – Monash Waste Collection – Community Perceptions Research Report – April 2022

# Most find smell the greatest challenge when putting food scraps in green bin

### Most challenging thing about putting food scraps in green bin (%)

Among those who put food scraps in green bin



# Households using nappies significantly more likely to find green bin getting smelly to be challenging

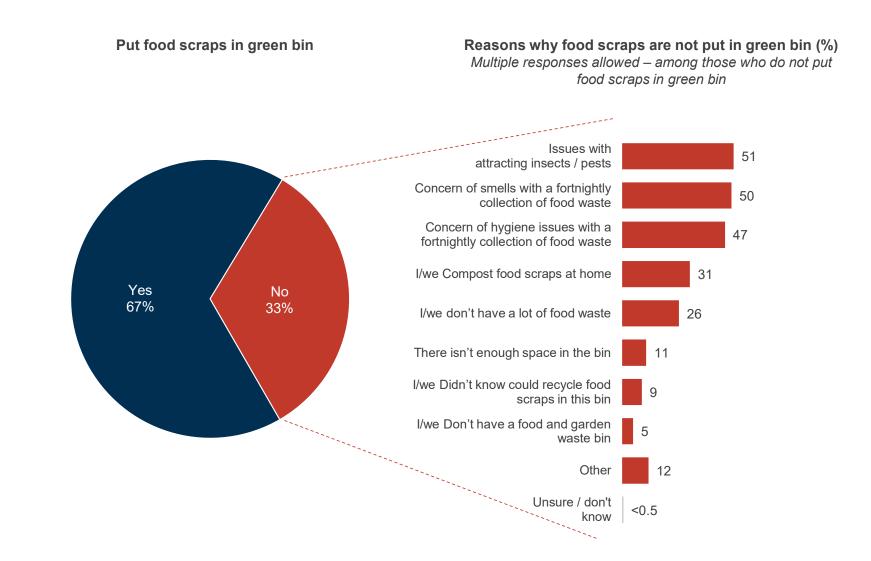
#### Most challenging thing about putting food scraps in green bin (%) (cont'd) Among those who put food scraps in green bin

	Total	Single HH (n=173)	2 person HH (n=570)	3-4 person HH (n=1,471)	5+ person HH (n=676)	Use nappies (n=437)	Have pet (n=1,455)	Medical condition in HH (n=362)
The bin gets smelly	54	47	49	57	54	60	54	46
The bin gets dirty	11	9	12	11	11	9	9	12
Having to take food scraps out to the green bin too frequently	8	11	7	8	10	11	10	11
Forgetting to put food scraps in the food and garden waste bin	5	3	4	5	4	4	5	7
Not having enough space in the bin for food scraps	4	3	5	4	5	3	5	5
Being unsure about what items can go in the food and garden waste bin	3	3	3	3	3	2	2	4
The bin is heavier to move	2	3	2	2	2	1	2	3
Other	8	14	10	6	8	6	7	9
Unsure / Dont know	5	6	8	5	4	4	5	4

Significantly higher / lower than the total at the 95% confidence interval.

Q6. What has been the most challenging thing about putting food scraps in your food and garden waste (green lid) bin? Base: Monash residents with individual bins who put food scraps in food and garden waste bin (n=2,890).

### A third do not put food scraps in their green bin, mostly due to pests, smells, and hygiene issues



Q3. Does your household currently put food scraps in your food and garden waste (green lid) bin? / Q7. Why don't you put food scraps in your food and garden waste (green lid) bin? (please select all that apply) Base: Monash residents with individual bins (n=4,302) / do not put food scraps in food and garden waste bin (n=1,412).

# Single person households more likely to claim they do not generate enough food waste to dispose of it correctly

#### Reasons why food scraps are not put in green bin (%)

Multiple responses allowed – among those who do not put food scraps in green bin

	Total	Single HH (n=81)	2 person HH (n=343)	3-4 person HH (n=695)	5+ person HH (n=293)	Use nappies (n=153)	Have pet (n=642)	Medical condition in HH (n=170)
Issues with attracting insects / pests	51	36	49	55	48	58	47	50
Concern of smells with a fortnightly collection of food waste	50	42	52	52	47	48	47	48
Concern of hygiene issues with a fortnightly collection of food waste	47	38	47	50	44	50	43	45
Compost food scraps at home	31	30	33	30	33	22	36	40
Don't have a lot of food waste	26	46	27	24	25	23	27	26
There isn't enough space in the bin	11	5	9	14	11	10	10	14
Didn't know could recycle food scraps in this bin	9	10	10	8	8	6	8	6
Don't have a food and garden waste bin	5	5	6	5	3	5	4	3
Other	12	9	10	13	11	12	12	13
Unsure / don't know	<0.5	0	<0.5	<0.5	1	1	<0.5	1

Significantly higher / lower than the total at the 95% confidence interval.

