Australian Litter Measure

LITTER SURVEY
Perth Metropolitan Area
May 2022

Contents

Executive Summary

This report summarises the findings of the Australian Litter Measure litter surveys completed across the Perth Metropolitan Area in May 2022.

Across 104,726 square metres surveyed, a total of 18,245 items of litter were counted, with a calculated volume of 1,145.65 litres.

Cigarette Butts were found to be most common item by count, while *Paper and Card Food Packaging* was the highest category by volume. Industrial and Main Road sites contained the highest levels of litter observed, whilst Beaches had the lowest.

Litter data has been provided by site types and key categories to establish a basis for trend analysis under this newly developed litter count method.

About Perth NRM

Perth NRM is a not-for-profit organisation, in the natural resources management (NRM) sector.

Perth NRM has successfully partnered with industry groups, local, state and federal government departments, educational institutions, and landcare groups to promote long-term outcomes in water quality, biodiversity enhancement, healthy coastal environments, cultural heritage preservation and sustainable agricultural practices.

 Through collaborative natural resource management initiatives, we contribute to the social, economic, and environmental well-being of the Perth region.

Our purpose: Empowering people to positive ecological impact.
Our vision: We live in thriving natural ecosystems with sustainable food production.

1. Project Summary

Perth NRM have been engaged by Keep Australia Beautiful Council ("KABC") to complete a series of litter audits utilising the Australian Litter Measure ("AusLM") method and produce a report on the findings. This is a newly developed litter count method, which aims to provide a methodology to capture standardised litter data across all states of Australia. The findings of the surveys have been summarised in the attached report, with a focus on highlighting key litter items, trends in litter volumes at the defined site types, and identifying key drivers and impacts on litter volumes overall.

Scope

A total of 57 sites within the Perth Metropolitan area were surveyed, during a two-week period in May 2022. The sites were spread across ten local government areas. The AusLM method classifies sites into six different categories, and in most cases, one of each site type was surveyed in each local government area.

Site type	Description
Beach	A mostly sandy beach frequently visited by people for activities such as swimming, walking, other recreation and relaxation.
Residential area	A street/collection of streets in a residential area. The street has homes, units, or apartments on both sides of the street.
Industrial area	A street/collection of streets in an industrial area.
Retail area	A street/collection of streets within a retail precinct (i.e., shopfronts).
Recreational park	A public outdoor park mostly covered by grass and frequently visited by individuals and families for recreation and leisure activities.
Main roads	Straight open stretches of sealed road with wide verges. Roads that typically act as an arterial for traffic between and around population centres.

The total number of sites, and transects surveyed within each site is summarised below. Local government names have been anonymised.

Locations	Number of sites	Transects
LG_01	6	28
LG_02	5*	23
LG_03	6	28
LG_04	6	28
LG_05	5*	23
LG_06	6	28
LG_07	6	28
LG_08	6	28
LG_09	5*	23
LG_10	6	28
Total	**57**	**265**

Three local government areas did not include a Beach or suitable alternative site (river or coastal) within their boundary, hence those locations only included five sites.

This is the first full set of litter surveys completed using the AusLM method in Western Australia.

This initial round of surveys established baseline data for the AusLM methodology in the Perth area, as well as identified key items and indicators, enabling comparisons and trends to be tracked when future surveys under this method are undertaken. The data obtained from these surveys will also be used by KABC to track the efficacy of its programs.

Survey Methodology

The 57 sites to be surveyed were selected by KABC with reference to the AusLM Site Type assessment criteria (attached at Appendix 1). Surveyors were provided theory and field training in the AusLM method, prior to commencing the surveys. They were also provided a copy of the AusLM Field Manual, which provides comprehensive guidelines on all aspects of the litter count method.

Data was collected on tablet devices, on a custom excel based database created by KABC. Litter observed was classified based on the 247 items in the current AusLM categorisation (refer Appendix 2).

The survey team worked in pairs, completing one location per team, per day. Transect establishment and set up was completed by both team members, and for litter counting there was one "spotter" to call out the items, and one person recording data to the tablet.

Site information was collected to ascertain if certain factors impacted the litter levels (such as waste and recycling bins, public transport stops, BBQ areas in parks).

Final data collation, review and analysis has been completed by Perth NRM.

Measurement Methodology

AusLM uses a standing stock visual litter count. This method was chosen as the most appropriate way of answering questions about broad trends and achievements at the jurisdictional scale. Under this method, litter items are counted and categorised in a defined area and litter is left in place. It is a relatively fast and cost-effective method that indicates the extent and composition of litter at a site at a point in time.

Data Calculation Basis

The following calculations have been utilised throughout the report:

Number of items (#)	total number of individual items counted
Items (#) per 1000m²	$\dfrac{\text{total number of individual items counted}}{\text{total square metres surveyed}} \times 1000$
Volume – litres (l)	total number of individual items counted x standard volume per item*
Volume (l) per 1000m²	$\dfrac{\text{total number of individual items counted x standard volume per item}}{\text{total square metres surveyed}} \times 1000$

* The estimated standard volume for each item is attached at Appendix 3.

2. Overall Litter Data

Summary

Full detail on all litter items counted has been provided at Appendix 2, in the AusLM count sheet format.

In summary, across 104,725.97 square metres surveyed, a total of 18,245 items of litter were counted, with a calculated volume of 1,145.65 litres.

Of all litter items counted, 60.49% was made of Plastic (including Hard Plastic, Soft Plastic and Fragments). From a volume perspective, Plastic items accounted for 32.63% of the litter, with Paper and Card the second largest contributor, at 22.52% of total volume.

SUMMARY LITTER DATA				
Total Area Surveyed (m²)	Total Litter Items	Litter Items /1000m²	Total Litter Volume (l)	Litter Volume (l)/1000m²
104,725.97	**18,245**	**174.22**	**1,145.65**	**10.94**

LITTER COUNT BY SOURCE MATERIAL

60.49%	PLASTIC
14.5%	PAPER AND CARD
8.47%	METAL
6.58%	OTHER MATERIALS
3.29%	GLASS
2.64%	POLYSTYRENE
2.29%	RUBBER
1.74%	CLOTH
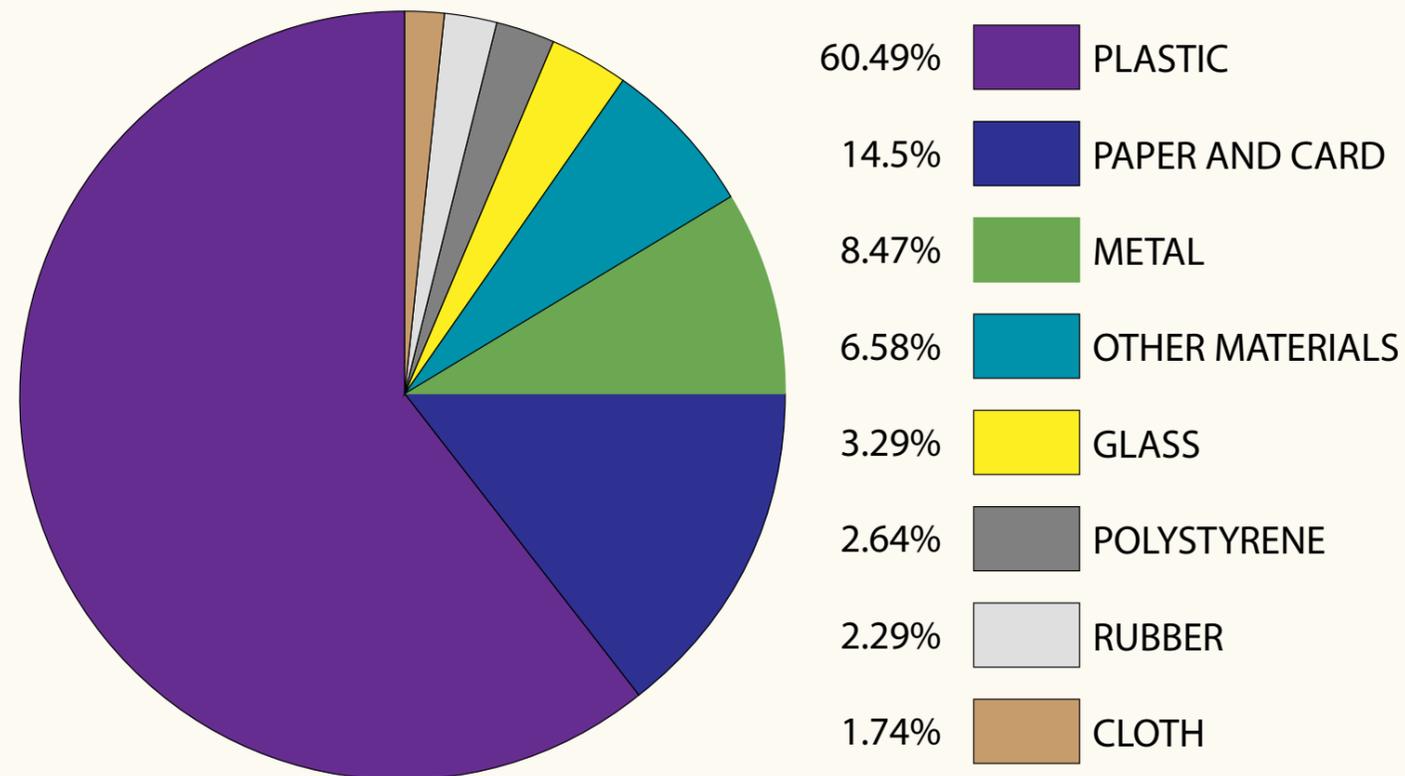
LITTER VOLUME BY SOURCE MATERIAL

32.63%	PLASTIC
22.52%	PAPER AND CARD
9.45%	METAL
13.87%	OTHER MATERIALS
3.07%	GLASS
6.49%	POLYSTYRENE
3.08%	RUBBER
8.44%	CLOTH
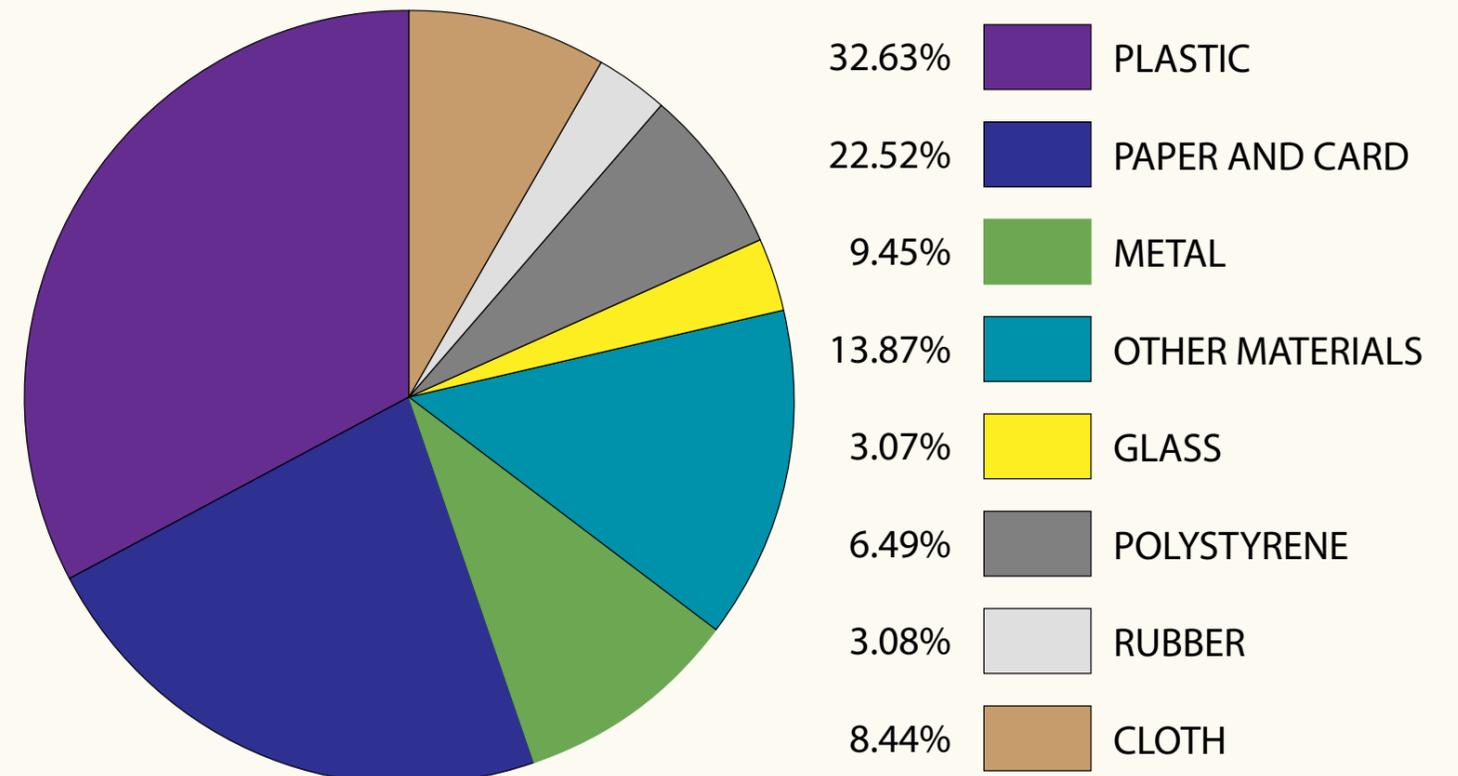
Top 15 Items

Top 15 Items by Count		
Item	**Number of Items**	**Items /1000m²**
Cigarette butts and filters	4,010	38.29
Hard Plastic Fragment – Small	2,293	21.90
Paper and Card Fragment – Small	1,060	10.12
Soft Plastic Fragment – Small	921	8.79
Food/confectionary Wrappers	826	7.89
Hard plastic Fragment – Medium	478	4.56
Lids, bottle tops, can ring pulls	478	4.56
Glass Fragment – Small	448	4.28
Aluminium foil wrap	428	4.09
Lids - Beverage container lids /caps	326	3.11
Tape/narrow soft plastic film	322	3.08
Other metal item	303	2.89
Paper tissues/napkin	303	2.89
Paper and Card Fragment – Medium	302	2.88
Polystyrene Fragment – Small	268	2.56

Top 15 Items by Volume		
Item	**Total Volume (l)**	**Volume (l)/1000m²**
Paper/card food packaging	87	0.83
Clothing	73	0.70
Other Food Package	59.5	0.57
Other polystyrene item	51.5	0.49
Rope/string	49.8	0.48
Non-Food package	48.5	0.46
Packages & boxes	46.5	0.44
Aluminium foil wrap	42.8	0.41
Food/confect. Wrappers	41.3	0.39
Other metal item	30.3	0.29
Construction materials	29.52	0.28
Personal Effects	25.8	0.25
Newspaper/Magazine	25	0.24
Takeaway food container	22.5	0.21
Other cloth item	21.8	0.21

General Data Commentary and Key Findings

- Western Australia has had a Container Deposit Scheme ("CDS"), named "Containers for Change" in place since October 2020. Beverage containers counted including both CDS eligible and non-CDS eligible totalled 151 or 0.82% of total items. Of these, 124 were classified as CDS eligible. As a rough basis of comparison, in the 2019/20 Western Australian National Litter Index[1], the most recently completed litter surveys prior to the CDS being initiated, total beverage containers recorded averaged 1,038 or 12.05% of total items. This data was collected in November 2019 and May 2020 and would indicate the CDS scheme has been highly effective at reducing the number of beverage containers that persist in the environment.

- Cigarette Butts were the highest litter item from a count perspective, totalling 4,010 or 21.98% of total items counted. Volume wise, they were less significant, coming in 35th highest and accounting for 0.70% of total litter volume. Cigarette butts were highly concentrated in Retail, Main Road and Industrial sites, with 91.04% found in those three site types. Cigarette Butt bins weren't commonly observed.

- Takeaway Packaging accounted for 2,423 or 13.28% of the total items counted, and 200.55 litres of the volume. Food/Confectionary Wrappers were the largest individual item by count within this category, with 826 items recorded. By volume, Paper/Card Food Packaging was the largest contributor, accounting for 43.38% of the total volume.

- Fragments made up a significant portion of litter items counted, totalling 7,058 across all categories and sizes. Hard Plastic Fragments were the most common material, accounting for 40.65% of the counted items, or 32.55% of the volume. Paper and Card Fragments were second most common, accounting for 20.92% of the counted items or 18.99% of the volume.

- Main Roads were the most highly littered site type, across both count and volume calculations. However, high levels of litter at Main Road sites was not a completely consistent trend across all locations, with a couple of sites driving the high litter figures for this site type. Industrial was the second highest site type, from both a count and volume perspective, and across the various locations, this high level of litter was a more consistent trend.

- The top four site types (Main Roads, Industrial, Residential and Retail) contributed 92.20% of total items counted, or 93.30% of the volume, leaving just 7.80% of items, or 6.7% of volume between the remaining two site types Parks and Beaches.

- The top litter item by count and volume for each site type is summarised to the right, with further data and analysis provided for both site types, and key litter items and categories in Sections 3 and 4.

