# **Community Preferences for Litter Reduction**

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### 1. Background

The purpose of the research was to gain an initial insight into community preferences for reducing litter and to understand relevant measures to describe the amount of litter.

The Standing Council on Environment and Water (SCEW) is in the process of developing a Packaging Impacts Consultation Regulation Impact Statement (CRIS) on a number of measures that may reduce the impacts of packaging, including the reduction of packaging litter. To inform the development of this CRIS, SCEW requires qualitative research on community perceptions and preferences with regard to litter reduction and has commissioned a suitably qualified consultant to undertake this work.

While consumer packaging delivers environmental benefits – for example, by reducing food waste through spoilage – it also has adverse environmental impacts throughout its lifecycle. In particular, the production and distribution of packaging and packaged goods requires the consumption of large amounts of materials, energy and water. Used packaging also places pressure on the environment; particularly the 37 per cent of packaging that is not recycled, which ends up in landfill or as a key component of litter.



#### 2. Research Objectives

The Standing Committee needed to further its understanding of the position of people regarding litter reduction and perceptions of litter. The research objectives were to find out:

a) From a community perspective, what are the relevant measures to describe the quantity of litter?

- How do people conceptualise the magnitude of litter? Do they use volumetric constructs or count-based constructs, or some other measure?
- How does the composition of litter influence people's assessment of the amount of littering and the loss of amenity from it?
- How does the location of litter influence people's assessment of the amount of littering and the loss of amenity from it?
- Is litter measurement a uni-dimensional or multi-dimensional construct?

b) What are their preferences with regard to reduction in litter? What improvements in litter would provide greatest amenity/public value to them?

- Is there a hierarchy of preferences for litter reduction with respect to littering sites (e.g. beaches, residential streets, near schools) and litter material (e.g. cigarettes butts, drink bottles, coffee cups)
- Is there a threshold below which improvements in litter are not perceived as improvements? What is this threshold? Is it site specific? Is it material specific?
- What factors explain or motivate these preferences?

At this stage, the intention of the research was to gain indicative information and early insights that could potentially be used to inform more detailed future work.



#### 3. Executive Summary

#### Where is litter seen?

Litter is seen by most people almost everywhere, both within the inner city and across the outer suburbs. The places where litter is perceived to be most abundant tend to be close to entertainment centres, in inner city urban areas where there is a high density of population, and in outdoor recreational areas. Younger people are most likely to make reference to litter surrounding nightlife areas, and special events, whilst older people are more likely to be concerned about litter in waterways.

People are more likely to notice litter in areas that they expect to be clean and "environmentally natural". These areas are typically thought of as being where there are fewer cars and less concrete, and where there are more trees and water, such as parks, beaches, and shorelines. Litter is particularly disturbing when spotted in these areas because it is unexpected and causes concern over the health and well being of fauna and flora.

#### Types of litter

The most common type of litter noticed by people is food packaging, especially empty cans and bottles, and food wrappers. Other litter noticed includes dog poo, cigarette butts, flyers/brochures, bulky rubbish such as white goods and e-waste, and hazardous rubbish. Food packaging, dog poo and cigarette butts are ranked the most aggravating types of litter because they are seen as being a direct consequence of laziness and irresponsible behaviour. People tend to rate litter as more or less annoying according to whether or not they perceive it to be a result of deliberate behaviour, or whether it was accidental (eg. wind blowing rubbish out of a bin). Litter that could have been recycled makes people particularly angry. People also assess the severity of litter based on its impact on the environment, in terms of how permanent or bio-degradable it is. Furthermore, the size of the litter, its smell and concentration also play a role in determining how "bad" it is.

#### Impact of litter

Litter makes people feel disappointed in others, disgusted, angry and cautious.

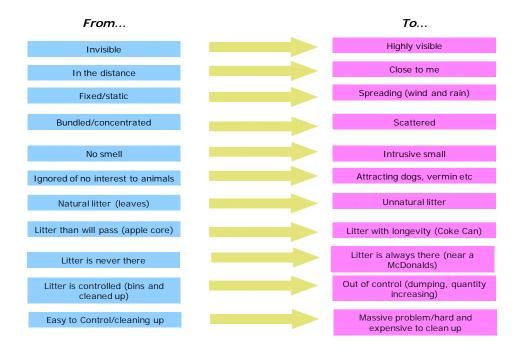
#### Conceptualising the quantity of Litter is multidimensional

When asked to describe the quantity of litter that might be present in any location participants struggled. There are a number of reasons for this. One is that litter is selectively ignored or tuned out until, for some reason, it intrudes into conscious awareness. Once it does it is difficult to ignore.