Q7. Why don't you put food scraps in your food and garden waste (green lid) bin? (please select all that apply) Base: Monash residents with individual bins who do not put food scraps in food and garden waste bin (n=1,412).

### Attitudes towards change



### **Section highlights: Attitudes towards change**

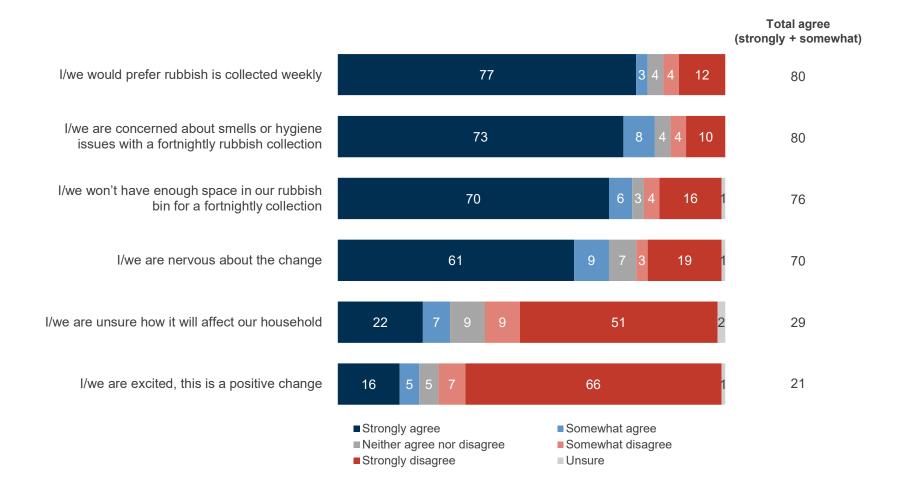
Most would prefer rubbish be collected weekly given smell and hygiene concerns Three quarters of Monash households with individual bins strongly agree that they would prefer rubbish to be collected weekly (77%). People are nervous about the change (61% strongly agree) and are concerned about smell and hygiene issues (73%) as well as lack of red bin capacity (70%). Just one in five claim to be excited and agree the change to the waste collection cycle is positive (21%).

Concerns stronger among homes of 3+ people, using nappies or with a medical condition Preference for weekly collection, concern about smell or hygiene and nervousness about the change is significantly higher among households with three or more people, with children in nappies or someone with a medical condition. These households are also significantly less likely to agree they are excited and the change is positive, whereas one or two-person households are significantly more likely.

Majority will put food scraps in their green bin when cycle changes More than half of households indicate that they <u>will</u> put some or all of their food scraps in green bin once food and garden waste is collected weekly and rubbish collected fortnightly (58%). However, more than four in ten <u>already</u> do so (42%), and a third say this <u>will not</u> change the way they currently dispose of food waste (33%).

# Three quarters would prefer rubbish be collected weekly with odour, hygiene and capacity concerns prevalent

#### Agreement with statements about changes to Council's waste collection cycle (%)



Q2. From August 2022, in the City of Monash, food and garden waste (green lid) bins will be collected weekly, and rubbish (red lid) bins will be collected every two weeks. How much does your household agree or disagree with the following statements in relation to this change? Base: Monash residents with individual bins (n=4,302).