TOP LITTER ITEM BY COUNT AND SITE TYPE		
Site Type	**Item**	**Total Items**
Beach	Hard Plastic Fragment - Small	107
Retail	Cigarette Butts and Filters	1,146
Residential	Cigarette Butts and Filters	233
Industrial	Cigarette Butts and Filters	1,400
Park	Paper and Card Fragment - Small	143
Main Road	Cigarette Butts and Filters	1,105

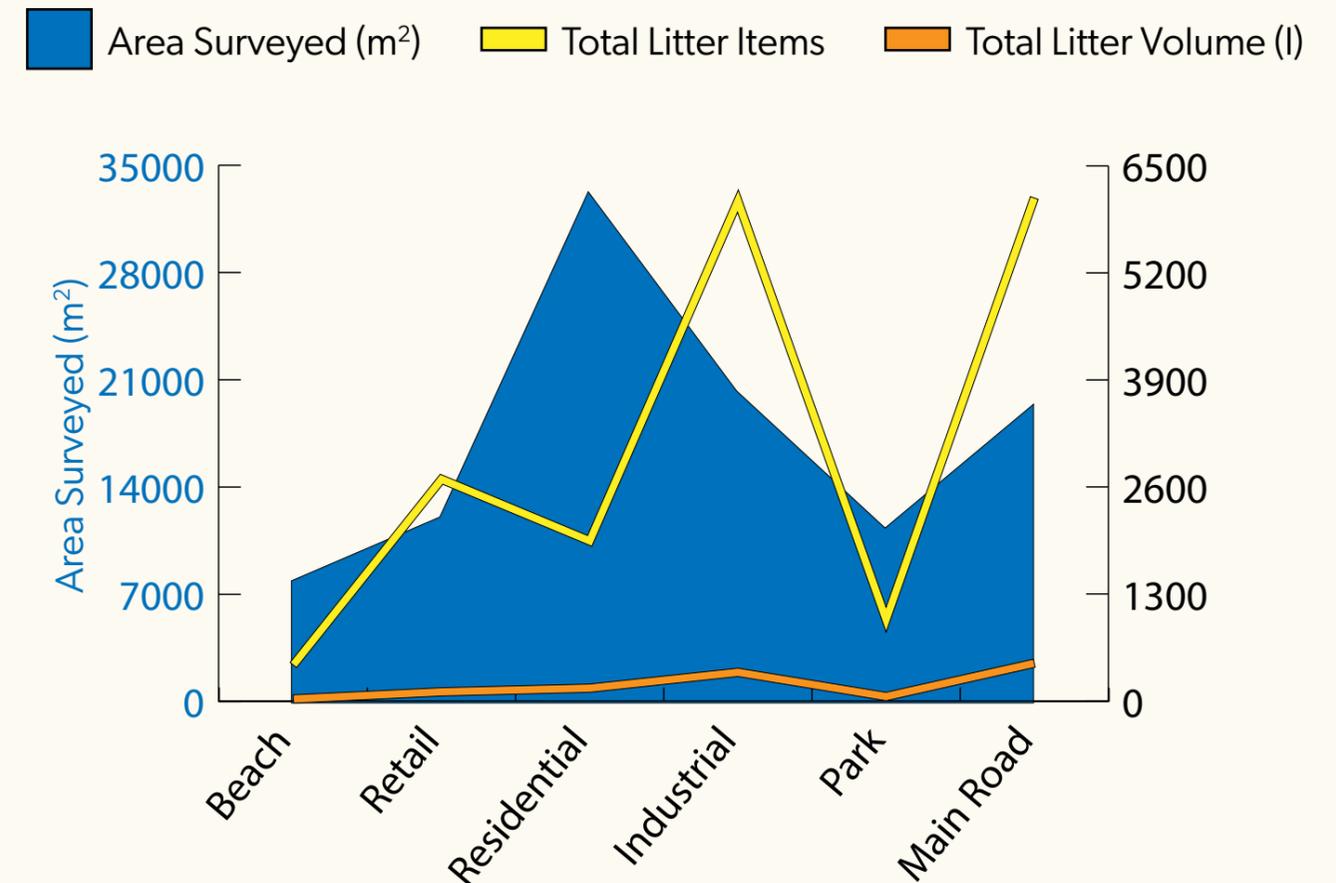| TOP LITTER ITEM BY VOLUME AND SITE TYPE		
Site Type	**Item**	**Total Volume (l)**
Beach	Rope/String	4
Retail	Paper/Card Food Packaging	15.5
Residential	Paper/Card Food Packaging	12
Industrial	Other Polystyrene Item	32.5
Park	Aluminium Foil Wrap	5.5
Main Road	Other Food Package	41

3. Litter Data by Site Type

The AusLM method involves litter counts at six distinct site types. Each site type is defined in the AusLM Field Manual, along with exclusion criteria that can render a site ''failed'' (refer Appendix 1). Sites noted as failed were counted and included in this overall litter count, but the failure and reason for fail will be reviewed in the planning stages of any future litter survey work.

Residential sites contributed the largest area surveyed, with over 33,000 square metres surveyed. Residential sites consist of variable widths, defined as road's edge to property boundary, meaning transect widths of up to 8m were surveyed (average width was 5.5m).

Beaches contributed the smallest area to the survey, with just under 8,000 square metres surveyed. This lower representation is explained by three sites not having a suitable beach to survey, as well as the variable length of beach transects resulting in some being comparatively short i.e., distance dune to water was in some cases only roughly 15m. (The average beach transect length was 38m). The varying areas surveyed across the different site types is adjusted for in the normalised (/1000m2) figures below and further discussed on the following page.

May 2022 Litter Survey
Area, Litter Count and Litter Volume by Site Type

LITTER DATA BY SITE TYPE					
Site Type	**Total Area Surveyed (m²)**	**Number of Items**	**Items /1000m²**	**Total Volume (l)**	**Volume (l) /1000m²**
Beach	7,967.40	436	54.72	23.66	2.97
Retail	12,131.00	2,693	221.99	109.73	9.05
Residential	33,361.90	1,944	58.27	154.48	4.63
Industrial	20,360.00	6,073	298.28	347.04	17.04
Park	11,413.17	988	86.57	53.11	4.65
Main Road	19,492.50	6,111	313.51	457.62	23.48
Total	**104,725.97**	**18,245**	**174.22**	**1,145.65**	**10.94**

Normalised Litter Data by Site Type

Raw litter data (# of items and volume of items) has been normalised, to adjust for the varying total square metres surveyed across each site type, and to enable more accurate comparisons about the density of litter. Normalising the data involved scaling up the total litter items and volume over a standard 1,000 sqm area, to remove the impact of the varying square metres surveyed by site type. The formulas to normalise the data are detailed in Section 2.

The normalised figures are closely aligned with the raw data trend lines for both total litter items and total litter volume, across most site types with the exception of Retail and Residential.

Retail shows higher calculated litter items and volume per 1,000m^2 than the raw total litter items/volume trendlines, a result of the relatively low area surveyed for Retail – and highlighting that the raw data alone somewhat understates the scale of litter in Retail sites.

Conversely, Residential sites show lower calculated litter items and volume per 1,000m^2 than the raw data, indicating that the litter density at Residential sites was lower than the average, once the area surveyed was taken into account.

Total Litter Items /1000m^2

Legend:
- Total Litter Items
- Litter Items /1000m^2 (normalised)

Total Litter Volume /1000m^2

Legend:
- Total Litter Volume
- Litter Volume/1000m^2 (normalised)
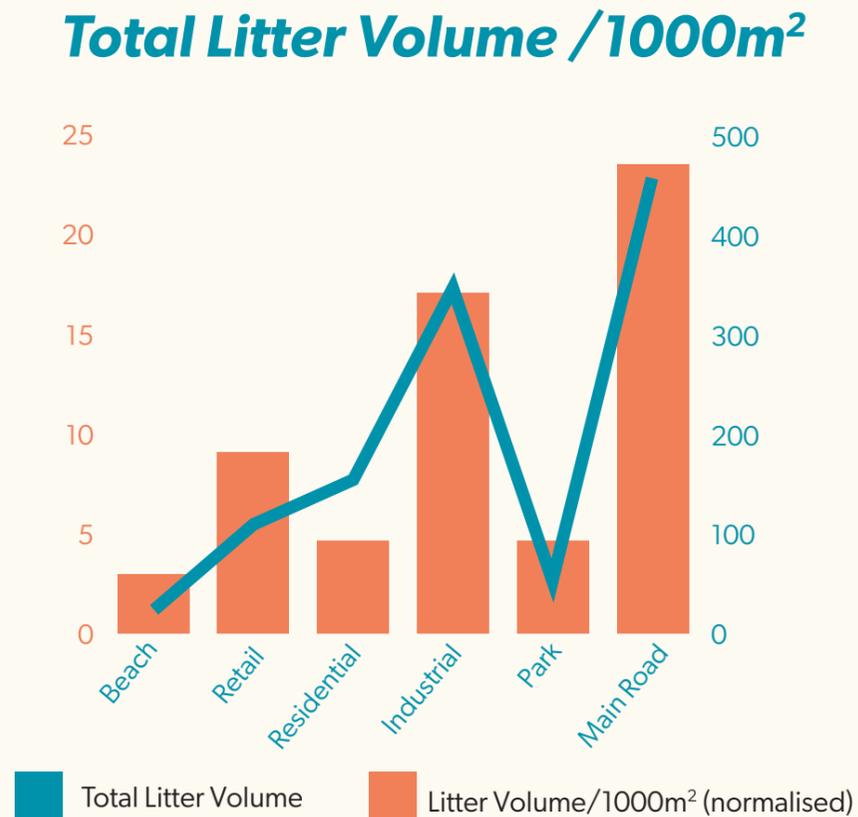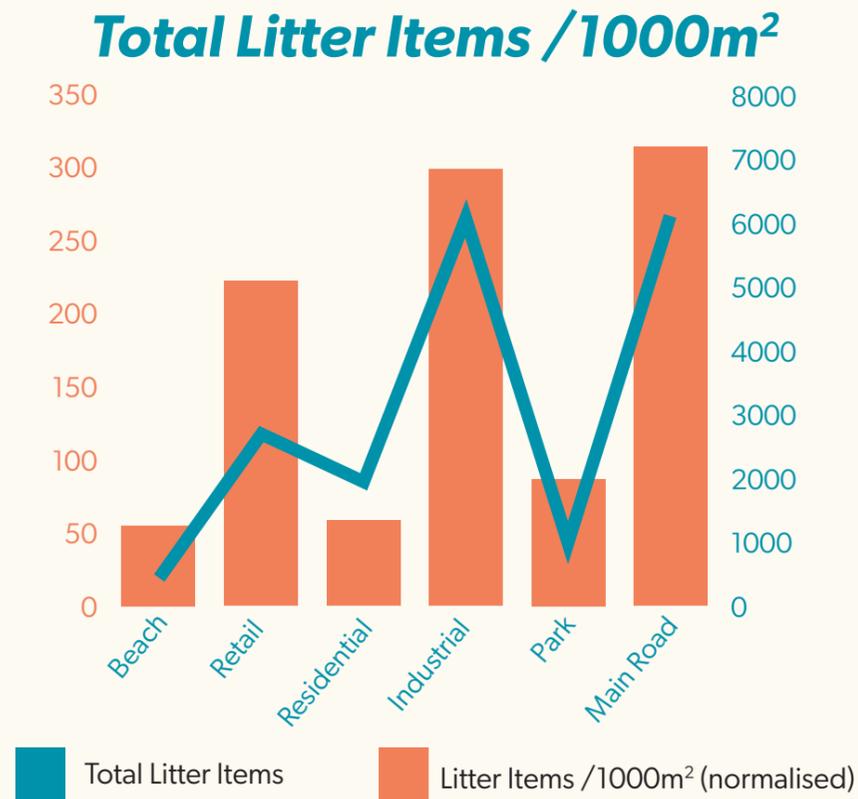
Litter Items by Site Type

From a count perspective Main Roads was the site type with the highest litter, accounting for 6,111 items or 33.49% of the total litter items surveyed.

Industrial was second highest, accounting for a further 6,073 items or 33.29%.

Together, Industrial and Main Roads contributed 66.78% of the total items counted.

Retail sites were the third highest, with 2,693 items, accounting for 14.76% of the total litter items.

Beaches contained the lowest litter levels, with only 436 items counted, equating to just 2.39% of the total items.
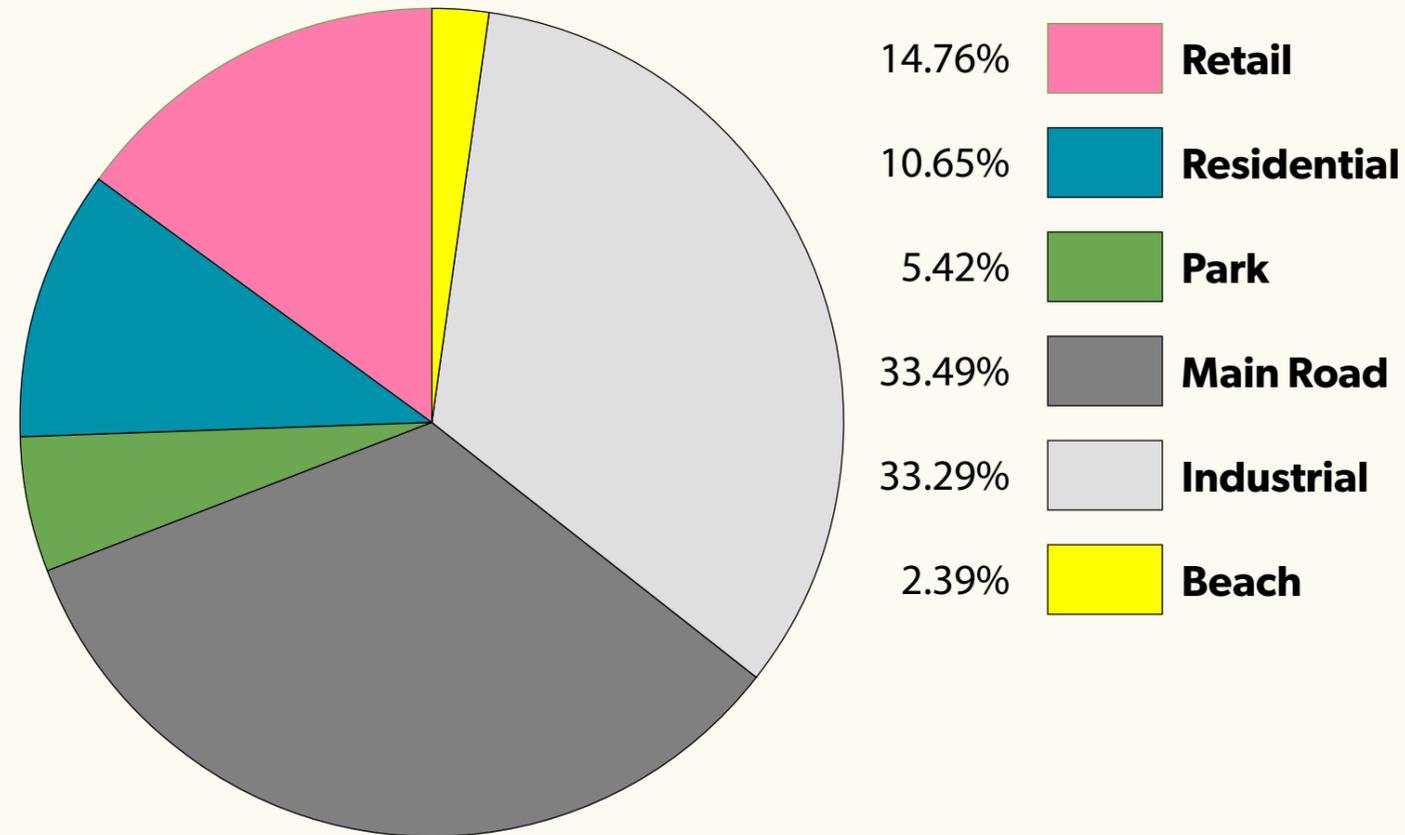
Litter Volume by Site Type

Main Roads was also the site type with the highest litter by volume, accounting for 39.94% of the total calculated litter volume.

The increased % of volume (compared to count) indicates that there is a trend towards larger, bulkier items being littered in Main Road sites, or that larger items persist for longer in a Main Road setting, compared to other site types.

Industrial remained second highest site type by volume.

Residential jumped into third place from a volume perspective, up from fourth by count.

Beaches contained the lowest litter levels by volume, accounting for just 2.07% of the calculated total volume.

	Litter Items by Site Type
14.76%	Retail
10.65%	Residential
5.42%	Park
33.49%	Main Road
33.29%	Industrial
2.39%	Beach

	Litter Volume by Site Type
9.58%	Retail
13.48%	Residential
4.64%	Park
39.94%	Main Road
30.29%	Industrial
2.07%	Beach
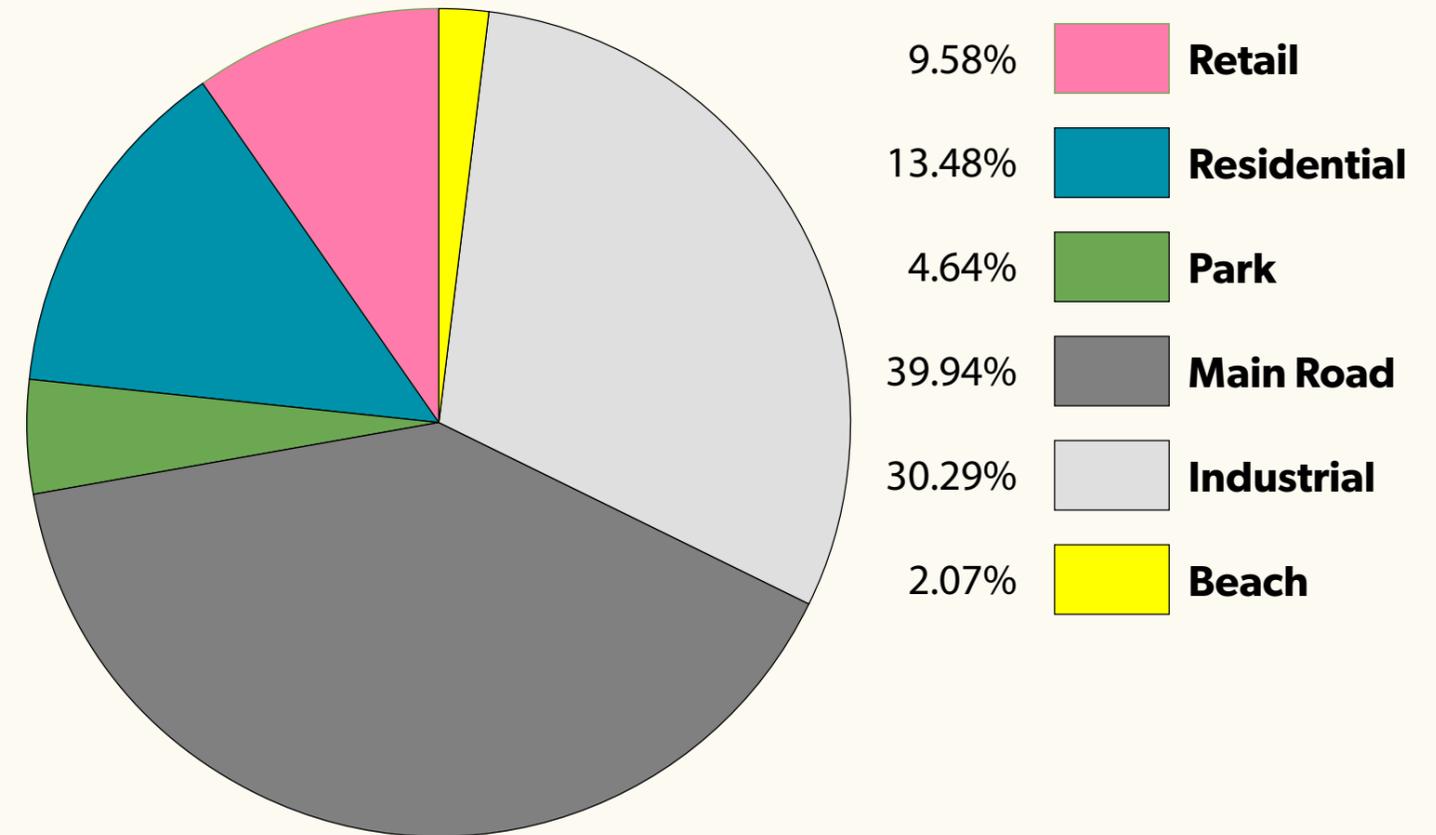
Site Type Summary – Beach

SITE SNAPSHOT	
Total Number of Items - (#)	436
Total Volume of Items- (l)	23.66
Items /1000m²	54.72
Volume (l)/1000m²	2.97
Top 3 Items – Number (#)	Hard plastic fragments – Small Cigarette butts and filters Food/confect. wrappers
Top 3 Items – Volume (l)	Rope/String Other Plastic Item Clothing
Highest Site Litter Count – Number (#)	199
Highest Site Litter Count – Volume (l)	6.67
Lowest Site Litter Count – Number (#)	4
Lowest Site Litter Count – Volume (l)	0.31

Common Site Features/Observations

General waste bins were frequently observed within Beach Sites, although not often within the transects themselves (i.e., they were often located on grassed, recreation areas adjacent to beach, or at beach carparks).