There are many reasons that litter suddenly intrudes into conscious thought. It is about a quantum change that suddenly offends. However this quantum change in the presence of litter is not simply about more volume of litter per square metre.

There are many dimensions that herald the crossing of the threshold where litter becomes noticed, as detailed below.



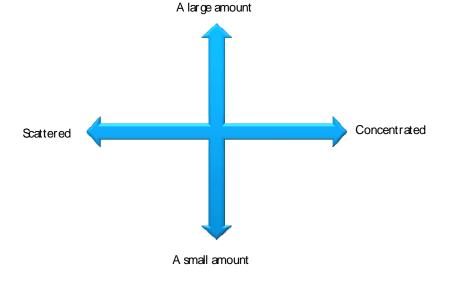


#### Fall back position on the perception of litter quantity

As a result of the multi dimensional nature of litter and the factors that bring it into stark relief, people find it a challenge to conceptualise a way to quantify the amount of litter present. When pushed to come up with a measure or metric for 'litter quantity' most thought of the quantity of litter in subjective ways, such as how it makes them feel or using subjective quantifications such as 'a lot', 'a little'.

People have a tendency to make reference to their own cultural standards and perceptions of cleanliness, rather than to think of objective ways to describe it. That said, when forced to think about "measuring" litter, people are able to come up with some basic methodologies, such as using whole counts (eg. number of cigarette butts), measuring resources required to clean the litter (eg. number of hours of cleaning required), volumetric or proportion of site coverage, or using specific thresholds to determine when litter is excessive (eg. the point at which you would contact the council to complain).

A simplified framework and way of describing the amounts of litter was the following:



However, the responses from the focus groups suggest that in this framework it is remains difficult to quantify what "a large amount" (or "a small amount") means because participants' responses indicate this can vary between individuals and by context, and could reflect a combination of measures. The concept of significance of litter changes for each individual, with aging, with location, with volume and concentration, and with type of litter, to mention a few. In short, litter measurement is a complex issue that is difficult to define objectively. Single quantitative measures of litter alone (such as a weight, or volume or count of litter) are unlikely to capture how individuals attribute significance to litter.

#### Priorities for reducing litter

People wish to see the litter that resides in waterways, and in recreational outdoor areas such as parks and playgrounds reduced first. This relates to their concerns over the impact of litter on the environment, as well as a concern for children and people being affected by it. Whilst younger people are more likely to want to see a reduction in food packaging and cigarette butts, older people are more likely to want to see a reduction in hazardous and industrial waste materials (which the group classed as 'litter'). Younger people tend to be more concerned about the aesthetic damage done by litter, whilst older people tend to be more concerned about the general long term damage to the environment, animals and humans.

#### Ways to reduce litter

Ideas suggested for reducing litter focuses on the consequences of littering, such as putting more efforts into cleaning, punitive actions against litterers, and monetary rewards for those who recycle. People also highlighted the importance of focusing efforts on preventing littering in the first place, through various communication efforts and education as well as providing more bins.



#### 4. Overview of the Methodology

The study was undertaken as follows:

Stage 1- INCEPTION CONVERSATION Stage 2- CONDUCT OF QUALITATIVE RESEARCH: 2 focus group discussions Stage 3- REPORTING

#### Rationale

The key to conducting the successful focus group discussions was ensuring positive group dynamics within each session. We ensured that participants had enough in common to 'bond' to an extent and feel comfortable enough to speak up and share their thoughts, feelings, attitudes and experiences. A number of factors were considered in the design of this research:

- Age and Life-stage participants were selected as broad age ranges and this ensured broadly similar life stages. This encouraged greater dialogue within the group as they had similar experiences to share with each other.
- Location participants were selected from inner and outer Sydney. This had a direct impact on the types of public places they used. We also wanted to include those with experiences in a wide range of public places. As a result the participants had greater experiences to draw from when explaining their opinions and how they had come to these views. Again the types of public places visited were used as criteria to enhance this common ground for conversation about litter.
- Gender a mix of gender was essential as litter may have affected men and women differently in an emotive sense.

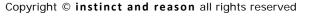
#### Sample structure and size

The two group discussions were recruited according to the following criteria:

Group	Main criteria	Details
1	Young singles and couples with no children aged 18-34 years. About half will live in inner Sydney and half will live in outer Sydney suburbs	Spend significant time every week in public areas such as beaches, parks and in the CBDs. They will be likely to attend New Years Eve events in the city or major sporting events.
2		Spend significant times every week in public areas such as railway stations, public transport, schools, local suburban parks. They will also be likely to attend New Years Eve events in the city as a family or major sporting events.