### **Preference for weekly collection is stronger among homes** of 3+ people, using nappies or with a medical condition

#### Agreement with statements about changes to Council's waste collection cycle Total agree (strongly + somewhat %)

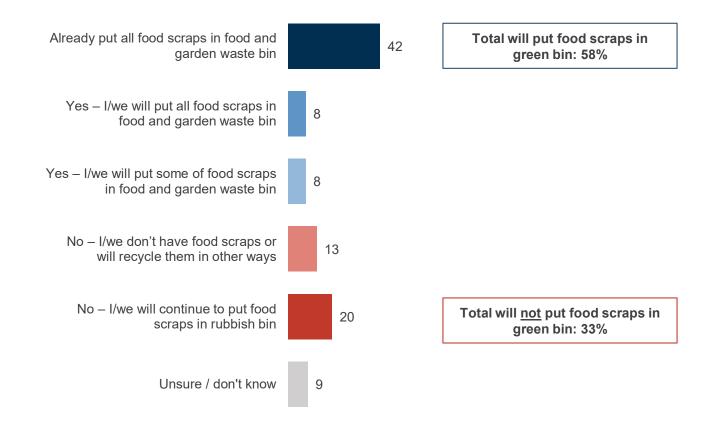
	Total	Single HH (n=254)	2 person HH (n=913)	3-4 person HH (n=2,166)	5+ person HH (n=969)	Use nappies (n=590)	Have pet (n=2,097)	Medical condition in HH (n=532)
l/we would prefer rubbish is collected weekly	80	54	66	84	92	92	83	92
I/we are concerned about smells or hygiene issues with a fortnightly rubbish collection	80	59	70	84	88	92	82	90
l/we won't have enough space in our rubbish bin for a fortnightly collection	76	35	58	82	90	91	80	90
l/we are nervous about the change	70	39	55	74	83	85	72	83
l/we are unsure how it will affect our household	29	21	28	30	31	32	29	29
I/we are excited, this is a positive change	21	50	36	17	8	9	18	6

Significantly higher / lower than the total at the 95% confidence interval.

 $Q^2$ . From August 2022, in the City of Monash, food and garden waste (green lid) bins will be collected weekly, and rubbish (red lid) bins will be collected every two weeks. How much does your household agree or disagree with the following statements in relation to this change? Base: Monash residents with individual bins (n=4,302).

# Majority of residents will put food scraps in their green bin when the collection cycle changes

Whether changes to collection cycle will change the way food waste is disposed of in household (%)



# Benefits and concerns



### **Section highlights: Benefits and concerns**



Majority do not believe they will benefit from the change More than half of those with individual bins do not believe a weekly green bin collection will benefit their household in any way (57%). Of the recognised household benefits, reducing waste to landfill (14%) and gardening (12%) resonate more than the ability to recycle more food waste (5%) and not needing to put bins out as often (2%)

Lack of red bin space due to large household the most anticipated challenge

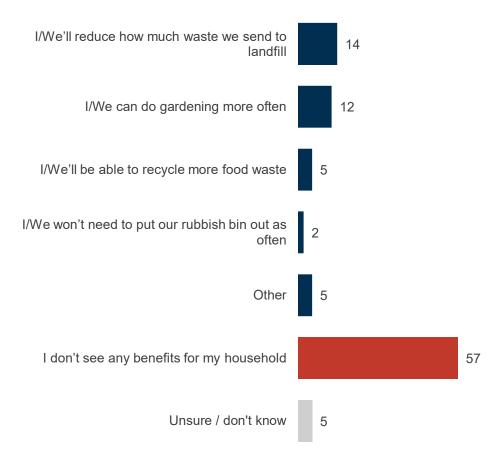
e

Half of residents anticipate not having enough red bin space to be the challenge that will affect their household most in the change to a fortnightly rubbish collection (51%). Residents who anticipate not having enough space in their red bin mostly attribute this to having a large household.

Anticipated challenges more prevalent among certain groups One or two person households are significantly more likely to see reducing waste to landfill and more gardening as benefits, and to anticipate no challenges in the change to fortnightly rubbish collection. Households with three or more people, children using nappies, someone with a medical condition, or a pet are significantly more likely to see no benefits and to anticipate not having enough bin space.

# Majority do not see weekly green bin collection as beneficial to their household

#### Most important benefit to household (%)



Q10. Having food and garden waste (green lid) bins collected weekly can provide many benefits. Which benefit is most important to your household? Base: Monash residents with individual bins (n=4,302).

# 1 and 2 person households significantly more likely to see reducing waste to landfill and more gardening as benefits

Most important benefit to household (%) (cont'd)