Recycling bins were observed on occasion, as well as one instance where a Containers for Change bin was noted. Evidence of cleaning (raking lines etc) was not noted at any Beach site; however Community Groups regularly coordinate beach clean-ups, which may contribute to the low levels of litter observed.

Hard Plastic Fragments made up the highest individual item found at Beach sites. This high volume of fragments could indicate that a lot of the litter found has travelled to the beach through waterways or been deposited on the beach from tidal movements (and been broken into fragments in transit).

For Beach sites without an engineered back, the survey area extended two metres into the dunes, and this was frequently a place where litter was observed.

Site Type Summary – Retail

SITE SNAPSHOT	
Total Number of Items - (#)	2,693
Total Volume of Items- (l)	109.73
Items /1000m^2	221.99
Volume (l)/1000m^2	9.05
Top 3 Items – Number (#)	Cigarette butts and filters Paper and Card fragments – Small Food/confect. wrappers
Top 3 Items – Volume (l)	Paper/card food packaging Food/confect. wrappers Clothing
Highest Site Litter Count – Number (#)	554
Highest Site Litter Count – Volume (l)	25.53
Lowest Site Litter Count – Number (#)	38
Lowest Site Litter Count – Volume (l)	0.94

Common Site Features/Observations

Litter bins were frequently observed within Retail sites – most commonly general waste bins, but occasionally also comingled recycling.

Of all site types, evidence of cleaning was most common amongst retail sites, but interestingly it was sometimes confined to only certain sections of a transect, i.e., on occasion just outside particular shopfronts, (presumably by individual tenants), resulting in variable levels of litter along a single transect.

Some retail transects included access ways/alleys behind the shopfronts themselves and these tended to be more highly littered, as they often contained commercial bin areas.
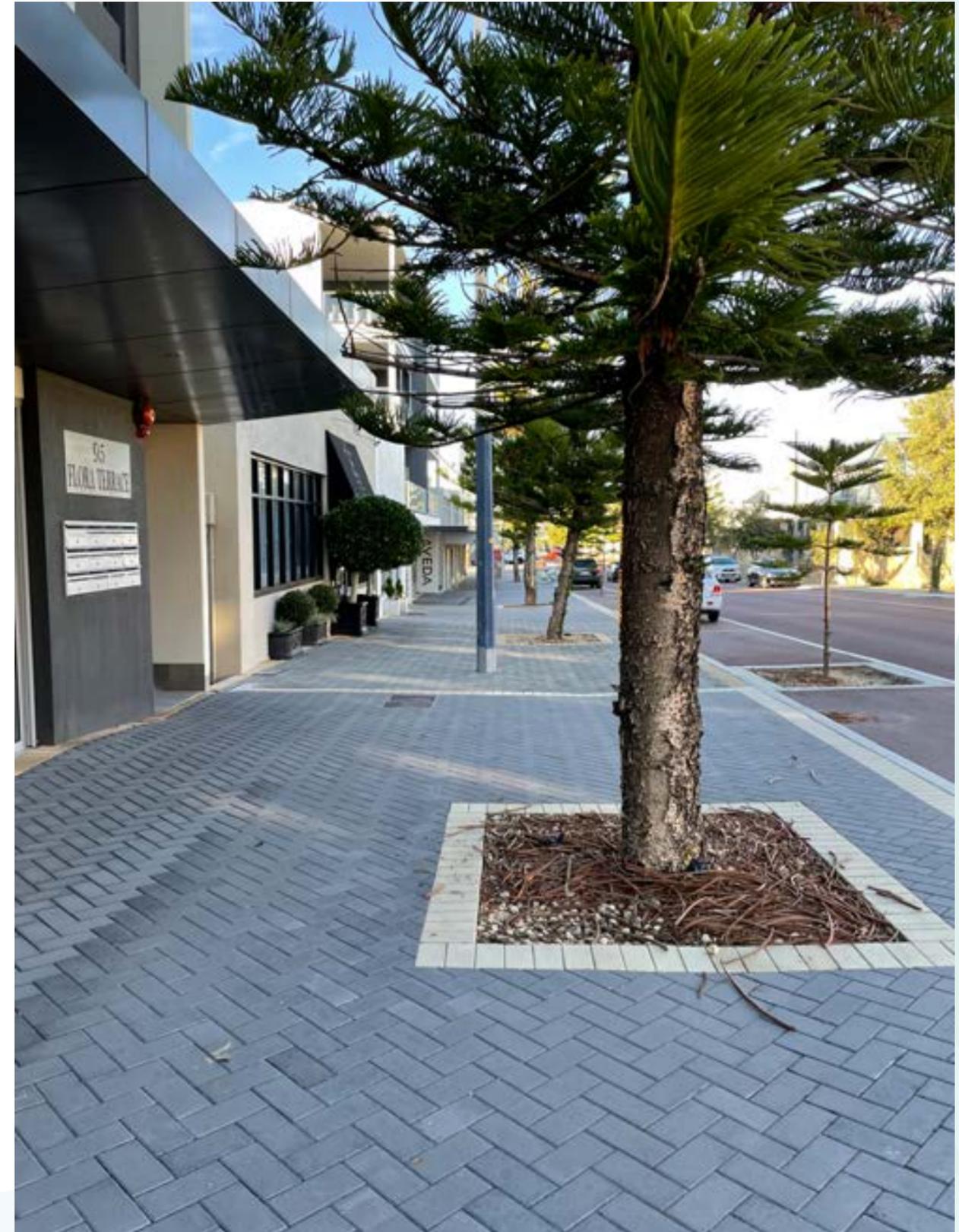
Site Type Summary – Residential

SITE SNAPSHOT	
Total Number of Items - (#)	1,944
Total Volume of Items- (I)	154.48
Items /1000m^2	58.27
Volume (I)/1000m^2	4.63
Top 3 Items – Number (#)	Cigarette butts and filters Hard plastic fragment – Small Paper and Card fragment – Small
Top 3 Items – Volume (I)	Paper/card food packaging Personal effects Construction materials
Highest Site Litter Count – Number (#)	620
Highest Site Litter Count – Volume (I)	61.42
Lowest Site Litter Count – Number (#)	89
Lowest Site Litter Count – Volume (I)	4.72

Common Site Features/Observations

Residential sites accounted for the highest area surveyed of any of the site types. Despite this, the total items counted within Residential sites was 3rd lowest.

The low level of litter may suggest individual householders regularly take responsibility for collection of litter items that end up on their verge area.

Site Type Summary – Industrial

SITE SNAPSHOT	
Total Number of Items - (#)	6,073
Total Volume of Items- (I)	347.04
Items /1000m^2	298.28
Volume (I)/1000m^2	17.04
Top 3 Items – Number (#)	Cigarette butts and filters Hard plastic fragment – Small Soft plastic fragment – Small
Top 3 Items – Volume (I)	Other polystyrene item Paper/card food packaging Clothing
Highest Site Litter Count – Number (#)	1,140
Highest Site Litter Count – Volume (I)	63.84
Lowest Site Litter Count – Number (#)	224
Lowest Site Litter Count – Volume (I)	14.00

Common Site Features/Observations

Industrial sites contained the second highest litter load, across all measures (count, count/1000m2, volume, and volume/1000m2). Litter levels were consistently high across most locations, with an average of 607 items per site.

Industrial sites frequently appeared to be highly littered. Verges tended to be poorly maintained and were often very functional spaces used to park vehicles.

They were rarely landscaped, and public bins were not commonly noted. Installation of rubbish, cigarette butt and Containers for Change bins in Industrial areas may have potential to greatly reduce the volume of litter at these sites.

LITTER COUNT BY INDUSTRIAL SITE
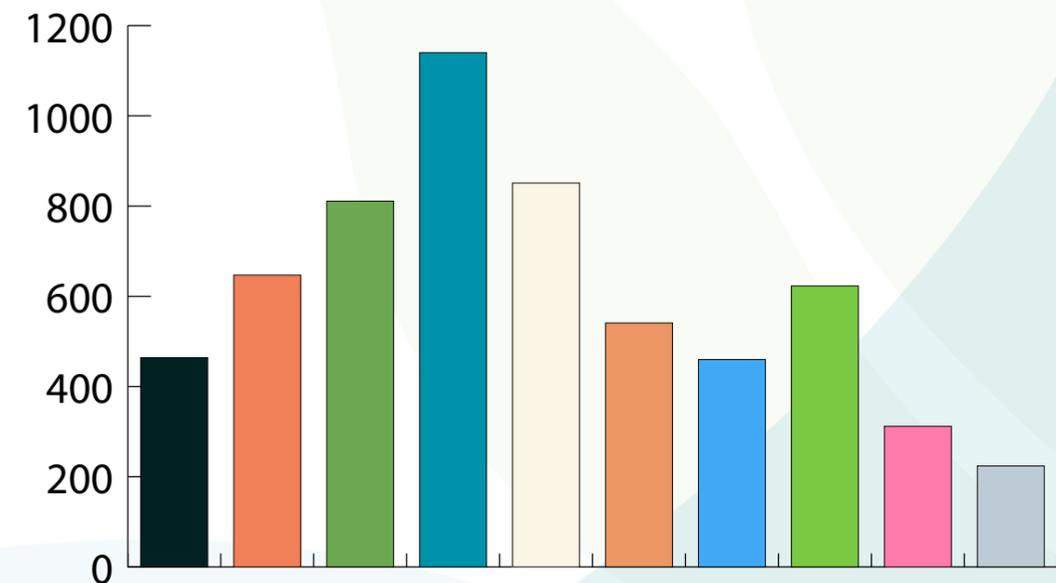
Site Type Summary – Park

SITE SNAPSHOT	
Total Number of Items - (#)	988
Total Volume of Items- (l)	53.11
Items /1000m^2	86.57
Volume (l)/1000m^2	4.65
Top 3 Items – Number (#)	Paper and Card fragment – Small Soft plastic fragment – Small Cigarette butts and filters
Top 3 Items – Volume (l)	Aluminium foil wrap Paper/card food packaging Food/confect. wrappers
Highest Site Litter Count – Number (#)	299
Highest Site Litter Count – Volume (l)	14.50
Lowest Site Litter Count – Number (#)	22
Lowest Site Litter Count – Volume (l)	112

Common Site Features/Observations

Overall, parks were one of the lowest littered sites. Items identified as fragments (of all materials and sizes) accounted for 422 or 42.71% of the litter counted, possibly a result of mowing that frequently occurs at public parks.

Litter bins were commonly observed at park sites.

The recorded presence of features such as BBQs, playgrounds and bench seating within the individual transects often appeared to impact the litter load (the highest transect count within each site type was noted to contain a BBQ, playground or bench seating at 7 of 10 locations).
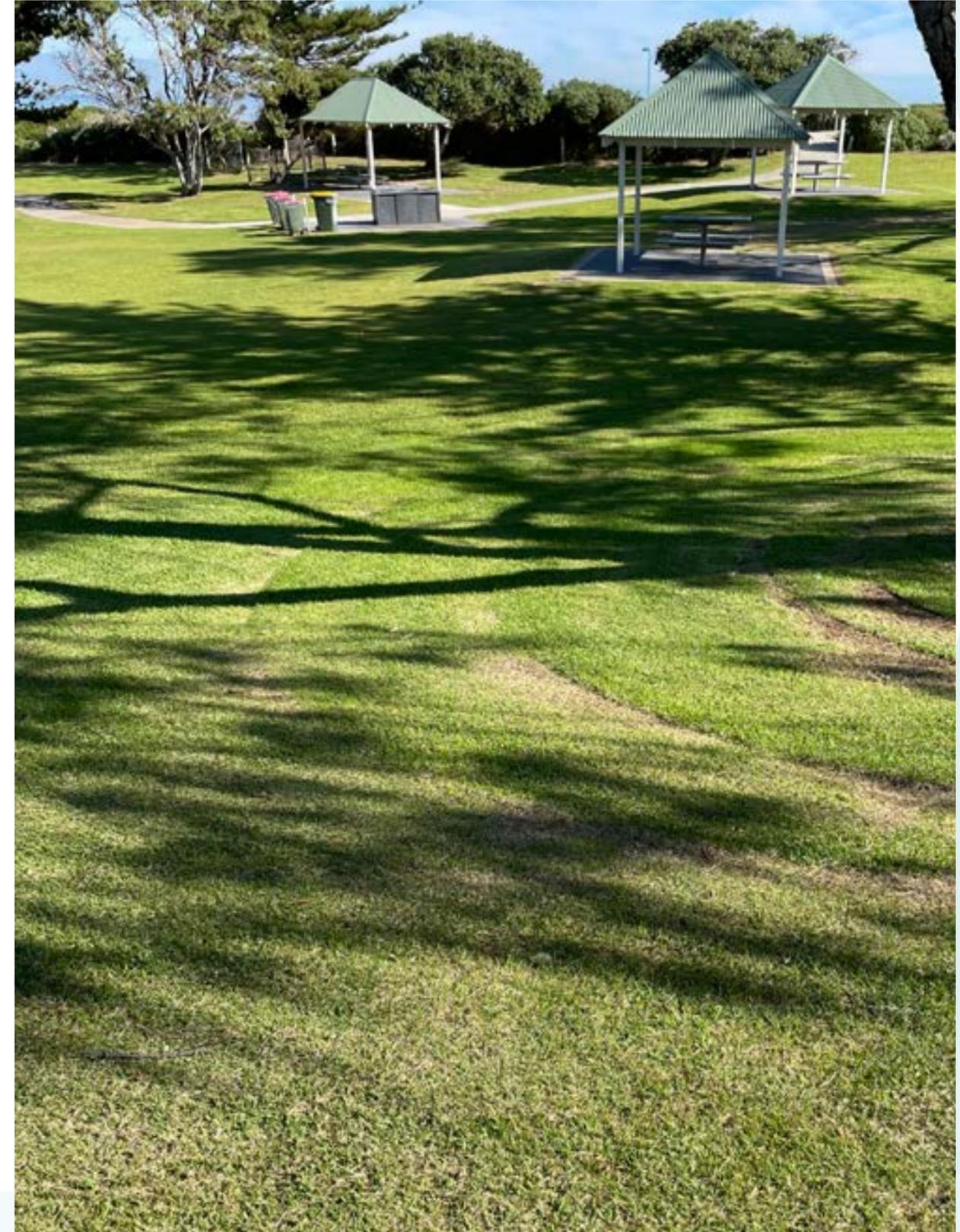
Site Type Summary – Main Road

SITE SNAPSHOT	
Total Number of Items - (#)	6,111
Total Volume of Items- (l)	457.62
Items /1000m^2	313.51
Volume (l)/1000m^2	23.48
Top 3 Items – Number (#)	Cigarette butts and filters Hard plastic fragment – Small Paper and card fragment – Small
Top 3 Items – Volume (l)	Other Food Package Clothing Paper/card food packaging
Highest Site Litter Count – Number (#)	2,324
Highest Site Litter Count – Volume (l)	232.18
Lowest Site Litter Count – Number (#)	98
Lowest Site Litter Count – Volume (l)	4.11

Common Site Features/Observations

Main Roads were found to be the highest littered sites across all measures (count, count/1000m^2, volume, and volume/1000m^2).

Across the 10 sites, the average litter per site was 611 items, however as demonstrated in the graph opposite, there were two highly littered sites that together accounted for 3,506 or 57.37% of the litter.

With these removed the average litter per Main Road site reduces to 326, indicating the litter load in Main Roads is not a consistent issue across all areas.

Litter appeared to be distributed along Main Road sites evenly where footpaths were and were not present, suggesting that litter discarded from vehicles was a contributing factor/source. As a result, continued messaging around not littering from car windows, as well as installation of more bins in targeted roadside areas may be strategies that would reduce the litter at these sites.

LITTER COUNT BY MAIN ROADS SITE
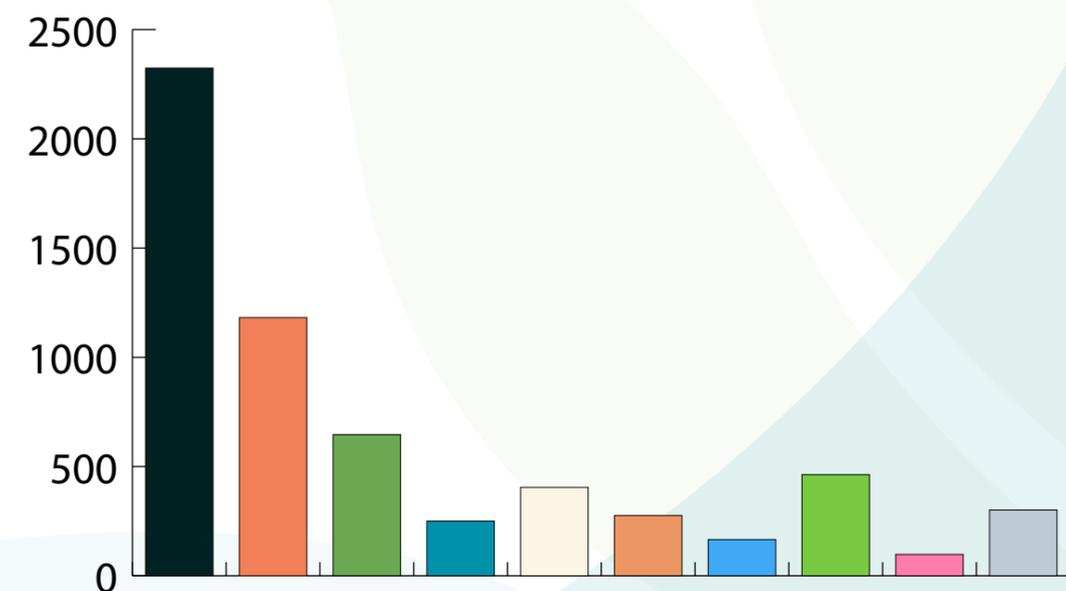
4. Key Categories and Items

Single Use Plastics

Single Use Plastics include items captured by the WA Government's "Plan for Plastics", a phased Single Use Plastic ban, which came into effect on 1st January 2022.