Group 1 had seven participants, Group 2 had six participants. At this stage, the intention of the research was to gain indicative information and early insights that could potentially be used to inform more detailed future work.

#### Logistics



The group discussions lasted for 2 hours and participants were incentivised to attend. The groups were recruited using random digit dialling to ensure participants were 'fresh'. All fitted the criteria above.



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# Main Findings



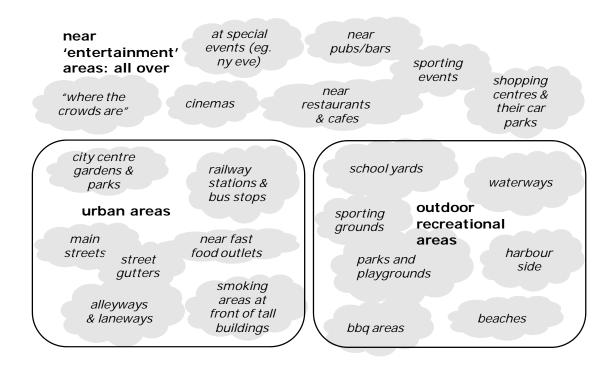
#### 5. How salient is litter?

#### Top of mind places where litter was seen

When first asked to mention where they saw litter, prticipant ideas flowed a bit like a laundry list. They ranged from very broad description to very specific descriptions.



However, once they wrote their lists down, three main areas started to emerged, centred around entertainment areas, urban areas, and outdoor recreational areas.



Upon reflection, respondents started to think of commonalities between areas where they saw a lot of litter, and started to articulate "predictors" of litter. For instance, they mentioned that areas with a high population density were more likely to have a lot of litter. Others mentioned that proximity to fast food outlets and entertainment areas was the biggest indicator of the likely presence of litter. Some mentioned a correlation between the amount of litter and the relative poverty in the area, saying that areas where the property was cheaper tended to be more littered. They attributed this increase in litter in poorer areas to a lack of budget from the council, and a reduction in the number of cleaners available. Some participants generalised that areas that have a bad reputation for crime were more likely to have litter in them.



There were some differences in perceptions of litter as people aged. Younger respondents were more likely to mention noticing litter in and around entertainment venues, and elaborate on those types of places. This may be a reflection on their more active social lives and related to the places where they "hang out".

- Younger respondents tended to elaborate more on the types of events where they would see litter, mentioning specific occasions such as the Big Day Out music festival, attending the races, or watching a soccer match.
- They were also more likely to make reference to litter being "in areas where there is nightlife", or "within a 7km radius from any pub".
- They seemed more concerned about the aesthetic impact of litter.

In contrast, older respondents were more vocal about litter in waterways. This may be a reflection of a more conscientious mindset and an 'outward' look on life. Older people:

- Spoke more of litter in the gutter, stopping the drains from working.
- Discussed litter in terms of its practical impact eg. blocking a drain
- Were more likely to be concerned with litter along the shoreline, or in the ocean and its longer term impact
- Were more concerned about invisible pollution which they saw as litter such as chemicals, lead paint, ewaste etc
- Saw litter as anything that people did not want to see there. They even discussed falling leaves as being litter because they saw it being 'cleaned up'
- Many mentioned seeing litter floating in the water.

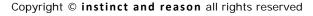
"I remember finding a parking fine washed up, from the north in the east, which had obviously come across the harbour"

- Female, over 35 years old

"Younger respondents tended to rank places according to whether the amount of litter is "heavy", "moderate" or "low".

	Place	Quantity
1	Major events	• Heavy
2	Night life areas	• Heavy
3	Buildings	• Heavy
4	Backstreets/Alleyways	• Heavy
5	Tree surrounds in city	• Heavy
6	Playgrounds/schools	Moderate
7	Bus stops	Moderate
8	Main roads/gutters	Moderate
9	Waterways	Moderate
10	Parks/gardens	Moderate

Meanwhile, older respondents were likely to think of the frequency of seeing a place littered, and categorized them into "regularly" or "occasionally" littered.