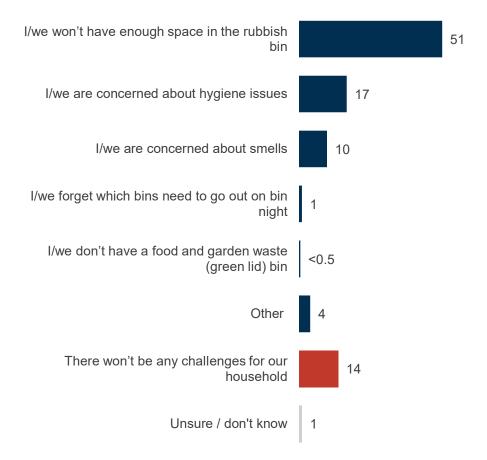
	Total	Single HH (n=254)	2 person HH (n=913)	3-4 person HH (n=2,166)	5+ person HH (n=969)	Use nappies (n=590)	Have pet (n=2,097)	Medical condition in HH (n=532)
I/We'll reduce how much waste we send to landfill	14	25	19	13	8	9	12	8
I/We can do gardening more often	12	21	18	11	7	8	12	8
I/We'll be able to recycle more food waste	5	7	7	4	5	4	4	3
I/We won't need to put our rubbish bin out as often	2	4	3	1	1	<0.5	1	1
Other	5	7	4	4	5	5	4	4
I don't see any benefits for my household	57	34	44	61	69	67	61	72
Unsure / dont know	5	2	5	6	6	6	5	5

Significantly higher / lower than the total at the 95% confidence interval. Q10. Having food and garden waste (green lid) bins collected weekly can provide many benefits. Which benefit is most important to your household?

Base: Monash residents with individual bins (n=4,302).

# Lack of red bin space is the most anticipated challenge about moving to fortnightly rubbish collection

Challenge that will most affect household (%)



Q11. There may be challenges for some households with having rubbish (red lid) bins collected every two weeks. Which challenge do you anticipate will affect your household the most? Base: Monash residents with individual bins (n=4,302).

# **Concern about space is higher among households with 3+ people, using nappies, with a medical condition or pet**

Challenge that will most affect household (%) (cont'd)

	Total	Single HH (n=254)	2 person HH (n=913)	3-4 person HH (n=2,166)	5+ person HH (n=969)	Use nappies (n=590)	Have pet (n=2,097)	Medical condition in HH (n=532)
I/we won't have enough space in the rubbish bin	51	18	32	55	72	70	60	64
l/we are concerned about hygiene issues	17	13	19	20	12	18	14	18
l/we are concerned about smells	10	15	13	10	7	5	9	6
I/we forget which bins need to go out on bin night	1	3	1	1	1	1	1	1
l/we don't have a food and garden waste (green lid) bin	<0.5	1	1	<0.5	<0.5	<0.5	<0.5	<0.5
Other	4	6	4	4	4	4	4	5
There won't be any challenges for our household	14	44	28	10	4	2	11	4
Unsure / don't know	1	2	2	1	1	<0.5	1	1

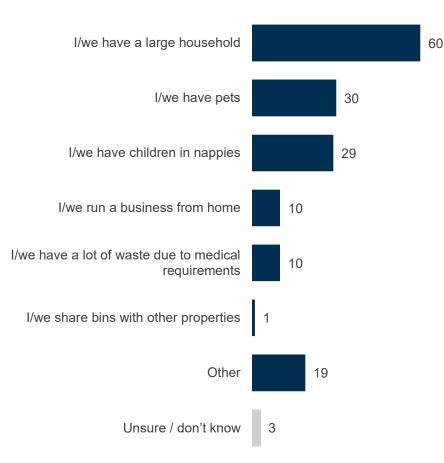
Significantly higher / lower than the total at the 95% confidence interval. Q11. There may be challenges for some households with having rubbish (red lid) bins collected every two weeks. Which challenge do you anticipate will affect your household the most? Base: Monash residents with individual bins (n=4,302).

### Living in a large household is the most likely reason red bin space will run out over two weeks



Why there won't be enough space in red bin for a fortnightly collection (%)

Multiple responses allowed – among those who anticipate they will not have enough space in red bin for fortnightly collection



# **Managing change**

### **Section highlights: Managing change**



Among those believe they will not have enough space in red bin for fortnightly collection, almost nine in ten (89%) do not feel that putting all of their food scraps (including meat and bones) in their green bin would create more space in their red bin for a fortnightly collection.

Few residents would consider getting an extra bin if they needed more space



Nearly nine in ten residents (88%) would not consider getting an extra bin if more space was needed, including 59% who would not due to cost. Despite this, only one in five (21%) say they *won't need* an extra bin. The groups who are significantly more likely to say *they will not* get an extra bin due to *cost*, are the ones who anticipate capacity issues the most.

Compostable liners would help recycle food scraps, but people do not want to pay Fewer than half of residents think compostable liners would help their households recycle more food scraps (43%). A large majority of residents who feel this way would prefer to order the bin liners from Council and have them delivered to their home (72%). Half of those who would prefer to access the bin liners through Council (either picked up or delivered) cannot or do not want to pay (53%).