Items include single use plastic bags, cutlery, straws, plastic cups and lids, coffee cups and lids and polystyrene food containers. Refer Appendix 4 for a count sheet indicating all items captured in this category.

'Other Food Packaging' contributed the largest quantity and volume of Single Use Plastic waste, totalling 119 items, or 59.5 litres. This equated to 17.95% of the number of items, or 44.94% of the volume.

Straws were second highest by count, with 114 items recorded, but represented only 0.43% of the total volume.

Takeaway food containers, with 45 items counted, were the second largest contributor by volume.

CONCENTRATION OF SINGLE USE PLASTICS BY SITE

10%	**Retail**
7%	**Residential**
8%	**Park**
49%	**Main Road**
24%	**Industrial**
2%	**Beach**
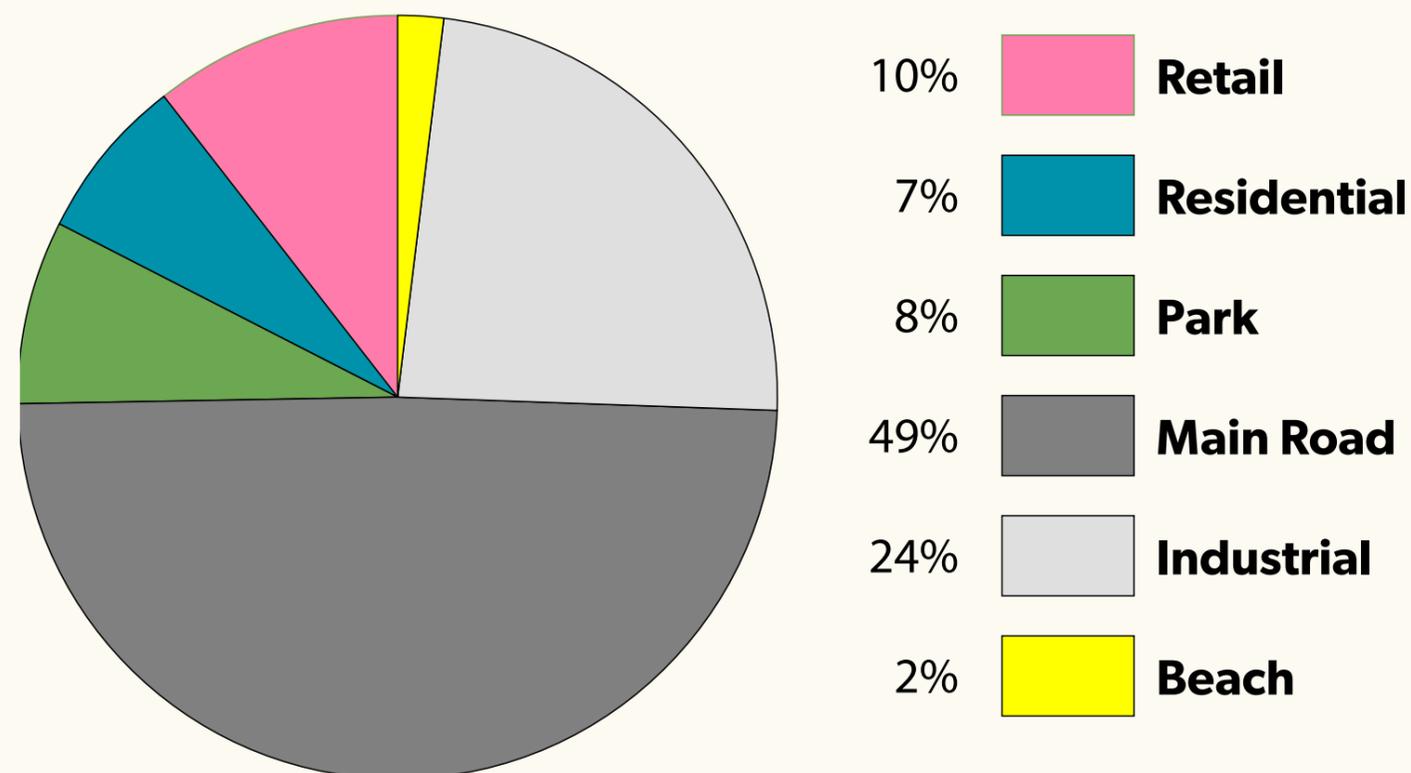
KEY ITEM SNAPSHOT: SINGLE USE PLASTICS	
Total Number of Items - (#)	663
Total Volume of Items- (I)	132.41
Highest Site Litter Count – Number (#)	217
Highest Site Litter Count – Volume (I)	58.12
Lowest Site Litter Count – Number (#)	0
Lowest Site Litter Count – Volume (I)	0

DETAIL - SINGLE USE PLASTICS		
Item	**Number of Items**	**Total Volume (I)**
Other Food Package	119	59.5
Straws	114	0.57
Lids - Plastic cup lid	99	1.98
Bag - Other	63	12.6
Bag -Lightweight shop	53	10.6
Cup – Single use	53	10.6
Takeaway food container	45	22.5
Cup - Coffee cup	38	7.6
Lids -Coffee cup lid	35	0.7
Cutlery/chopsticks	25	0.25
Cotton buds/tips	10	0.01
Bag - Heavy Boutique	4	4
Food pack./clam shells	2	1
Plate/bowl – single use	2	0.4
Bag - Mesh Bags	1	0.1
TOTAL	**663**	**132.41**

Beverage Containers

The analysis below has been provided for beverage containers eligible for a 10c refund under Western Australia's CDS.

A large portion of CDS containers found were in Industrial and Main Road sites, with these two site types alone accounting for 76.61% of items counted. No CDS containers were observed at Beach sites. One Beach site contained a dedicated CDS collection bin, which had some containers present.

Beer was the largest contributor, accounting for 52 of the 124 items, or 41.94%. Soft drinks were the second highest, accounting for 22.58%

BEVERAGE CONTAINERS (CDS) COUNT BY TYPE

	Count	Type
	3pcs	Wine Cooler
	9pcs	Water
	28pcs	Soft Drink
	9pcs	Premix Alc.
	11pcs	Juice
	9pcs	Flav. Milk
	3pcs	Cider
	52pcs	Beer

KEY ITEM SNAPSHOT: BEVERAGE CONTAINERS (CDS)	
Total Number of Items - (#)	124
Total Volume of Items- (l)	56.18
Highest Site Litter Count – Number (#)	18
Highest Site Litter Count – Volume (l)	9
Lowest Site Litter Count – Number (#)	0
Lowest Site Litter Count – Volume (l)	0

Other Non-CDS Beverage Containers

Total Beverage Containers (including CDS and Non-CDS) was 151 – in addition to the reported 124 CDS containers there were a further 27 containers counted, that were classified as not being eligible for the CDS scheme.

CONCENTRATION OF BEVERAGE CONTAINERS (CDS) BY SITE

	Percent	Site
	6%	Retail
	15%	Residential
	2%	Park
	40%	Main Road
	37%	Industrial
	0%	Beach
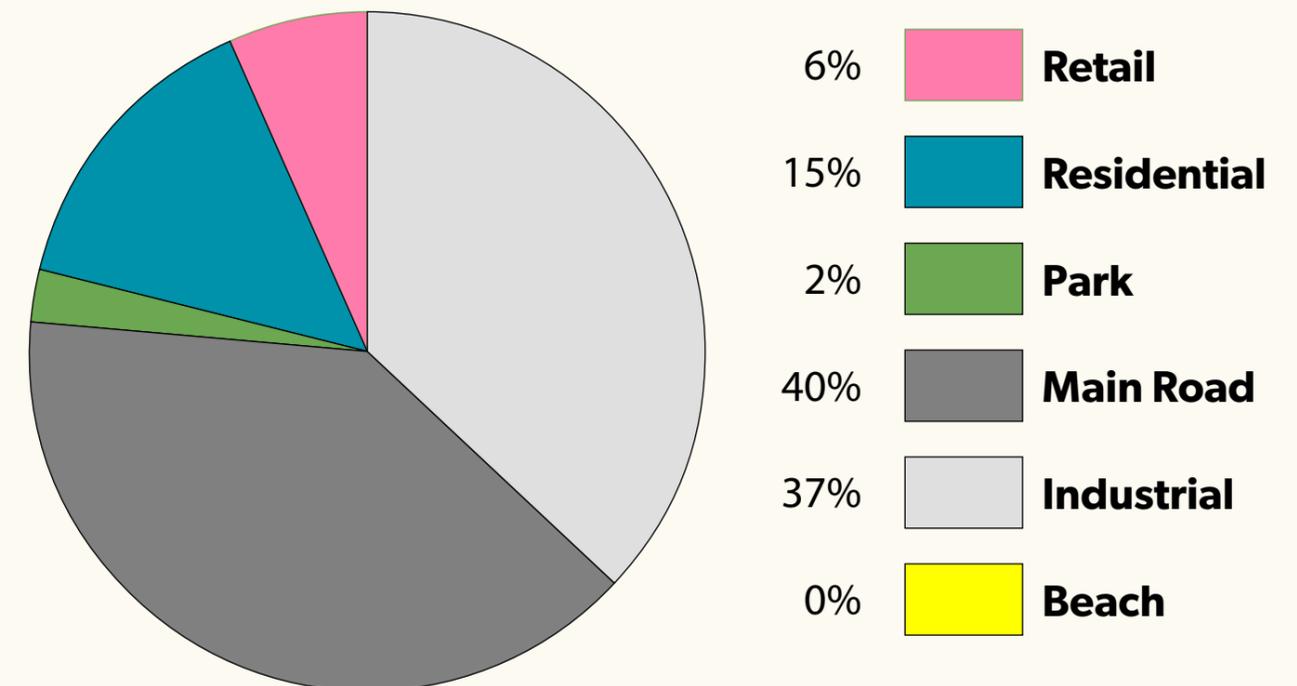
DETAIL - BEVERAGE CONTAINERS (CDS)		
Item	# Items	Volume (l)
Glass Beer 150-499mL	26	9.75
Metal Beer 150-499mL	17	6.38
Metal Soft Dr/FW/FJD/SpD/EnD 150-499mL	14	5.25
Plastic Fruit/vegetable juice 150-499mL	8	3.00
Metal Premixed spirit drinks 150-499mL	6	2.25
Glass Beer 500-999mL	5	3.00
Metal Beer 500-999mL	4	2.40
Metal Soft Dr/FW/FJD/SpD/EnD 500-999mL	4	2.40
Plastic Soft Dr/FW/FJD/SpD/EnD 150-499mL	4	1.50
Plastic Flav. Milk 150-499mL	4	1.50
Glass Wine-based/wine cooler 500-999mL	3	1.80
Plastic Flav. Milk 500-999mL	3	1.80
Glass Soft Dr/FW/FJD/SpD/EnD 150-499mL	3	1.13
Glass Water 150-499mL	3	1.13
Plastic Water 1000mL-3000mL	2	3.00
Plastic Soft Dr/FW/FJD/SpD/EnD 500-999mL	2	1.20
Plastic Fruit/vegetable juice 500-999mL	2	1.20
Glass Premixed spirit drinks 150-499mL	2	0.75
Glass Cider 150-499mL	2	0.75
Plastic Water 150-499mL	2	0.75
Metal Premixed spirit drinks 1000mL-3000mL	1	1.50
Glass Soft Dr/FW/FJD/SpD/EnD 500-999mL	1	0.60
Glass Water 500-999mL	1	0.60
Glass Cider 500-999mL	1	0.60
Paper Flav. milk (Cartons) 500-999mL	1	0.60
Plastic Water 500-999mL	1	0.60
Glass Fruit juice 150-499mL	1	0.38
Paper Flav. milk (Cartons) 150-499mL	1	0.38
TOTAL	124	56.18
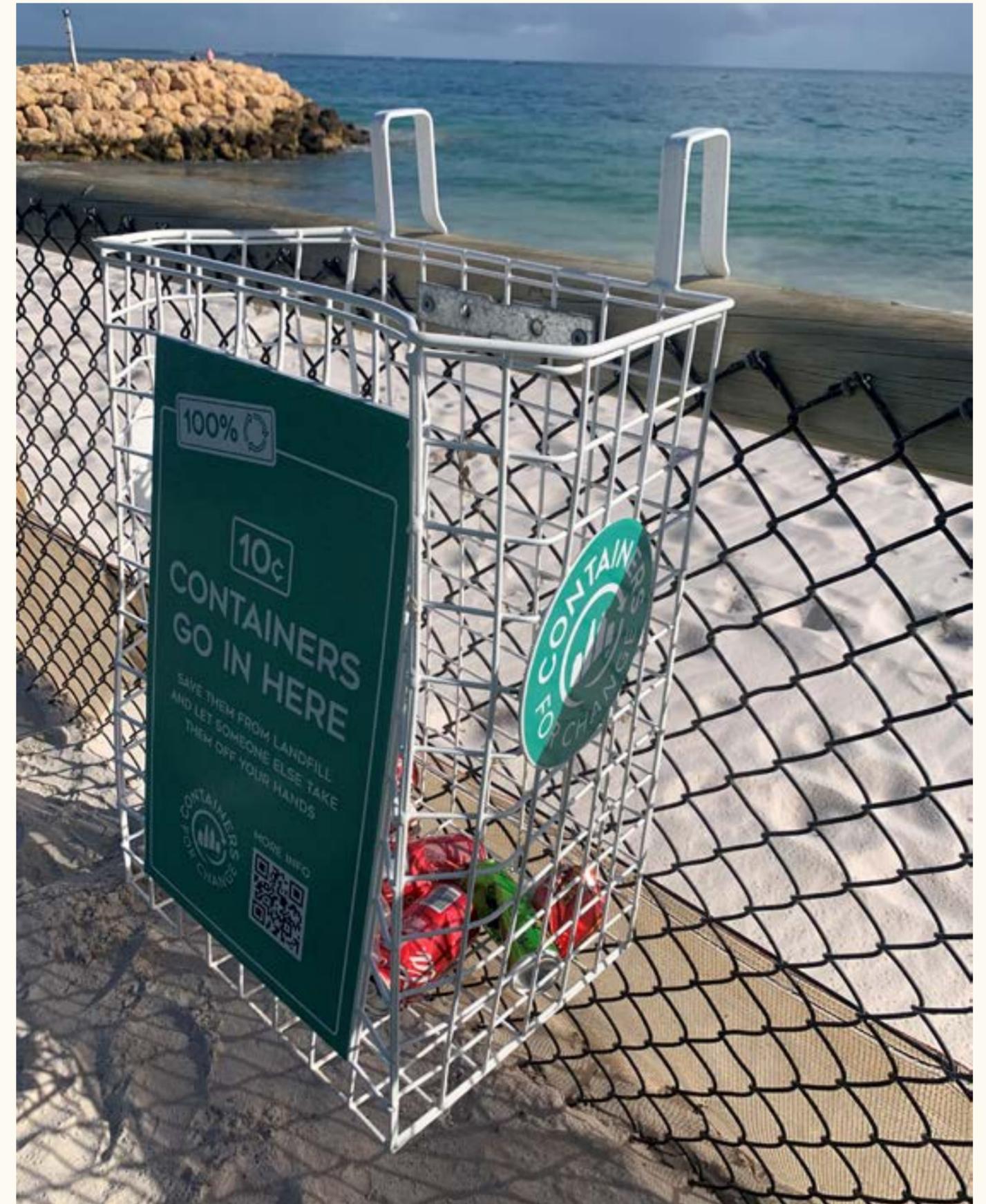
Cigarette Butts

Cigarette Butts were the highest individual litter item by count, with a total of 4,010 Cigarette Butts (and filters) observed.

Together, Retail, Main Road and Industrial accounted for 91.04% of the total Cigarette Butts counted.

Cigarette Butt bins were not commonly observed at the locations surveyed, but the data would indicate installation of public cigarette butt bins may be of most benefit in Retail, Industrial and roadside (Main Road) areas (i.e., including public transport stops, rest points).

Messaging around collecting used butts in vehicles for proper disposal at a later date (i.e., utilising an ashtray) may reduce the volume of cigarette butts in both Main Road (tossed from window) and Industrial (disposed from parked cars) sites.

KEY ITEM SNAPSHOT: CIGARETTE BUTTS	
Total Number of Items - (#)	4010
Total Volume of Items- (l)	8.02
Highest Site Litter Count – Number (#)	360
Highest Site Litter Count – Volume (l)	0.72
Lowest Site Litter Count – Number (#)	0
Lowest Site Litter Count – Volume (l)	0

CONCENTRATION OF CIGARETTE BUTTS BY SITE

29%	**Retail**
6%	**Residential**
2%	**Park**
27%	**Main Road**
35%	**Industrial**
1%	**Beach**
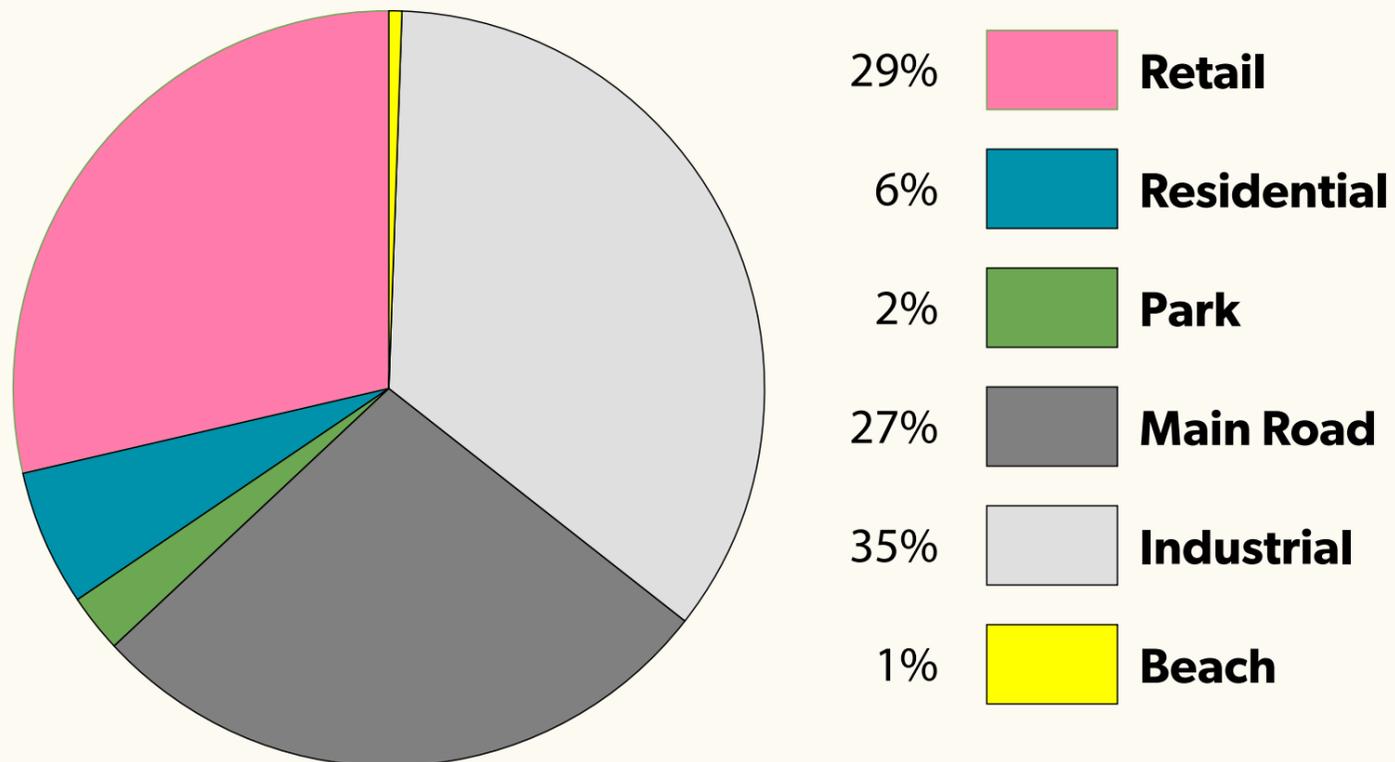
Takeaway Food Packaging

Takeaway Food Packaging contains a range of materials used to wrap, package and transport takeaway foods. Refer Appendix 4 for a count sheet indicating all items captured in this category.