	Place	Regularity	Density
1	Train Stations/Tracks	Regular	• High
2	Locations close to fast food outlets	Regular	• High
3	Sporting Grounds	Occasional	• High
4	Events (eg. NY eve)	Occasional	• High
5	Parks/BBQ areas	Occasional	• High
6	Waterways	Occasional	• High
7	Car Parks & Shopping Centres	Occasional	• Low
8	Back alleyways/streets	Occasional	• Low



#### 6. Attitudes to the places that are littered

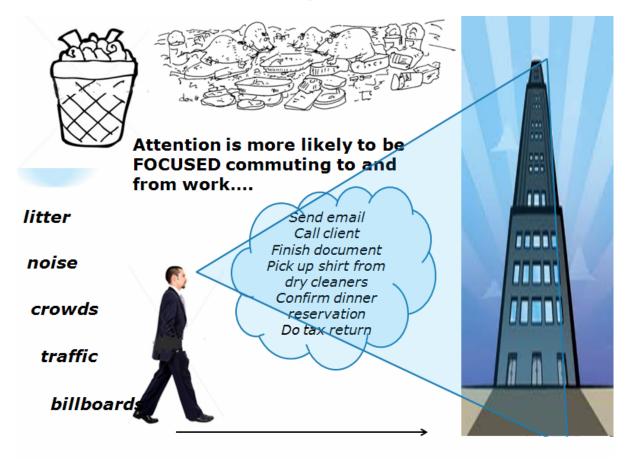
Almost all who attended the group discussions mentioned how surprised they were about the quantity of litter they noticed in the time between being recruited for the group discussion and actually attending the group. Most people have found an accommodation with litter for the most part although they do not like it for many reasons.

While litter was noticed by people during the week as they commuted to and from work it was often not actively reflected upon or allowed to affect them as much as on weekends, or outside work hours. With the hustle & bustle during peak hour, people reported they had a tendency to switch off from the stimulus around them. They explained this as they were likely to be pre-occupied about work, and that their attention was focused on their day or evening ahead.

Some comments that highlighted this phenomenon were:

"I tune out to all the rubbish"

"It doesn't seem to be too bad on my route to work"

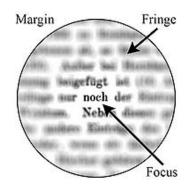


#### **Cognitive and Perceptual Attention Theories**

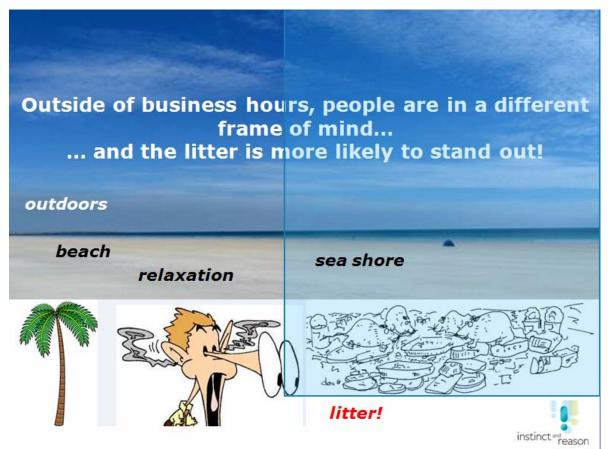
The 'spotlight model' is an appropriate illustrative framework frequently used in cognitive psychology to explain how things beyond the fringe can go unnoticed, especially when the processing load is high. In other words: when there are many stimuli competing for our attention, we tend just to focus on the main tasks that need to get done.



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Litter stood out more when it was noticed on weekends, or outside work hours. People tended to get more upset about it and spoke more about the litter they noticed during these times. Litter was seen as particularly disturbing and distracting when people were engaging in leisure outdoor activities, or trying to relax, for example whilst playing soccer, or enjoying themselves at the beach.



The times and places when litter was most likely bother them also tended to be in environments, where one might typically head to get some "fresh air", or "to be in a natural" setting, close to trees and water. Seeing litter floating in the water was of particular concern to many people in Sydney. Other times when litter bothered them most included:

- Whilst jogging
- When walking the dog
- When playing sport outdoors
- When going on a picnic
- When relaxing at the beach
- Near the harbour



- Near the shore
- Waterways.

The weather also had an impact on their awareness of litter, with certain weather conditions making litter more visible than others, such as:

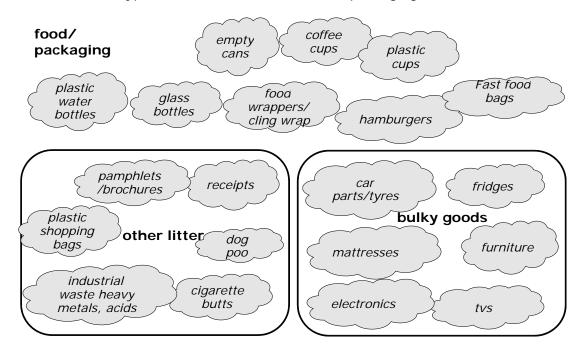
- Anytime there is a storm
- During summer time
- If it is windy
- When autumn leaves are falling
- When litter gets mixed up in mud from the rain
- When the tides comes in.