### Vast majority of those who anticipate capacity issues do not feel recycling all food scraps will help

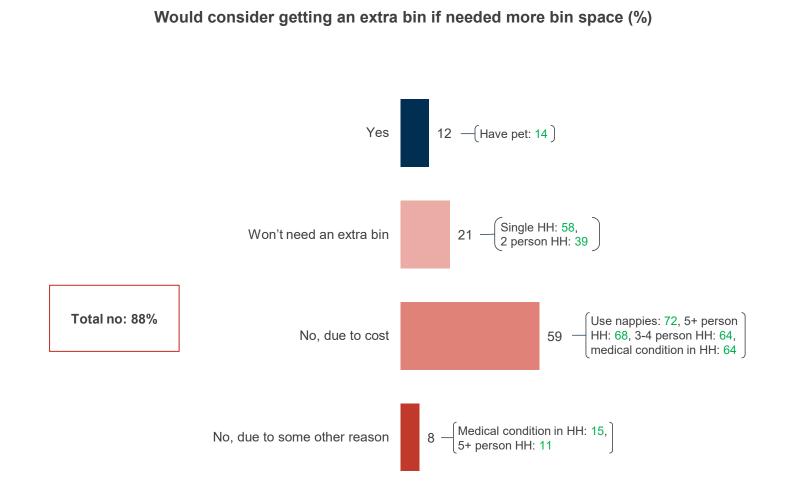
W

Putting all food scraps in garden waste bin would create more space in red bin for a fortnightly collection Among those who anticipate they will not have enough space in red bin for fortnightly collection

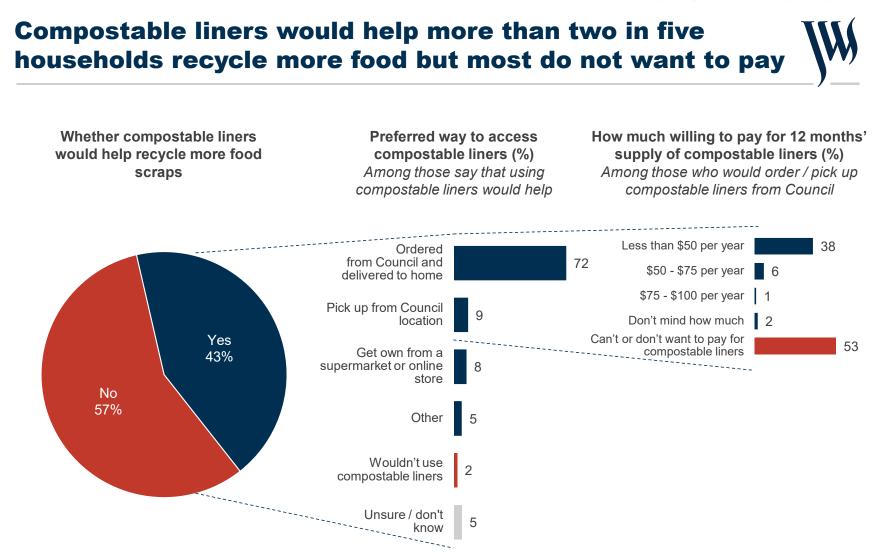
> Yes 11% 11% No 89%

Q13. All food scraps, including meat and bones (raw and cooked), can go in your food and garden waste (green lid) bin. If you put all your food scraps in this bin, do you feel this would create more space in your rubbish (red lid) bin for a fortnightly collection? Base: Monash residents with individual bins who anticipate will not have enough space in rubbish bin for fortnightly collection (n=2,211).

# Majority would not consider getting an extra bin if they needed more space, due to cost



Significantly higher than the total at the 95% confidence interval. Q14. Additional bins can be arranged to support waste disposal needs, however there may be costs associated with this. If you needed more bin space, would you consider getting an extra bin? Base: Monash residents with individual bins (n=4,302).



Q15. Certified compostable liners can be used to collect food scraps and help reduce the chance of smells and insects. Would using compostable liners help your household to recycle more food scraps in your food and garden waste bin? / Q16. If Council made compostable liners available for residents, how would you prefer to access these? / Q17. How much would you be willing to pay for 12 months' supply of compostable liners?

Base: Monash residents with individual bins (n=4,302) / using compostable liners would help household to recycle more food scraps (n=1,861) / would order or pick up compostable liners from Council (n=1,497).