KEY ITEM SNAPSHOT: TAKEAWAY FOOD PACKAGING	
Total Number of Items - (#)	2,423
Total Volume of Items- (l)	200.55
Highest Site Litter Count – Number (#)	336
Highest Site Litter Count – Volume (l)	40.61
Lowest Site Litter Count – Number (#)	1
Lowest Site Litter Count – Volume (l)	0.001

Takeaway Food Packaging accounted for 13.28% of the total litter items counted, and 17.50% of the volume.

The detail of individual items is provided on the following page, but the largest contributors by count were Food and confectionary wrappers, Metal lids/bottle caps and Plastic beverage container lids.

By volume, Paper and card food packaging was the largest contributor, followed by Food and confectionary wrappers and Plastic takeaway containers.

The number of takeaway items is closely aligned with the overall litter items by site type, with the exception of Industrial which was slightly below the trend line and Main Roads, which was slightly above. This indicates that Takeaway Food Packaging is proportionately the largest issue in the Main Road site type. This can be seen on the graph on page 23.

CONCENTRATION OF TAKEAWAY FOOD PACKAGING BY SITE

15%	Retail
12%	Residential
8%	Park
35%	Main Road
27%	Industrial
3%	Beach
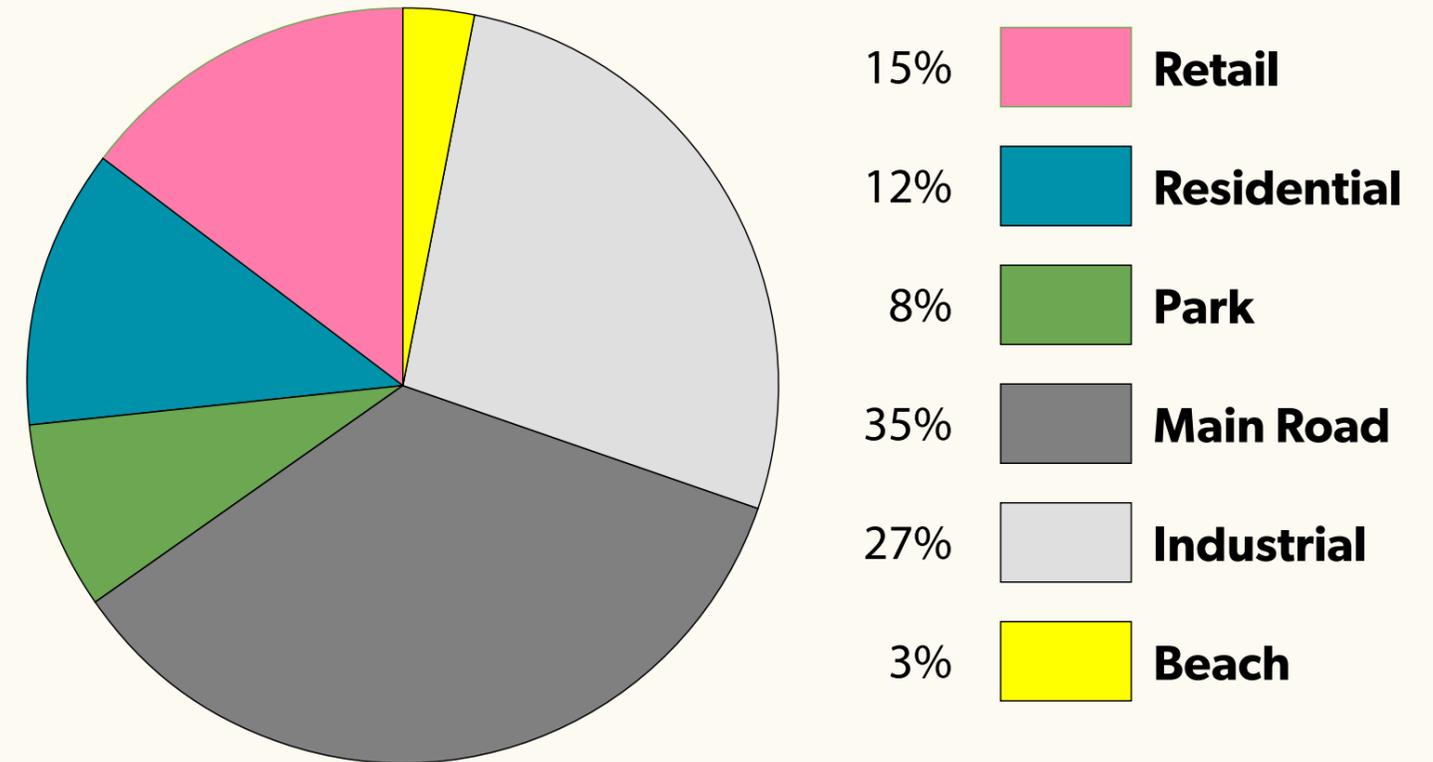
DETAIL - TAKEAWAY FOOD PACKAGING		
Item	# Items	Volume (l)
Food/confect. Wrappers	826	41.30
Lids, bottle tops, can ring pulls	478	0.96
Lids - Beverage container lids /caps	326	6.52
Paper/card food packaging	174	87.00
Straws	114	0.56
Lids - Plastic cup lid	99	1.98
Lollipop Sticks	69	0.07
Cup - Other paper cup	63	12.60
Cup – Single use	53	10.60
Takeaway food container	45	22.50
Cup - Coffee cup	38	7.60
Lids -Coffee cup lid	35	0.70
Ice Cream Stick	29	0.03
Cutlery/chopsticks	25	0.25
Lids - Other	19	0.38
Ice cream wrappers	10	0.20
Foil takeaway container	9	4.50
Cups (foam)	7	1.40
Food pack./clam shells	2	1.00
Plate/bowl – single use	2	0.40
Stirrers	0	0.00
Six pack rings	0	0.00
Total	**2,423**	**200.55**

COMPARISON:
TAKEAWAY FOOD PACKAGING AGAINST TOTAL LITTER COUNT

■ Total Takeaway Items   ■ Total Litter Items
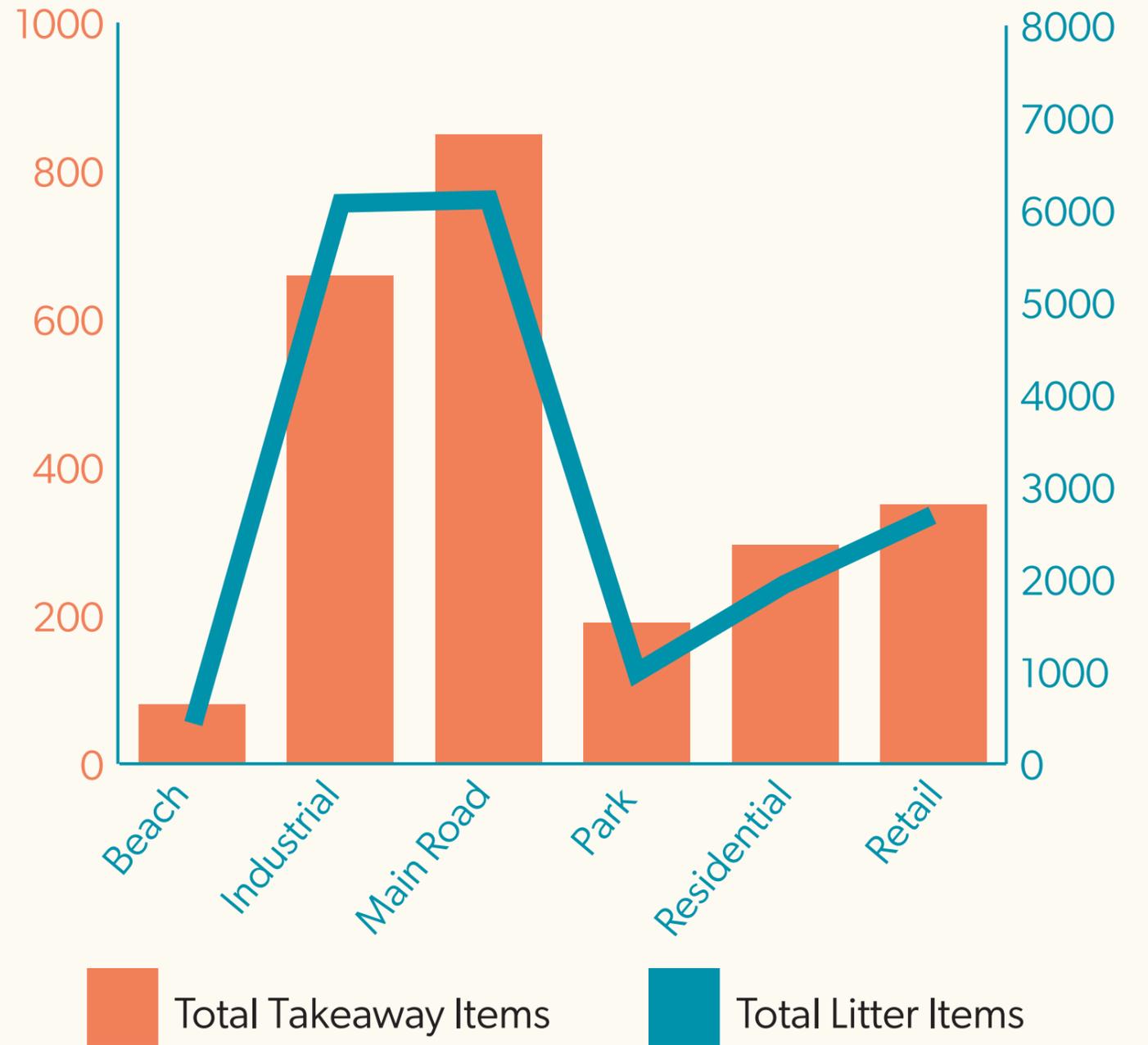
Polystyrene

This category captures Polystyrene takeaway food packaging and cups, insulation and packaging, and fragments.

Fragments were the most common Polystyrene item found by count, with total fragments of all sizes accounting for 355 of the 481 items found, or 73.80%.

It was evident when completing the count, this high proportion of fragments within this category is a product of the fragile nature of polystyrene and its tendency to break into many smaller parts.

KEY ITEM SNAPSHOT: POLYSTYRENE	
Total Number of Items - (#)	481
Total Volume of Items- (l)	79.47
Highest Site Litter Count – Number (#)	97
Highest Site Litter Count – Volume (l)	15
Lowest Site Litter Count – Number (#)	0
Lowest Site Litter Count – Volume (l)	0

DETAIL - POLYSTYRENE		
Item	**Number of Items**	**Total Volume (l)**
Polystyrene Fragment - Small	268	6.43
Other polystyrene item	103	51.50
Polystyrene Fragment - Medium	67	3.22
Polystyrene Fragment - Large	20	1.92
Insulation & Packaging	14	14.00
Cups (foam)	7	1.40
Food pack./clam shells	2	1.00
Total	**481**	**79.47**

CONCENTRATION OF POLYSTYRENE BY SITE

12pcs	Retail
21pcs	Residential
17pcs	Park
193pcs	Main Road
225pcs	Industrial
13pcs	Beach
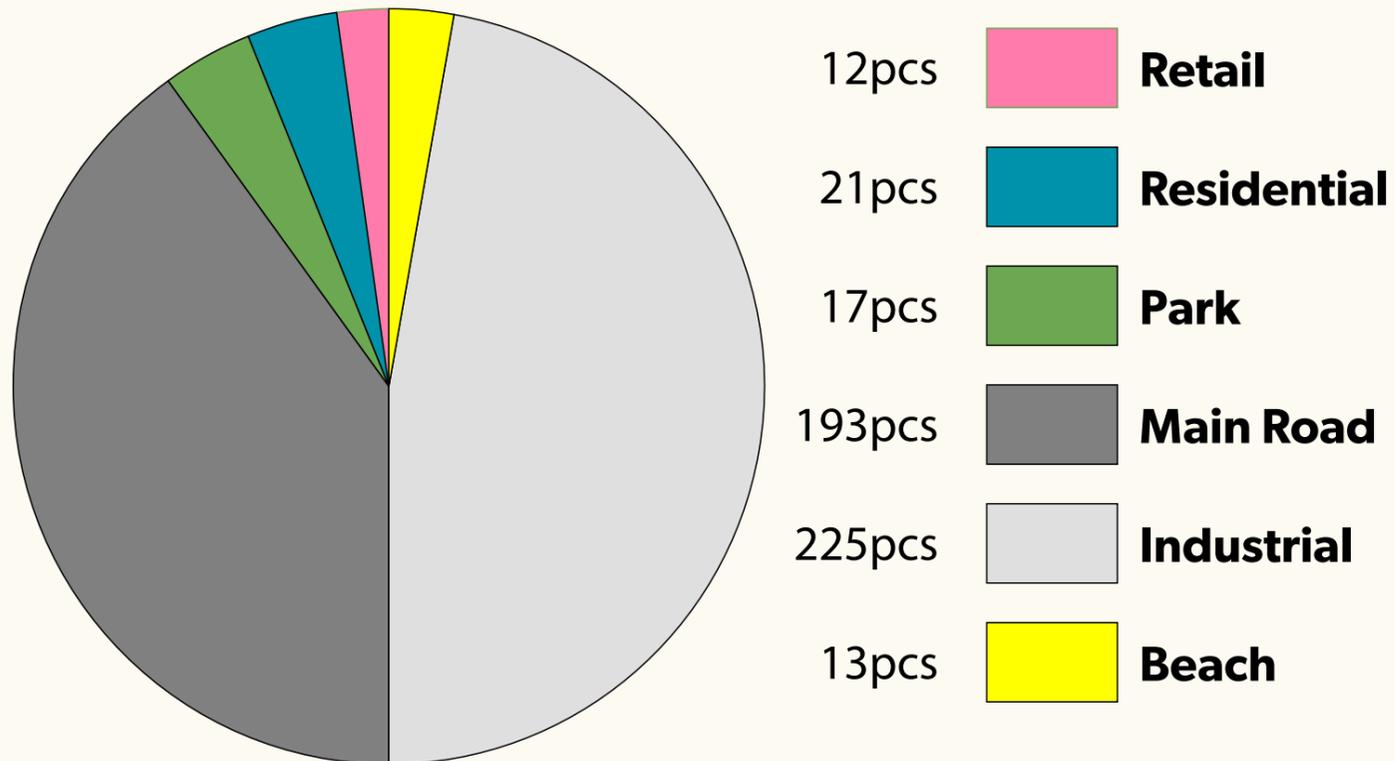
Fragments - All Materials

Fragments are defined in the AusLM Field Manual as "pieces of litter [that are] either no longer identifiable as a whole item, or there is less than half of the whole item found in one or multiple contributing pieces".

Fragments were counted and classified by their source material, and size;

- small (2.5 cm to 8 cm)
- medium (8 cm to 16 cm)
- Large (anything bigger than 16 cm)

Fragments made up a significant portion of litter items counted, totalling 7,058 across all categories and sizes.

Across the material types, small fragments were consistently the most common size found. Hard Plastic was the most common material for small and medium fragments, and Paper and Card for large.

Soft Plastic fragments were third highest and were less than half the number and volume of Hard Plastic. This is possibly due to the flexible nature of soft plastic; this material is more likely to persist in the environment in its original form e.g., whole plastic bags, food/confectionary wrappers, whilst the more rigid nature of Hard Plastic means it is more likely to break into fragments, which remain in the environment in fragment form.