#### 7. Attitudes to the types of litter

#### **Types of Litter Seen**

The most common type of litter mentioned was food/packaging related.



After nominating the types of litter they were aware of, participants were asked to identify their personal priority wastes to tackle and the following table summarizes how many votes each item got (2 votes were allowed per participant):





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#### Which types of litter are considered worse, and why?

"In the back alleys of china town there is a fowl stench, it is high in protein food so when you break it down it smells bad" - Male, over 35 years old

#### The types of litter that people find most upsetting were:

- Food packaging
- Cigarette butts, especially amongst younger respondents
- Dog poo, especially amongst older respondents (even though technically OEH don't recognise dog droppings as litter, people do).

Most types of litter were considered to be upsetting because people felt that they were the direct result of a human act which could have been avoided. Despite the fact that technically the dog is the "litterer", all participants acknowledged that its owner had a responsibility to pick it up. These three major types of litter identified by participants highlighted the lack of proper conduct, and in the case of cigarette butts, a "socially irresponsible" attitude. It conjured negative images of smoking in general, and negative associations with the smoke being a health hazard.

Some found the presence on the streets of large or bulky goods to be upsetting because it was seen as a "waste", especially when the pieces of furniture or equipment could be re-used or recycled and were just being dumped randomly.

All agreed that there was no acceptable level of litter, and that the ideal was to have no litter at all. Some thought it was OK to litter when:

- Bins are over-flowing
- Some attempt has been made to dispose of it properly
- If it's very small litter like a lifesaver wrapper
- If you do positive anti littering acts to compensate.

Even then, most other participants said people should carry their rubbish away with them and dispose of it later on when they find a bin with room in it.

#### Factors impacting on people's assessment of the severity of litter

Attitudes towards litter are multi-dimensional, with many facets affecting whether litter was tolerable, and how much of it was tolerable.

#### whether caused by human behaviour

-whether it could have been avoidable eg. if there were bins nearby when person littered, the behaviour is seen as worse -whether it was deliberate or accidental eg. the wind blew rubbish out of a bin eg. there were no ashtravs nearby -whether it is a symptom of laziness eg. dumping junk mail was particularly frowned upon

## whether it impacts on environment & health

-certain types of waste are considered more harmful eg. plastic bags could kill an animal that ate them -whether it impacts on hygiene or health eg. cigarette butts considered worse there was a concern particularly amongst older people with hazardous materials -whether it is biodegradable or permanent eq. more acceptable if it could have been a natural bi-product eg. apple core vs. coffee cup -could it have been recycled?

#### how the litter presents itself

-whether it is scattered or concentrated *impacts how easy it would be to clean up* -the size of the litter – *eg. furniture was seen as less acceptable than a small lollie wrapper* -whether it is expected or not

eg. more shocking in rural areas than in a busy city food court -how bad it smells



#### 8. Feelings about litter

A place without litter was described as being:

- beautiful
- clean
- safe
- enjoyable
- relaxing.

Such a place was likely to make people feel pleased, happy, and proud. They were likely to think that people (their fellow citizens) had done the right thing, or done "a good job".

In contrast, a place with litter caused many different and adverse emotions to be triggered. There were two main mindsets that emerged relating to feelings about litter.

Those who are very upset/distressed by litter	Those who are relatively blazé about litter
"I feel extremely disappointed in people" Female, under 35 years old	<i>"I am not morally outraged, although I must admit it can sometimes be annoying"</i> Female, under 35 years old
"I feel like it is so wrong, it is the attitude	
of the person"	"It doesn't catch my eye so much. It would
Female, over 35 years old	be good to clean it up for aesthetic
	reasons, but otherwise it doesn't bother
"I am just as annoyed seeing it on the road	me too much"
as seeing the behaviour. It is just unacceptable"	Male, under 35 years old
Female, over 35 years old	<i>"I don't like seeing rubbish, but put into context of all the issues on this planet, it is</i>
"It really annoys me when people throw	down the bottom of the list"
cigarette butts out of cars, it's so	Male, under 35 years old
disgusting"	-
Male, under 35 years old	<i>"I feel bad and dodge it but I get over it,</i>
	I just don't go back to the same place
"It makes me feel depressed, and	again"
hopeless"	Male, over 35 years old
Male, over 35 years old	-

Females tended to be more upset by litter than men, particularly *older women*.

The most common feelings associated with litter or littering behaviour were:

- Disgust
- Anger
- Disappointment
- Fear and caution.