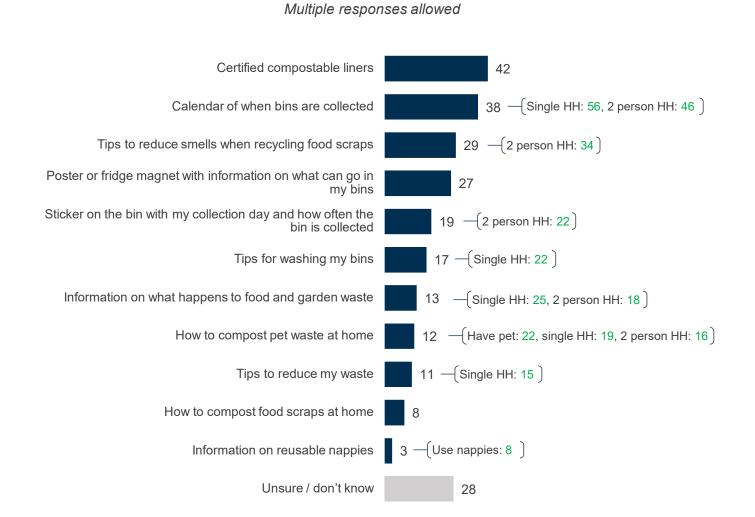
# Preferences for Council support pack



### **Section highlights: Preferences for Council support pack**

Compostable liners and bin collection calendar the most popular inclusions for support pack To help Monash residents adjust to a weekly food and garden waste collection and fortnightly rubbish collection, the most appealing inclusions for a support pack are certified compostable liners, followed by a calendar of when bins are collected. Residents also show some interest in tips to reduce smells when recycling food scraps, and a poster or fridge magnet with information on what can go in their bins.

# Top preferences for support pack inclusions are certified compostable liners and a bin collection calendar



Preferred inclusions in support pack (%)

Significantly higher than the total at the 95% confidence interval. Q18. To help you adjust to a weekly food and garden waste collection and fortnightly rubbish collection, we'll be putting together a support pack. What would you like to see included in this pack? (You can select up to 4 responses) Base: Monash residents with individual bins (n=4.302).

### **Appendices**



Online opt-in survey Appendix A: Demographics



### **Demographics**

Gender	%	
Men	37	
Women	46	
Self-describe	<0.5	
Prefer not to say	16	
Live with	%	
Friends or housemates	4	
Family members	56	
Partner	36	
Children under 18	28	
Children over 18	8	
Other	1	
Prefer not to say	4	
Pet in household		
Yes	49	
No	51	

Suburb	%
Glen Waverley	24
Mount Waverley	20
Mulgrave	13
Wheelers Hill	11
Clayton	5
Chadstone	5
Oakleigh East	4
Oakleigh	4
Hughesdale	4
Ashwood	4
Oakleigh South	3
Burwood	2
Notting Hill	1
Huntingdale	1
Somewhere else	0

Number of people in household		
Live alone	6	
2	21	
3	18	
4	32	
5	16	
6 or more		

### **Children at home who wear nappies** *among those with children under 18*

Yes	48
No	52

### Other characteristics of household members

Have medical needs that generate additional waste	12
Require assistance to put the bins out	4
Neither of the above / prefer not to say	86

Q20.What suburb do you live in? / Q21. How many people currently live in your household on a full-time basis? / Q22. Who do you live with? / Q23. Are there any children in the house of nappy wearing age? / Q24. Does your household have any pets? / Q25. Do you, or someone you live with... / Q26. Your gender?

Base: Monash residents with individual bins (n=4,302); those with children under 18 years (n=1,219).

Online opt-in survey Appendix B: Survey completion dates



### **Online opt-in survey: survey completion dates**



Breakdown of total completed survey responses received each week during the consultation period (31 January to 25 March 2022) via Shape Monash.

Week	Dates	Survey responses (n)
1	31 January to 6 February	2,575
2	7 February to 13 February	811
3	14 February to 20 February	489
4	21 February to 27 February	158
5	28 February to 6 March	118
6	7 March to 13 March	93
7	14 March to 20 March	63
8	21 March to 25 March	64

Total: n=4,371 responses over the eight week period.

Note: Week 8 includes five days only due to consultation closing on a Friday. All other weeks include seven days. Hard copy survey responses received on or before Friday 25 March 2022 were entered online and are included in the above totals.