TOTAL FRAGMENTS					
Material	Small (#)	Medium (#)	Large (#)	Total (#)	Volume (l)
Cloth	77	40	19	136	1.86
Glass	448	59	8	515	4.78
Metal	214	48	13	275	8.69
Paper & Card	1,060	302	115	1,477	16.99
Plastic (Hard)	2,293	478	98	2,869	29.13
Plastic (Soft)	921	232	95	1,248	14.12
Polystyrene	268	67	20	355	11.57
Rubber	121	39	23	183	2.33
Total	**5,402**	**1,265**	**391**	**7,058**	**89.47**

FRAGMENTS: TOTAL AND SIZE BY TYPE
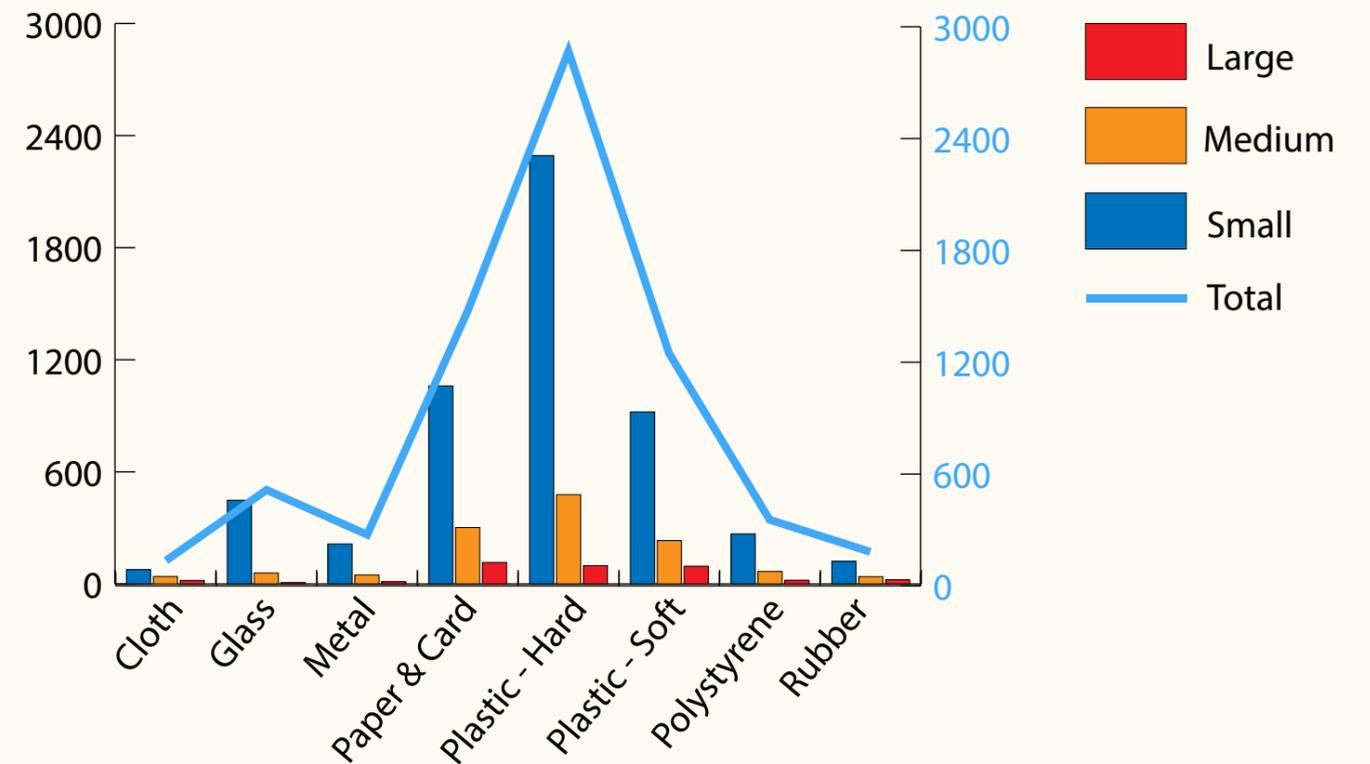
5. Other Observations

Items of Note – Facemasks

Over the period 2020 – 2022, the Coronavirus Pandemic has resulted in a number of Public Health Orders, including periods of Facemask mandates across the Perth Metropolitan Area.

Facemasks made up a relatively small portion of the total litter counted, totalling just 0.44% of the total items, or 0.70% of the volume.

Nearly half (47%) of the facemasks counted were found in Main Road sites. There were no facemasks counted at beach sites.

Of the 80 masks counted, 72 were disposable, and the balance were fabric/reusable.

At the time of the Litter Surveys (May 2022) there were limited Facemasks mandates in place, with them required to be worn only in certain settings (public transport, airports, hospitals, residential aged care and disability service facilities, and correctional facilities.) This contrasts with four months prior, when Masks were mandatory in all Public indoor venues.

CONCENTRATION OF FACEMASKS BY SITE

16pcs	Retail
8pcs	Residential
2pcs	Park
38pcs	Main Road
16pcs	Industrial
0pcs	Beach
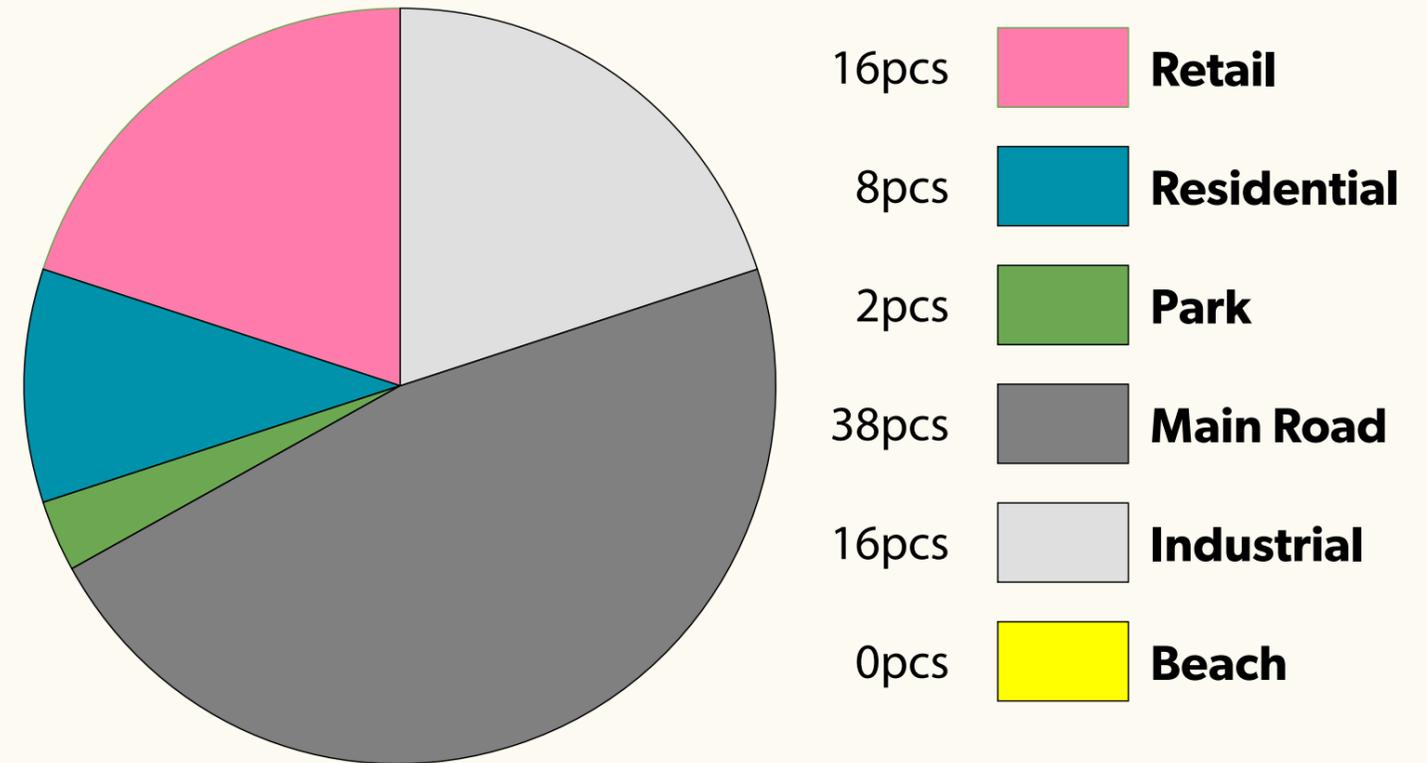
KEY ITEM SNAPSHOT: FACE MASKS	
Total Number of Items - (#)	80
Total Volume of Items- (l)	8
Highest Site Litter Count – Number (#)	16
Highest Site Litter Count – Volume (l)	1.6
Lowest Site Litter Count – Number (#)	0
Lowest Site Litter Count – Volume (l)	0

Illegal Dumping

There were occasions where illegal dumping was observed during the litter surveys. In three instances, there was dumping noted within a specific transect, and accordingly, per the AusLM Field Manual, the items found were excluded from the count and the area containing the items plus a one metre buffer was excluded from the surveyed area.

The total volume of illegal dumping inside transect boundaries was estimated at two medium loads, and one small load. Items of this nature observed included mattresses, sheets, construction waste and clothing.

Adjacent to, but outside of transect boundaries there was additional instances of dumped clothing and footwear observed (these had no impact on reported figures but have been noted here for context).

Appendix 1

Site Type Assessment Checklist

RESIDENTIAL AREA

Summary	A street/collection of streets in a residential area. The street has homes, units, or apartments on both sides of the street.
Inclusion criteria	☐ Houses, multi-unit developments, apartments and townhouses on both sides of the street.
Exclusion criteria	☐ Streets maximum speed limits greater than 60 km/h. ☐ Dead end/blind-ended streets (e.g. courts, cul-de-sac) ☐ Streets with schools or other significant public amenity (though these can be nearby in neighbouring streets).

RETAIL AREA

Summary	A street/collection of streets within a retail precinct (i.e. shopfronts).
Inclusion criteria	☐ Majority of street contains retail shops and food stores. A small fraction of other building types (e.g. a library, a small office frontage) is allowed. The retail strip might be only on one side of the road or both. Buildings that have retail fronts/at ground level and residential above can be included.
Exclusion criteria	☐ A strip that is dominated by restaurants/pubs (i.e. more than 80% of the land use areas).

INDUSTRIAL AREA

Summary	A street/collection of streets in an industrial area.
Inclusion criteria	☐ Streets will include factories, industrial offices, warehouses, workshops or other industrial buildings.
Exclusion criteria	☐ Industrial areas that are accessed by a private road. e.g. Industrial parks where the listed address is the main road at the front of the estate. ☐ More than 10% of the street length contains retail shops-.

RECREATIONAL PARK

Summary	A public outdoor space frequently visited by individuals and families for recreation and leisure.
Inclusion criteria	☐ Has **one or more** of the following: a playground or covered eating area (e.g. a rotunda) or barbeque or similar substantial piece of infrastructure. ☐ 50% or more open area (i.e. grass, paths) that is not playgrounds or dense vegetation.
Exclusion criteria	☐ Parks with food retail outlets (kiosks, takeaway stores etc.) within the site or within 50 m of the park boundary.

BEACH

Summary	A mostly sandy beach frequently visited by people for activities such as swimming, walking, other recreation and relaxation.
Inclusion criteria	☐ The majority (i.e. 90% or more) of the beach area to be sampled is sand (or sand covered in seaweed etc.).
Exclusion criteria	☐ Piers, jetties, wharves or boat ramps are within 100 metres of the location of the transects to be surveyed.

MAIN ROAD

Summary	Straight open stretches of sealed road with wide verges. Roads that typically act as an arterial for traffic between and around population centres.
Inclusion criteria	☐ A main road linking population centres (towns/cities) ☐ Vegetation bordering each side of the road
Exclusion criteria	☐ Petrol stations, fast food outlets and service centres within 2 km of the site ☐ Site has bridges, overpasses, rest stops, turn-offs, intersections (except driveways), and slipways ☐ Areas with steeply sloped verges (i.e. >45^0) are excluded.

Appendix 2
Total Items and Volume in Count Sheet Format

	Item	Total Number of Items	Items /1000m2	Total Volume (l)	Volume (l)/1000m2
P	Cigarette butts and filters	4010	38.29	8.02	0.08
L					
A	Bag - Dog Poo	24	0.23	4.80	0.05
S	Bag - Fruit/Veg	4	0.04	0.80	0.01
T	Bag - Green Reusable	10	0.10	10.00	0.10
I	Bag - Heavy Boutique	4	0.04	4.00	0.04
C	Bag - Heavy Supermrkt	8	0.08	8.00	0.08
	Bag – Ice	0	0.00	0.00	0.00
	Bag -Lightweight shop	53	0.51	10.60	0.10
	Bag - Mesh Bags	1	0.01	0.10	0.00
	Bag - Other	63	0.60	12.60	0.12
	Bread Bag Tags/twist ties	20	0.19	0.02	0.00
	Cable ties	172	1.64	0.86	0.01
	Cigarette Lighters	3	0.03	0.03	0.00
	Cigarette packet cellophane wrap	7	0.07	0.01	0.00
	Cotton buds/tips	10	0.10	0.01	0.00
	Cup – Single use	53	0.51	10.60	0.10
	Cup – Reusable	1	0.01	0.20	0.00
	Cutlery/chopsticks	25	0.24	0.25	0.00
	Fishing related	5	0.05	0.25	0.00
	Food/confect. Wrappers	826	7.89	41.30	0.39
	Lids - Beverage container lids /caps	326	3.11	6.52	0.06
	Lids - Plastic cup lid	99	0.95	1.98	0.02
	Lids -Coffee cup lid	35	0.33	0.70	0.01
	Lids - Other	19	0.18	0.38	0.00
	Lollipop Sticks	69	0.66	0.07	0.00
	Non-Food Bottle	5	0.05	2.50	0.02
	Non-Food package	97	0.93	48.50	0.46
	Other Food Package	119	1.14	59.50	0.57
	Plate/bowl – single use	2	0.02	0.40	0.00
	Plate/bowl – reusable	0	0.00	0.00	0.00
	Plastic wrap non-food	22	0.21	4.40	0.04
	Six pack rings	0	0.00	0.00	0.00
	Strapping band	65	0.62	13.00	0.12
	Stirrers	0	0.00	0.00	0.00
	Straws	114	1.09	0.57	0.01
	Syringe	1	0.01	0.01	0.00
	Takeaway food container	45	0.43	22.50	0.21
	Tape/narrow soft plastic film	322	3.07	16.10	0.15
	Tobacco pouch	0	0.00	0.00	0.00
	Toys	24	0.23	2.40	0.02
	Whipper snipper cord	7	0.07	0.04	0.00
	Other plastic item	211	2.01	21.10	0.20
M	Aerosol cans	1	0.01	0.30	0.00
E	Aluminium foil wrap	428	4.09	42.80	0.41
T	Foil takeaway container	9	0.09	4.50	0.04
A	Lids, bottle tops, can ring pulls	478	4.56	0.96	0.01
L	**Other metal item**	303	2.89	30.30	0.29
GLASS	Glass jars	8	0.08	3.00	0.03
	Other glass item	24	0.23	4.80	0.05
P	Cigarette packets	63	0.60	6.30	0.06
A	Cup - Coffee cup	38	0.36	7.60	0.07
P	Cup - Other paper cup	63	0.60	12.60	0.12
E	Ice cream wrappers	10	0.10	0.20	0.00
R	Junk mail / free circulars	30	0.29	15.00	0.14
	Newspaper/Magazine	50	0.48	25.00	0.24
&	Packages & boxes	93	0.89	46.50	0.44
	Paper bags	24	0.23	7.20	0.07
C	Paper/card food packaging	174	1.66	87.00	0.83
A	Paper tissues/napkin	303	2.89	15.15	0.14
R	Shopper dockets, tickets/receipts	199	1.90	9.95	0.10
D	**Other paper & card.**	118	1.13	5.90	0.06
RUBBER	Rubber band/hair tie	66	0.63	0.33	0.00
	Rubber toy	9	0.09	0.45	0.00
	Tyre pieces	38	0.36	0.19	0.00
	Tyres	1	0.01	20.00	0.19
	Other rubber item	120	1.15	12.00	0.11
P	Cups (foam)	7	0.07	1.40	0.01
O	Food pack./clam shells	2	0.02	1.00	0.01
L	Insulation & Packaging	14	0.13	14.00	0.13
Y	**Other polystyrene item**	103	0.98	51.50	0.49

CLOTH	Clothing	73	0.70	73.00	0.70
	Other cloth item	109	1.04	21.80	0.21
O	Balloons	35	0.33	1.75	0.02
T	Batteries	5	0.05	0.05	0.00
H	Condom	1	0.01	0.01	0.00
E	Construction materials	82	0.78	29.52	0.28
R	Cotton buds/tips (non- plastic)	10	0.10	0.01	0.00
	Cutlery (non-plastic)	11	0.11	0.11	0.00
M	Dog poo	69	0.66	3.45	0.03
A	Electrical wire	61	0.58	0.61	0.01
T	Face mask – disposable	72	0.69	7.20	0.07
E	Face mask – reusable	8	0.08	0.80	0.01
R	Fruit/vegetable/food	94	0.90	18.80	0.18
I	Gum	37	0.35	0.00	0.00
A	Ice Cream Stick	29	0.28	0.03	0.00
L	Nappy	1	0.01	0.50	0.00
S	Personal Effects	129	1.23	25.80	0.25
	Plate/bowl (non-plastic)	1	0.01	0.20	0.00
	Rope/string	249	2.38	49.80	0.48
	Sanitary Items	1	0.01	0.20	0.00
	Stirrers (non-plastic)	2	0.02	0.00	0.00
	Straw (non-plastic)	46	0.44	0.23	0.00
	Vape packaging	1	0.01	0.05	0.00
	Vape pen	3	0.03	0.15	0.00
	Vehicle parts	14	0.13	0.70	0.01
	Wet wipes	118	1.13	5.90	0.06
	Wooden items	83	0.79	8.30	0.08
	Unknown item	35	0.33	3.50	0.03
Beverage containers					
Plastic	Drink pouches <150 ml	1	0.01	0.12	0.00
	Drink pouches 150-499mL	2	0.02	0.75	0.01
	Drink pouches 500-999mL	0	0.00	0.00	0.00
	Drink pouches 1000mL-3000mL	0	0.00	0.00	0.00
	Drink pouches >3000mL	0	0.00	0.00	0.00
Plastic	Flav. Milk <150 ml	1	0.01	0.12	0.00
	Flav. Milk 150-499mL	4	0.04	1.50	0.01
	Flav. Milk 500-999mL	3	0.03	1.80	0.02
	Flav. Milk 1000mL-3000mL	0	0.00	0.00	0.00
	Flav. Milk >3000mL	0	0.00	0.00	0.00
Plastic	Soft Dr/FW/FJD/SpD/EnD <150 ml	2	0.02	0.24	0.00
	Soft Dr/FW/FJD/SpD/EnD 150-499mL	4	0.04	1.50	0.01
	Soft Dr/FW/FJD/SpD/EnD 500-999mL	2	0.02	1.20	0.01
	Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL	0	0.00	0.00	0.00
	Soft Dr/FW/FJD/SpD/EnD >3000mL	0	0.00	0.00	0.00
Plastic	Fruit/vegetable juice <150 ml	1	0.01	0.12	0.00
	Fruit/vegetable juice 150-499mL	8	0.08	3.00	0.03
	Fruit/vegetable juice 500-999mL	2	0.02	1.20	0.01
	Fruit/vegetable juice 1000mL-3000mL	0	0.00	0.00	0.00
	Fruit/vegetable juice >3000mL	0	0.00	0.00	0.00
Plastic	Water <150 ml	0	0.00	0.00	0.00
	Water 150-499mL	2	0.02	0.75	0.01
	Water 500-999mL	1	0.01	0.60	0.01
	Water 1000mL-3000mL	2	0.02	3.00	0.03
	Water >3000mL	0	0.00	0.00	0.00
Plastic	White milk <150 ml	1	0.01	0.12	0.00
	White milk 150-499mL	1	0.01	0.50	0.00
	White milk 500-999mL	1	0.01	1.00	0.01
	White milk 1000mL-3000mL	0	0.00	0.00	0.00
	White milk >3000mL	0	0.00	0.00	0.00
Metal	Beer <150 ml	0	0.00	0.00	0.00
	Beer 150-499mL	17	0.16	6.38	0.06
	Beer 500-999mL	4	0.04	2.40	0.02
	Beer 1000mL-3000mL	0	0.00	0.00	0.00
	Beer >3000mL	0	0.00	0.00	0.00
Metal	Cider/fruit based <150 ml	0	0.00	0.00	0.00
	Cider/fruit based 150-499mL	0	0.00	0.00	0.00
	Cider/fruit based 500-999mL	0	0.00	0.00	0.00
	Cider/fruit based 1000mL-3000mL	0	0.00	0.00	0.00
	Cider/fruit based >3000mL	0	0.00	0.00	0.00
Metal	Premixed spirit drinks <150 ml	2	0.02	0.24	0.00
	Premixed spirit drinks 150-499mL	6	0.06	2.25	0.02
	Premixed spirit drinks 500-999mL	0	0.00	0.00	0.00