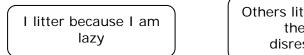
Generally the sight of litter caused people to reflect on the behaviours of those who littered. They thought about how disrespectful it was, inconsiderate and how socially irresponsible it was.

People were likely to be particularly aggravated by repeated and persistent littering behaviour – particularly if it was directly or personally affecting them and their ability to enjoy the environment they were in. In one case, one of the under 35 year old respondents reported being terribly upset by the repeated offences of a couple who used

to regularly spend time in a car parked at the front of her property, and then thew their litter out the window onto her front yard.

"Every night the same couple drives to my street, they sit there and chat, and then throw their food rubbish in my garden every night...It is the fact that it happens over and over that bothers me the most...I have taken 17 photos and am enquiring into what legal action I can take"

#### My behaviour versus the behaviour of others



Others litter because they are disrespectful

Some respondents admitted that they had been guilty at times of littering and that they could see how their behaviour would have disappointed others. They often rationalized their own littering behaviour by blaming the packaging, a lack of bins, accidents and because they were busy:

"Sometimes lollies have much unnecessary packaging around them" Female, under 35

However, people tended to be less critical of their own behaviour than they were of others' behaviours. They admitted their own littering behaviours attributing their own littering to "laziness", however, they used much harsher words to describe the littering of others eg: it is "irresponsible" and it shows a "lack of respect and morals".

#### Perceptual errors in attribution

This way of thinking, while it might seem contradictory or hypocritical, is actually a normal process by which individuals explain and rationalise their behaviours. The tendency to make interpersonal attributions that result in being less critical of oneself and more critical of another, although fundamentally unfair, is something which most people do without realising it. It forms part of a natural mechanism that works to maintain self esteem.

9. Attitudes to the metrics surrounding litter

#### **Measuring Litter**

"When I see litter, I feel angry about it. But I don't tend to think about measuring it. I am not walking around with a ruler trying to calculate the amount of ground space it covers"

Female, under 35 years old

None of the respondents kept any hard and mathematically sound measures for litter top of mind.

#### How would they measure litter?

Participants initial reactions when asked this question was to describe how a large amount of litter would feel and the sorts of thoughts it would provoke in them.

Respondents struggled with the task of having to define the quantity of litter and how they would measure it quantitatively. They tended to stick to words such as: "a lot", and found it hard to articulate this in a quantitative way.

Subjective definitions of "a large amount of litter" that were given included:

- When I have to change my behaviour to avoid litter (*eg. when it is so bad I wouldn't catch public transport*)
- When I feel upset by it
- Visibility (eg. if I can notice it, then it is a lot, or when I can see the bins overflowing, it radiates out from there)
- When it becomes a health issue for me and my family (*if breathing becomes difficult*)
- Proximity to where I am standing (eg. if it feels close to me, then it is a lot)
- How dense the area looks to me
- My gut feeling about the amount of effort required to clean the litter (*if I get the feeling that it would take a lot of effort, then it is a large amount of litter*).

When given time to think about it further about it, some respondents started to formulate metrics, such as whole counts, quantitative measures, benchmarks, and binary scales.

#### **Metrics Mentioned**

Whole Counts such as:

- Number of cigarette butts
- Number of cups of litter per square metre
- Number of truckloads of litter
- Number of shopping bags filled with litter.

Other measures mentioned covered the volume of litter, the time taken to clean it up, the volume of items, and the % of ground covered. (Although people could not accurately estimate these measures they did use them to differentiate between a little and a lot of litter).

Measures suggested by men:	Measures suggested by women:
- Number of cups of litter per 10	<ul> <li>Number of people it takes to clean</li> </ul>
square metres	it all up
- Number of council wheely bins of	- Number of hours taken to clean it
litter per hectare	up
- Tens of litres of litter	- The time taken to fill a truck load
- Litres of litter per square meter	<ul> <li>% of the ground covered in litter</li> </ul>

Males were more likely than females to think of *specific* metrics involving the *quantity of litter*, whilst females were more likely to think of *other measures such as time and human resource*.

Those whose jobs relied upon having a numerical skill set were generally more vocal in terms of making suggestions. However, in general none of the respondents sounded confident when putting forward their ideas, many looked uncertain and perplexed when thinking about it.

Even when prompted to describe litter along a scale, the majority of participants struggled. Essentially *"litter is OK until it isn't"*. It was difficult for them to define clear intervals along the scale as quantity increased, and they felt more comfortable discussing "thresholds" for litter.