Material	Product	Count	Col2	Col3	Col4
	Premixed spirit drinks 1000mL-3000mL	1	0.01	1.50	0.01
	Premixed spirit drinks >3000mL	0	0.00	0.00	0.00
Metal	Soft Dr/FW/FJD/SpD/EnD <150 ml	3	0.03	0.36	0.00
	Soft Dr/FW/FJD/SpD/EnD 150-499mL	14	0.13	5.25	0.05
	Soft Dr/FW/FJD/SpD/EnD 500-999mL	4	0.04	2.40	0.02
	Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL	0	0.00	0.00	0.00
	Soft Dr/FW/FJD/SpD/EnD >3000mL	0	0.00	0.00	0.00
Metal	Wine Bladders <150 ml	0	0.00	0.00	0.00
	Wine Bladders 150-499mL	0	0.00	0.00	0.00
	Wine Bladders 500-999mL	0	0.00	0.00	0.00
	Wine Bladders 1000mL-3000mL	0	0.00	0.00	0.00
	Wine Bladders >3000mL	0	0.00	0.00	0.00
Glass	Wine <150 ml	0	0.00	0.00	0.00
	Wine 150-499mL	3	0.03	1.13	0.01
	Wine 500-999mL	0	0.00	0.00	0.00
	Wine 1000mL-3000mL	0	0.00	0.00	0.00
	Wine >3000mL	0	0.00	0.00	0.00
Glass	Spirit <150 ml	0	0.00	0.00	0.00
	Spirit 150-499mL	0	0.00	0.00	0.00
	Spirit 500-999mL	1	0.01	0.70	0.01
	Spirit 1000mL-3000mL	0	0.00	0.00	0.00
	Spirit >3000mL	0	0.00	0.00	0.00
Glass	Premixed spirit drinks <150 ml	0	0.00	0.00	0.00
	Premixed spirit drinks 150-499mL	2	0.02	0.75	0.01
	Premixed spirit drinks 500-999mL	0	0.00	0.00	0.00
	Premixed spirit drinks 1000mL-3000mL	0	0.00	0.00	0.00
	Premixed spirit drinks >3000mL	0	0.00	0.00	0.00
Glass	Beer <150 ml	2	0.02	0.24	0.00
	Beer 150-499mL	26	0.25	9.75	0.09
	Beer 500-999mL	5	0.05	3.00	0.03
	Beer 1000mL-3000mL	0	0.00	0.00	0.00
	Beer >3000mL	0	0.00	0.00	0.00
Glass	Cider <150 ml	0	0.00	0.00	0.00
	Cider 150-499mL	2	0.02	0.75	0.01
	Cider 500-999mL	1	0.01	0.60	0.01
	Cider 1000mL-3000mL	0	0.00	0.00	0.00
	Cider >3000mL	0	0.00	0.00	0.00
Glass	Soft Dr/FW/FJD/SpD/EnD <150 ml	0	0.00	0.00	0.00
	Soft Dr/FW/FJD/SpD/EnD 150-499mL	3	0.03	1.13	0.01
	Soft Dr/FW/FJD/SpD/EnD 500-999mL	1	0.01	0.60	0.01
	Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL	0	0.00	0.00	0.00
	Soft Dr/FW/FJD/SpD/EnD >3000mL	0	0.00	0.00	0.00
Glass	Fruit juice <150 ml	0	0.00	0.00	0.00
	Fruit juice 150-499mL	1	0.01	0.38	0.00
	Fruit juice 500-999mL	0	0.00	0.00	0.00
	Fruit juice 1000mL-3000mL	0	0.00	0.00	0.00
	Fruit juice >3000mL	0	0.00	0.00	0.00
Glass	Water <150 ml	0	0.00	0.00	0.00
	Water 150-499mL	3	0.03	1.13	0.01
	Water 500-999mL	1	0.01	0.60	0.01
	Water 1000mL-3000mL	0	0.00	0.00	0.00
	Water >3000mL	0	0.00	0.00	0.00
Glass	Wine-based/wine cooler <150 ml	0	0.00	0.00	0.00
	Wine-based/wine cooler 150-499mL	0	0.00	0.00	0.00
	Wine-based/wine cooler 500-999mL	3	0.03	1.80	0.02
	Wine-based/wine cooler 1000mL-3000mL	0	0.00	0.00	0.00
	Wine-based/wine cooler >3000mL	0	0.00	0.00	0.00
Card	Flav. milk (Cartons) <150 ml	0	0.00	0.00	0.00
	Flav. milk (Cartons) 150-499mL	1	0.01	0.38	0.00
	Flav. milk (Cartons) 500-999mL	1	0.01	0.60	0.01
	Flav. milk (Cartons) 1000mL-3000mL	1	0.01	1.50	0.01
	Flav. milk (Cartons) >3000mL	0	0.00	0.00	0.00
Card	Fruit Juice <150 ml	1	0.01	0.12	0.00
	Fruit Juice 150-499mL	0	0.00	0.00	0.00
	Fruit Juice 500-999mL	0	0.00	0.00	0.00
	Fruit Juice 1000mL-3000mL	0	0.00	0.00	0.00
	Fruit Juice >3000mL	0	0.00	0.00	0.00
Card	FW/FW/FJD/SpD/EnD <150 ml	0	0.00	0.00	0.00
	FW/FW/FJD/SpD/EnD 150-499mL	0	0.00	0.00	0.00
	FW/FW/FJD/SpD/EnD 500-999mL	0	0.00	0.00	0.00
	FW/FW/FJD/SpD/EnD 1000mL-3000mL	0	0.00	0.00	0.00

	FW/FW/FJD/SpD/EnD >3000mL	0	0.00	0.00	0.00
Card	Milk, plain (white) <150 ml	0	0.00	0.00	0.00
	Milk, plain (white) 150-499mL	0	0.00	0.00	0.00
	Milk, plain (white) 500-999mL	0	0.00	0.00	0.00
	Milk, plain (white) 1000mL-3000mL	0	0.00	0.00	0.00
	Milk, plain (white) >3000mL	0	0.00	0.00	0.00
Any	Other beverage <150 ml	1	0.01	0.12	0.00
	Other beverage 150-499mL	3	0.03	1.13	0.01
	Other beverage 500-999mL	0	0.00	0.00	0.00
	Other beverage 1000mL-3000mL	0	0.00	0.00	0.00
	Other beverage >3000mL	0	0.00	0.00	0.00
Fragments	Hard plastic Size 1 – Small (> 2.5 cm to 8 cm)	2293	21.90	18.34	0.18
	Hard plastic Size 2 – Medium (> 8 cm to 16 cm)	478	4.56	7.65	0.07
	Hard plastic Size 3 – Large (> 16 cm)	98	0.94	3.14	0.03
Fragments	Soft plastic Size 1 – Small (> 2.5 cm to 8 cm)	921	8.79	7.37	0.07
	Soft plastic Size 2 – Medium (> 8 cm to 16 cm)	232	2.22	3.71	0.04
	Soft plastic Size 3 – Large (> 16 cm)	95	0.91	3.04	0.03
Fragments	Metal Size 1 – Small (> 2.5 cm to 8 cm)	214	2.04	5.14	0.05
	Metal Size 2 – Medium (> 8 cm to 16 cm)	48	0.46	2.30	0.02
	Metal Size 3 – Large (> 16 cm)	13	0.12	1.25	0.01
Fragments	Glass Size 1 – Small (> 2.5 cm to 8 cm)	448	4.28	3.58	0.03
	Glass Size 2 – Medium (> 8 cm to 16 cm)	59	0.56	0.94	0.01
	Glass Size 3 – Large (> 16 cm)	8	0.08	0.26	0.00
Fragments	Paper and Card Size 1 – Small (> 2.5 cm to 8 cm)	1060	10.12	8.48	0.08
	Paper and Card Size 2 – Medium (> 8 cm to 16 cm)	302	2.88	4.83	0.05
	Paper and Card Size 3 – Large (> 16 cm)	115	1.10	3.68	0.04
Fragments	Rubber Size 1 – Small (> 2.5 cm to 8 cm)	121	1.16	0.97	0.01
	Rubber Size 2 – Medium (> 8 cm to 16 cm)	39	0.37	0.62	0.01
	Rubber Size 3 – Large (> 16 cm)	23	0.22	0.74	0.01
Fragments	Polystyrene Size 1 – Small (> 2.5 cm to 8 cm)	268	2.56	6.43	0.06
	Polystyrene Size 2 – Medium (> 8 cm to 16 cm)	67	0.64	3.22	0.03
	Polystyrene Size 3 – Large (> 16 cm)	20	0.19	1.92	0.02
Fragments	Cloth Size 1 – Small (> 2.5 cm to 8 cm)	77	0.74	0.62	0.01
	Cloth Size 2 – Medium (> 8 cm to 16 cm)	40	0.38	0.64	0.01
	Cloth Size 3 – Large (> 16 cm)	19	0.18	0.61	0.01
	Totals	**18245**	**174.22**	**1145.65**	**10.94**

Classification for AusLM Litter Surveys - May 2022		Name	Estimated volume (ml)	Estimated volume (l)
P	Cigarette butts and filters	Cigarette Butts	2	0.002
L				0
A	Bag - Dog Poo	Bag - Dog Poo	200	0.2
S	Bag - Fruit/Veg	Bag - Fruit/Veg	200	0.2
T	Bag - Green Reusable	Bag - Green Reusable	1000	1
I	Bag - Heavy Boutique	Bag - Heavy Boutique	1000	1
C	Bag - Heavy Supermrkt	Bag - Heavy Supermarket	1000	1
	Bag – Ice	Bag - Ice	500	0.5
	Bag -Lightweight shop	Bag - Lightweight shopping	200	0.2
	Bag - Mesh Bags	Bag - Mesh	100	0.1
	Bag - Other	Bag - Other	200	0.2
	Bread Bag Tags/twist ties	Bread Bag Tags/twist ties	1	0.001
	Cable ties	Cable ties	5	0.005
	Cigarette Lighters	Cigarette Lighters	10	0.01
	Cigarette packet cellophane wrap	Cigarette packet cellophane wrap	1.1	0.0011
	Cotton buds/tips	Cotton buds/tips	1	0.001
	Cup – Single use	Cup - single use	200	0.2
	Cup – Reusable	Cup – reusable	200	0.2
	Cutlery/chopsticks	Cutlery / chopsticks	10	0.01
	Fishing related	Fishing related	50	0.05
	Food/confect. Wrappers	Food/Confectiony Wrappers	50	0.05
	Lids - Beverage container lids /caps	Lids - Beverage container lids /caps	20	0.02
	Lids - Plastic cup lid	Lids - Plastic cup lid	20	0.02
	Lids -Coffee cup lid	Lids -Coffee cup lid	20	0.02
	Lids - Other	Lids - Other	20	0.02
	Lollipop Sticks	Lollipop Sticks	1	0.001
	Non-Food Bottle	Non-Food Bottle	500	0.5
	Non-Food package	Non-Food Package	500	0.5
	Other Food Package	Other Food Package	500	0.5
	Plate/bowl – single use	Plate/bowl – single use	200	0.2
	Plate/bowl – reusable	Plate/bowl – reusable	200	0.2
	Plastic wrap non-food	Plastic Wrap Non-Food	200	0.2
	Six pack rings	Six Pack Rings	200	0.2
	Strapping band	Strapping band	200	0.2
	Stirrers	Stirrers	1	0.001
	Straws	Straws	5	0.005
	Syringe	Syringe	10	0.01
	Takeaway food container	Take away food container	500	0.5
	Tape/narrow soft plastic film	Tape/narrow soft plastic film	50	0.05
	Tobacco pouch	Tobacco pouch	100	0.1
	Toys	Toys	100	0.1
	Whipper snipper cord	Whipper snipper cord	5	0.005
	Other plastic item	Other plastic	100	0.1
M	Aerosol cans	Aerosol Cans	300	0.3
E	Aluminium foil wrap	Aluminium foil wrap	100	0.1
T	Foil takeaway container	Foil Takeaway container	500	0.5
A	Lids, bottle tops, can ring pulls	Metal Lids, bottletops, can ring pulls	2	0.002
L	**Other metal item**	Other metal	100	0.1
GLASS	Glass jars	Glass Jars	375	0.375
	Other glass item	Other glass	200	0.2
P	Cigarette packets	Cigarette packets	100	0.1
A	Cup - Coffee cup	Cup - Coffee Cup	200	0.2
P	Cup - Other paper cup	Cup - Other Paper Cup	200	0.2
E	Ice cream wrappers	Ice cream wrappers	20	0.02
R	Junk mail / free circulars	Junk mail / free circulars	500	0.5
	Newspaper/Magazine	Newspaper/Magazine	500	0.5
&	Packages & boxes	Packages & boxes	500	0.5
	Paper bags	Paper bags	300	0.3
C	Paper/card food packaging	Paper/card food packaging	500	0.5
A	Paper tissues/napkin	Paper tissues/napkin	50	0.05
R	Shopper dockets, tickets/receipts	Shopper dockets, tickets/receipts	50	0.05
D	**Other paper & card.**	Other Paper	50	0.05
RUBBER	Rubber band/hair tie	Rubber band/hair tie	5	0.005
	Rubber toy	Rubber Toy	50	0.05
	Tyre pieces	Tyre Pieces	5	0.005
	Tyres	Tyres	20000	20
	Other rubber item	Other rubber	100	0.1

Category	Item	Item (description)	Value 1	Value 2
P	Cups (foam)	Cups (foam)	200	0.2
O	Food pack./clam shells	Food packaging/clam shells	500	0.5
L	Insulation & Packaging	Insulation & Packaging	1000	1
Y	**Other polystyrene item**	Other foam	500	0.5
CLOTH	Clothing	Clothing	1000	1
	Other cloth item	Other textile/cloth	200	0.2
O	Balloons	Balloons	50	0.05
T	Batteries	Batteries	10	0.01
H	Condom	Condom	5	0.005
E	Construction materials	Construction materials	360	0.36
R	Cotton buds/tips (non- plastic)	Cotton buds/tips	1	0.001
	Cutlery (non-plastic)	Cutlery (non-plastic)	10	0.01
M	Dog poo	Dog poo	50	0.05
A	Electrical wire	Electrical wire	10	0.01
T	Face mask – disposable	Face mask - disposable	100	0.1
E	Face mask – reusable	Face mask - reusable	100	0.1
R	Fruit/vegetable/food	Fruit/vegetable/food	200	0.2
I	Gum	Gum		0
A	Ice Cream Stick	Ice cream stick	0.9	0.0009
L	Nappy	Nappy	500	0.5
S	Personal Effects	Personal Effects	200	0.2
	Plate/bowl (non-plastic)	Plate/bowl (non-plastic)	200	0.2
	Rope/string	Rope/string	200	0.2
	Sanitary Items	Sanitary Items	200	0.2
	Stirrers (non-plastic)	Stirrers (non-plastic)	2	0.002
	Straw (non-plastic)	Straw (non-plastic)	5	0.005
	Vape packaging	Vape packaging	50	0.05
	Vape pen	Vape pen	50	0.05
	Vehicle parts	Vehicle parts	50	0.05
	Wet wipes	Wet wipes	50	0.05
	Wooden items	Wooden items	100	0.1
	Unknown item	Unknown item	100	0.1
				0

Beverage containers

Category	Item	Item (description)	Value 1	Value 2
Plastic	Drink pouches <150 ml	Plastic - Drink pouch <150 ml	120	0.12
	Drink pouches 150-499mL	Plastic - Drink pouch 150 - 499 ml	375	0.375
	Drink pouches 500-999mL	Plastic - Drink pouch 500 - 999 ml	600	0.6
	Drink pouches 1000mL-3000mL	Plastic - Drink pouch 1000 - 3000 ml	1500	1.5
	Drink pouches >3000mL	Plastic - Drink pouch >3000 ml	3500	3.5
Plastic	Flav. Milk <150 ml	Plastic - Flav. Milk <150 ml	120	0.12
	Flav. Milk 150-499mL	Plastic - Flav. Milk 150 - 499 ml	375	0.375
	Flav. Milk 500-999mL	Plastic - Flav. Milk 500 - 999 ml	600	0.6
	Flav. Milk 1000mL-3000mL	Plastic - Flav. Milk 1000 - 3000 ml	1500	1.5
	Flav. Milk >3000mL	Plastic - Flav. Milk >3000 ml	3500	3.5
Plastic	Soft Dr/FW/FJD/SpD/EnD <150 ml	Plastic - Soft Dr/FW/FJD/SpD/EnD <150 ml	120	0.12
	Soft Dr/FW/FJD/SpD/EnD 150-499mL	Plastic - Soft Dr/FW/FJD/SpD/EnD 150 - 499 ml	375	0.375
	Soft Dr/FW/FJD/SpD/EnD 500-999mL	Plastic - Soft Dr/FW/FJD/SpD/EnD 500 - 999 ml	600	0.6
	Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL	Plastic - Soft Dr/FW/FJD/SpD/EnD 1000 - 3000 ml	1500	1.5
	Soft Dr/FW/FJD/SpD/EnD >3000mL	Plastic - Soft Dr/FW/FJD/SpD/EnD >3000 ml	3500	3.5
Plastic	Fruit/vegetable juice <150 ml	Plastic - Fruit/vegetable juice <150 ml	120	0.12
	Fruit/vegetable juice 150-499mL	Plastic - Fruit/vegetable juice 150 - 499 ml	375	0.375
	Fruit/vegetable juice 500-999mL	Plastic - Fruit/vegetable juice 500 - 999 ml	600	0.6
	Fruit/vegetable juice 1000mL-3000mL	Plastic - Fruit/vegetable juice 1000 - 3000 ml	1500	1.5
	Fruit/vegetable juice >3000mL	Plastic - Fruit/vegetable juice >3000 ml	3500	3.5
Plastic	Water <150 ml	Plastic - Water <150 ml	120	0.12
	Water 150-499mL	Plastic - Water 150 - 499 ml	375	0.375
	Water 500-999mL	Plastic - Water 500 - 999 ml	600	0.6
	Water 1000mL-3000mL	Plastic - Water 1000 - 3000 ml	1500	1.5
	Water >3000mL	Plastic - Water >3000 ml	3500	3.5
Plastic	White milk <150 ml	Plastic - White milk <150 ml	120	0.12
	White milk 150-499mL	Plastic - White milk 150 - 499 ml	500	0.5
	White milk 500-999mL	Plastic - White milk 500 - 999 ml	1000	1
	White milk 1000mL-3000mL	Plastic - White milk 1000 - 3000 ml	2000	2
	White milk >3000mL	Plastic - White milk >3000 ml	3500	3.5
Metal	Beer <150 ml	Metal - Beer, aluminium <150 ml	120	0.12
	Beer 150-499mL	Metal - Beer, aluminium 150 - 499 ml	375	0.375
	Beer 500-999mL	Metal - Beer, aluminium 500 - 999 ml	600	0.6
	Beer 1000mL-3000mL	Metal - Beer, aluminium 1000 - 3000 ml	1500	1.5