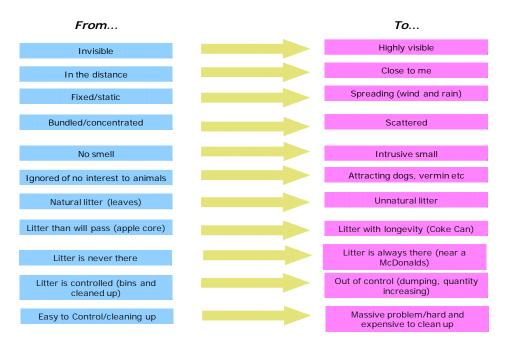


Suggested benchmarks/thresholds were:

- An amount equivalent to the Big Day Out (= a lot of litter)
- An amount equivalent to the aftermath of a big event (= a lot of litter)
- An amount equivalent to a tip (= a lot of litter)
- The point at which you have to ask your kids to pick it up (= a lot of litter)
- The point at which you would ask the council to take action (= a lot of litter)
- >100 bottles in an area (= a lot of litter)
- >2 days worth of cleaning (= a lot of litter)
- >5 items of litter (= a lot of litter).

#### Continuums/dimensions that frame the quantity of litter

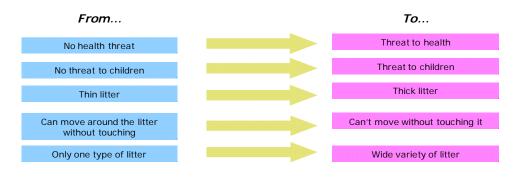
Nevertheless participants described litter on many continuums. The quantity of litter that tipped people into a state of conscious awareness of its presence was multi dimensional and place specific. These dimensions mentioned by many included the following:



People recognised that they weren't offended by litter until they noticed it. There was a threshold for the presence of litter that once crossed offended people.

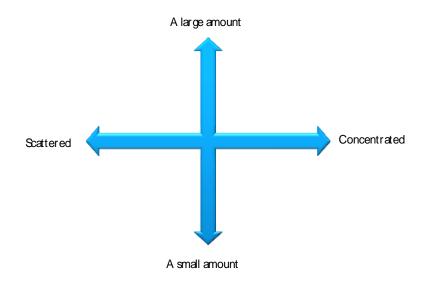
This threshold was different for different locations, times, types of litter. The result being that litter, once noticed, becomes "unacceptable".

A range of other ideas were also mentioned by **some** in slightly different ways which illustrates the **complicated and subjective** nature of measuring the quantity of litter:



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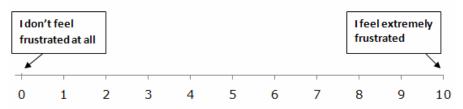
When asked to come to some consensus the following matrix was acceptable and agreeable to most. However, in this framework it is difficult to quantify what "a large amount" (or "a small amount") means because participants' responses indicate this can vary between individuals and by context, and could reflect a combination of measures. The concept of significance of litter changes for each individual, with aging, with location, with volume and concentration, and with type of litter to mention a few. But at the heart of the step change in awareness of the presence of litter (too much litter), were two very common dimensions, which were almost universally mentioned by all participants – amount and distribution.



The above dimensions were mentioned in multiple different ways by various people, and were representative of the way in which most individuals thought about litter. They will first notice whether there is a small or a large amount, and then notice whether it is scattered or concentrated. Most respondents agree that they would classify litter in terms of its amount into one of the above four quadrants. Added to this was sometimes the smell of litter which took the problem of litter to a new level.

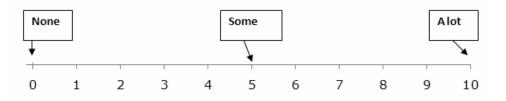
### Suggested Scales with intervals

Some respondents came up with more complicated scales involving intervals, such as a 10 point scale for the level of frustration they feel when seeing the litter:

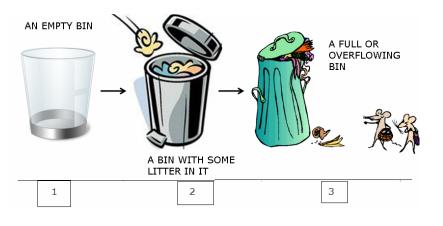


The discussion showed that attempting to describe how much litter was present was a complex task involving multi dimensions. As a result many participants oversimplified the issue as illustrated in the following 10-point scale to describe the quantity of litter. As mentioned, 'None to some' means I haven't consciously noticed anything and a lot means anything that is brought to my conscious attention and offends:

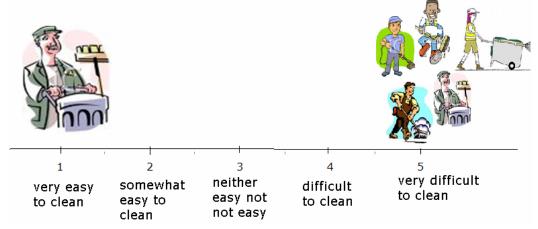




## A three-point scale describing how full a rubbish bin can be:



#### A 5-point scale of how easy the litter is to clean:





#### 10. Priorities for litter reduction

#### Which areas would they fix first?

1. Green Areas and Waterways were a priority

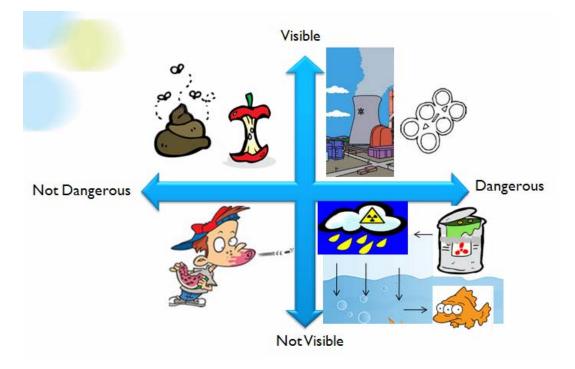
These two areas were a priority for a number of reasons. Participants mentioned the connection between litter, the drain and the ocean. This connection raised concern about the negative repercussions for the environment and for animal and fish life. Areas where trees and parks are, were associated with being "natural" and the presence of litter there was most disturbing. There was some acceptance that there will be some litter where people work and live but natural places were meant to be protected and to be places of escape from human induced problems.

2. BBQs areas and parks with playgrounds in residential areas were second priorities

These areas were typically thought of as recreational areas, where kids played regularly. The presence of litter could be harmful if kids pick it up and eat it. Participants were also concerned with the fact that kids could witness people in the act of littering thus setting a bad example. These areas were typically places where families go to relax, and as such, they should be made as safe as possible.

#### What sort of litter do they want to eliminate first?

When thinking about their approach to litter elimination, participants tended to think of litter along two continuums. The first being how visible it was, and the second being how much of a threat it was to the environment.





Amongst younger respondents:	Amongst older respondents:
<ul> <li>Beer bottles &amp; food packaging first <ul> <li>It is manageable and something can easily be done about it</li> <li>There are small items</li> <li>It has a more direct and personal impact on your daily life</li> <li>Seen as biggest "bang for our buck"</li> <li>Preference to fix the things which are not necessarily dangerous, but which are visible and should not be there <ul> <li><i>There is too much visual contamination, if the city looked better, people could take pride in it"</i> Male, under 35</li> </ul> </li> </ul></li></ul>	<ul> <li>Industrial Waste first <ul> <li>Affects our health</li> <li>The litter that impacts on the environment</li> </ul> </li> <li>This is the litter which is likely to be toxic and hazardous, and have the worst long term impact</li> <li>Concern about animals and fish</li> <li>Preferences to fix things which are not necessarily visible, yet very dangerous</li> </ul>



#### 11. Ideas to reduce litter

The suggestions respondents made to reduce litter ranged from fixing the consequences of littering, such as putting more efforts into cleaning, punishing bad behaviour and rewarding good behaviour, through to working on preventing littering in the first place through various efforts and education. The mention of providing more bins was commonly heard.

#### More efforts into cleaning

- Employ more park and council rangers
- Employ more cleaners
- Regular council cleanups

#### Punish bad behaviour

- More enforcement
- "Dobbing the litterer" start up a website
- A fine for not cleaning up

#### Reward good behaviour

- People can make money out of it
- Give money for each lot of rubbish that is recycled (by its weight)
- Encouraging people to re-use things

#### More efforts into preventing littering

- Putting public ash trays everywhere, particularly at the bottom of buildings
- High visibility of the bins
- Limit the amount of advertisements (mail drops)
- Reduce the amount of packaging around candy and food
- New laws that force all coffee cups manufactured to be biodegradable

#### More education

- Videos showing the bad effect it is having on the environment
- Teaching school kids about it as part of their curriculum
- Communication and promotion in schools (eg. Wednesday is no rubbish day)

Many participants mentioned their increased litter awareness once they knew they were coming to participate in a group discussion about litter. Overall they reported they had been surprised by the presence and quantity of litter almost everywhere. They recognised they had found accommodation with the presence and quantity of litter.

With increased awareness most wanted more done about litter because of the adverse affect its presence had on their sense of well being and community. Nevertheless many also mentioned there were more pressing environmental and social issues that needed the attention of government and the community.