Material	Description	Description		
	Beer >3000mL	Metal - Beer, aluminium >3000 ml	3500	3.5
Metal	Cider/fruit based <150 ml	Metal - Cider/fruit based <150 ml	120	0.12
	Cider/fruit based 150-499mL	Metal - Cider/fruit based 150 - 499 ml	375	0.375
	Cider/fruit based 500-999mL	Metal - Cider/fruit based 500 - 999 ml	600	0.6
	Cider/fruit based 1000mL-3000mL	Metal - Cider/fruit based 1000 - 3000 ml	1500	1.5
	Cider/fruit based >3000mL	Metal - Cider/fruit based >3000 ml	3500	3.5
Metal	Premixed spirit drinks <150 ml	Metal - Premixed spirit drinks <150 ml	120	0.12
	Premixed spirit drinks 150-499mL	Metal - Premixed spirit drinks 150 - 499 ml	375	0.375
	Premixed spirit drinks 500-999mL	Metal - Premixed spirit drinks 500 - 999 ml	600	0.6
	Premixed spirit drinks 1000mL-3000mL	Metal - Premixed spirit drinks 1000 - 3000 ml	1500	1.5
	Premixed spirit drinks >3000mL	Metal - Premixed spirit drinks >3000 ml	3500	3.5
Metal	Soft Dr/FW/FJD/SpD/EnD <150 ml	Metal - Soft Dr/FW/FJD/SpD/EnD <150 ml	120	0.12
	Soft Dr/FW/FJD/SpD/EnD 150-499mL	Metal - Soft Dr/FW/FJD/SpD/EnD 150 - 499 ml	375	0.375
	Soft Dr/FW/FJD/SpD/EnD 500-999mL	Metal - Soft Dr/FW/FJD/SpD/EnD 500 - 999 ml	600	0.6
	Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL	Metal - Soft Dr/FW/FJD/SpD/EnD 1000 - 3000 ml	1500	1.5
	Soft Dr/FW/FJD/SpD/EnD >3000mL	Metal - Soft Dr/FW/FJD/SpD/EnD >3000 ml	3500	3.5
Metal	Wine Bladders <150 ml	Metal - Wine bladders <150 ml	120	0.12
	Wine Bladders 150-499mL	Metal - Wine bladders 150 - 499 ml	375	0.375
	Wine Bladders 500-999mL	Metal - Wine bladders 500 - 999 ml	600	0.6
	Wine Bladders 1000mL-3000mL	Metal - Wine bladders 1000 - 3000 ml	1500	1.5
	Wine Bladders >3000mL	Metal - Wine bladders >3000 ml	3500	3.5
Glass	Wine <150 ml	Glass - Wine <150 ml	120	0.12
	Wine 150-499mL	Glass - Wine 150 - 499 ml	375	0.375
	Wine 500-999mL	Glass - Wine 500 - 999 ml	750	0.75
	Wine 1000mL-3000mL	Glass - Wine 1000 - 3000 ml	1500	1.5
	Wine >3000mL	Glass - Wine >3000 ml	3000	3
Glass	Spirit <150 ml	Glass - Spirit <150 ml	120	0.12
	Spirit 150-499mL	Glass - Spirit 150 - 499 ml	375	0.375
	Spirit 500-999mL	Glass - Spirit 500 - 999 ml	700	0.7
	Spirit 1000mL-3000mL	Glass - Spirit 1000 - 3000 ml	1500	1.5
	Spirit >3000mL	Glass - Spirit >3000 ml	3500	3.5
Glass	Premixed spirit drinks <150 ml	Glass - Premixed spirit drinks <150 ml	120	0.12
	Premixed spirit drinks 150-499mL	Glass - Premixed spirit drinks 150 - 499 ml	375	0.375
	Premixed spirit drinks 500-999mL	Glass - Premixed spirit drinks 500 - 999 ml	600	0.6
	Premixed spirit drinks 1000mL-3000mL	Glass - Premixed spirit drinks 1000 - 3000 ml	1500	1.5
	Premixed spirit drinks >3000mL	Glass - Premixed spirit drinks >3000 ml	3500	3.5
Glass	Beer <150 ml	Glass - Beer <150 ml	120	0.12
	Beer 150-499mL	Glass - Beer 150 - 499 ml	375	0.375
	Beer 500-999mL	Glass - Beer 500 - 999 ml	600	0.6
	Beer 1000mL-3000mL	Glass - Beer 1000 - 3000 ml	1500	1.5
	Beer >3000mL	Glass - Beer >3000 ml	3500	3.5
Glass	Cider <150 ml	Glass - Cider <150 ml	120	0.12
	Cider 150-499mL	Glass - Cider 150 - 499 ml	375	0.375
	Cider 500-999mL	Glass - Cider 500 - 999 ml	600	0.6
	Cider 1000mL-3000mL	Glass - Cider 1000 - 3000 ml	1500	1.5
	Cider >3000mL	Glass - Cider >3000 ml	3500	3.5
Glass	Soft Dr/FW/FJD/SpD/EnD <150 ml	Glass - Soft Dr/FW/FJD/SpD/EnD <150 ml	120	0.12
	Soft Dr/FW/FJD/SpD/EnD 150-499mL	Glass - Soft Dr/FW/FJD/SpD/EnD 150 - 499 ml	375	0.375
	Soft Dr/FW/FJD/SpD/EnD 500-999mL	Glass - Soft Dr/FW/FJD/SpD/EnD 500 - 999 ml	600	0.6
	Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL	Glass - Soft Dr/FW/FJD/SpD/EnD 1000 - 3000 ml	1500	1.5
	Soft Dr/FW/FJD/SpD/EnD >3000mL	Glass - Soft Dr/FW/FJD/SpD/EnD >3000 ml	3500	3.5
Glass	Fruit juice <150 ml	Glass - Fruit juice <150 ml	120	0.12
	Fruit juice 150-499mL	Glass - Fruit juice 150 - 499 ml	375	0.375
	Fruit juice 500-999mL	Glass - Fruit juice 500 - 999 ml	600	0.6
	Fruit juice 1000mL-3000mL	Glass - Fruit juice 1000 - 3000 ml	1500	1.5
	Fruit juice >3000mL	Glass - Fruit juice >3000 ml	3500	3.5
Glass	Water <150 ml	Glass - Water <150 ml	120	0.12
	Water 150-499mL	Glass - Water 150 - 499 ml	375	0.375
	Water 500-999mL	Glass - Water 500 - 999 ml	600	0.6
	Water 1000mL-3000mL	Glass - Water 1000 - 3000 ml	1500	1.5
	Water >3000mL	Glass - Water >3000 ml	3500	3.5
Glass	Wine-based/wine cooler <150 ml	Glass - Wine-based/Wine cooler <150 ml	120	0.12
	Wine-based/wine cooler 150-499mL	Glass - Wine-based/Wine cooler 150 - 499 ml	375	0.375
	Wine-based/wine cooler 500-999mL	Glass - Wine-based/Wine cooler 500 - 999 ml	600	0.6
	Wine-based/wine cooler 1000mL-3000mL	Glass - Wine-based/Wine cooler 1000 - 3000 ml	1500	1.5
	Wine-based/wine cooler >3000mL	Glass - Wine-based/Wine cooler >3000 ml	3500	3.5

Card	Flav. milk (Cartons) <150 ml	Cardboard - Flav. milk <150 ml	120	0.12
	Flav. milk (Cartons) 150-499mL	Cardboard - Flav. milk 150 - 499 ml	375	0.375
	Flav. milk (Cartons) 500-999mL	Cardboard - Flav. milk 500 - 999 ml	600	0.6
	Flav. milk (Cartons) 1000mL-3000mL	Cardboard - Flav. milk 1000 - 3000 ml	1500	1.5
	Flav. milk (Cartons) >3000mL	Cardboard - Flav. milk >3000 ml	3500	3.5
Card	Fruit Juice <150 ml	Cardboard - Fruit Juice <150 ml	120	0.12
	Fruit Juice 150-499mL	Cardboard - Fruit Juice 150 - 499 ml	375	0.375
	Fruit Juice 500-999mL	Cardboard - Fruit Juice 500 - 999 ml	600	0.6
	Fruit Juice 1000mL-3000mL	Cardboard - Fruit Juice 1000 - 3000 ml	1500	1.5
	Fruit Juice >3000mL	Cardboard - Fruit Juice >3000 ml	3500	3.5
Card	FW/FW/FJD/SpD/EnD <150 ml	Cardboard - FW/FW/FJD/SpD/EnD <150 ml	120	0.12
	FW/FW/FJD/SpD/EnD 150-499mL	Cardboard - FW/FW/FJD/SpD/EnD 150 - 499 ml	375	0.375
	FW/FW/FJD/SpD/EnD 500-999mL	Cardboard - FW/FW/FJD/SpD/EnD 500 - 999 ml	600	0.6
	FW/FW/FJD/SpD/EnD 1000mL-3000mL	Cardboard - FW/FW/FJD/SpD/EnD 1000 - 3000 ml	1500	1.5
	FW/FW/FJD/SpD/EnD >3000mL	Cardboard - FW/FW/FJD/SpD/EnD >3000 ml	3500	3.5
Card	Milk, plain (white) <150 ml	Cardboard - Milk, plain (white) <150 ml	120	0.12
	Milk, plain (white) 150-499mL	Cardboard - Milk, plain (white) 150 - 499 ml	375	0.375
	Milk, plain (white) 500-999mL	Cardboard - Milk, plain (white) 500 - 999 ml	600	0.6
	Milk, plain (white) 1000mL-3000mL	Cardboard - Milk, plain (white) 1000 - 3000 ml	1500	1.5
	Milk, plain (white) >3000mL	Cardboard - Milk, plain (white) >3000 ml	3500	3.5
Any	Other beverage <150 ml	Any material - Other beverage <150 ml	120	0.12
	Other beverage 150-499mL	Any material - Other beverage 150 - 499 ml	375	0.375
	Other beverage 500-999mL	Any material - Other beverage 500 - 999 ml	600	0.6
	Other beverage 1000mL-3000mL	Any material - Other beverage 1000 - 3000 ml	1500	1.5
	Other beverage >3000mL	Any material - Other beverage >3000 ml	3500	3.5
				0
Fragments	Hard plastic Size 1 – Small (> 2.5 cm to 8 cm)	Hard plastic fragments Size 1	8	0.008
	Hard plastic Size 2 – Medium (> 8 cm to 16 cm)	Hard plastic fragments Size 2	16	0.016
	Hard plastic Size 3 – Large (> 16 cm)	Hard plastic fragments Size 3	32	0.032
Fragments	Soft plastic Size 1 – Small (> 2.5 cm to 8 cm)	Soft plastic film fragment Size 1	8	0.008
	Soft plastic Size 2 – Medium (> 8 cm to 16 cm)	Soft plastic film fragment Size 2	16	0.016
	Soft plastic Size 3 – Large (> 16 cm)	Soft plastic film fragment Size 3	32	0.032
Fragments	Metal Size 1 – Small (> 2.5 cm to 8 cm)	Metal fragment Size 1	24	0.024
	Metal Size 2 – Medium (> 8 cm to 16 cm)	Metal fragment Size 2	48	0.048
	Metal Size 3 – Large (> 16 cm)	Metal fragment Size 3	96	0.096
Fragments	Glass Size 1 – Small (> 2.5 cm to 8 cm)	Broken Glass Fragment Size 1	8	0.008
	Glass Size 2 – Medium (> 8 cm to 16 cm)	Broken Glass Fragment Size 2	16	0.016
	Glass Size 3 – Large (> 16 cm)	Broken Glass Fragment Size 3	32	0.032
Fragments	Paper and Card Size 1 – Small (> 2.5 cm to 8 cm)	Paper & card Frag. Size 1	8	0.008
	Paper and Card Size 2 – Medium (> 8 cm to 16 cm)	Paper & card Frag. Size 2	16	0.016
	Paper and Card Size 3 – Large (> 16 cm)	Paper & card Frag. Size 3	32	0.032
Fragments	Rubber Size 1 – Small (> 2.5 cm to 8 cm)	Rubber fragment Size 1	8	0.008
	Rubber Size 2 – Medium (> 8 cm to 16 cm)	Rubber fragment Size 2	16	0.016
	Rubber Size 3 – Large (> 16 cm)	Rubber fragment Size 3	32	0.032
Fragments	Polystyrene Size 1 – Small (> 2.5 cm to 8 cm)	Polystyrene Fragment Size 1	24	0.024
	Polystyrene Size 2 – Medium (> 8 cm to 16 cm)	Polystyrene Fragment Size 2	48	0.048
	Polystyrene Size 3 – Large (> 16 cm)	Polystyrene Fragment Size 3	96	0.096
Fragments	Cloth Size 1 – Small (> 2.5 cm to 8 cm)	Cloth fragment Size 1	8	0.008
	Cloth Size 2 – Medium (> 8 cm to 16 cm)	Cloth fragment Size 2	16	0.016
	Cloth Size 3 – Large (> 16 cm)	Cloth fragment Size 3	32	0.032

		Captured in Single Use Plastic Category	Captured in Takeaway Food Packaging Category
P	Cigarette butts and filters		
L			
A	Bag - Dog Poo		
S	Bag - Fruit/Veg		
T	Bag - Green Reusable		
I	Bag - Heavy Boutique	Y	
C	Bag - Heavy Supermrkt		
	Bag – Ice	Y	
	Bag -Lightweight shop	Y	
	Bag - Mesh Bags	Y	
	Bag - Other	Y	
	Bread Bag Tags/twist ties		
	Cable ties		
	Cigarette Lighters		
	Cigarette packet cellophane wrap		
	Cotton buds/tips	Y	
	Cup – Single use	Y	Y
	Cup – Reusable		
	Cutlery/chopsticks	Y	Y
	Fishing related		
	Food/confect. Wrappers		Y
	Lids - Beverage container lids /caps	Y	Y
	Lids - Plastic cup lid	Y	Y
	Lids -Coffee cup lid	Y	Y
	Lids - Other	Y	Y
	Lollipop Sticks	Y	Y
	Non-Food Bottle		
	Non-Food package		
	Other Food Package	Y	
	Plate/bowl – single use	Y	Y
	Plate/bowl – reusable		
	Plastic wrap non-food		
	Six pack rings		Y
	Strapping band		
	Stirrers	Y	Y
	Straws	Y	Y
	Syringe		
	Takeaway food container	Y	Y
	Tape/narrow soft plastic film		
	Tobacco pouch		
	Toys		
	Whipper snipper cord		
	Other plastic item		
M	Aerosol cans		
E	Aluminium foil wrap		
T	Foil takeaway container		Y
A	Lids, bottle tops, can ring pulls		Y
L	**Other metal item**		
GLASS	Glass jars		
	Other glass item		
P	Cigarette packets		
A	Cup - Coffee cup		Y
P	Cup - Other paper cup		Y
E	Ice cream wrappers		Y
R	Junk mail / free circulars		
	Newspaper/Magazine		
&	Packages & boxes		
	Paper bags		
C	Paper/card food packaging		Y
A	Paper tissues/napkin		
R	Shopper dockets, tickets/receipts		
D	**Other paper & card.**		
RUBBER	Rubber band/hair tie		
	Rubber toy		
	Tyre pieces		
	Tyres		
	Other rubber item		
P	Cups (foam)		Y
O	Food pack./clam shells	Y	Y
L	Insulation & Packaging		
Y	**Other polystyrene item**		
CLOTH	Clothing		
	Other cloth item		
O	Balloons		
T	Batteries		
H	Condom		
E	Construction materials		
R	Cotton buds/tips (non- plastic)		
	Cutlery (non-plastic)		

		Captured in Single Use Plastic Category	Captured in Takeaway Food Packaging Category
Beverage Containers			
Plastic	Drink pouches <150 ml		
	Drink pouches 150-499mL		
	Drink pouches 500-999mL		
	Drink pouches 1000mL-3000mL		
	Drink pouches >3000mL		
Plastic	Flav. Milk <150 ml		
	Flav. Milk 150-499mL		
	Flav. Milk 500-999mL		
	Flav. Milk 1000mL-3000mL		
	Flav. Milk >3000mL		
Plastic	Soft Dr/FW/FJD/SpD/EnD <150 ml		
	Soft Dr/FW/FJD/SpD/EnD 150-499mL		
	Soft Dr/FW/FJD/SpD/EnD 500-999mL		
	Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL		
	Soft Dr/FW/FJD/SpD/EnD >3000mL		
Plastic	Fruit/vegetable juice <150 ml		
	Fruit/vegetable juice 150-499mL		
	Fruit/vegetable juice 500-999mL		
	Fruit/vegetable juice 1000mL-3000mL		
	Fruit/vegetable juice >3000mL		
Plastic	Water <150 ml		
	Water 150-499mL		
	Water 500-999mL		
	Water 1000mL-3000mL		
	Water >3000mL		
Plastic	White milk <150 ml		
	White milk 150-499mL		
	White milk 500-999mL		
	White milk 1000mL-3000mL		
	White milk >3000mL		
Metal	Beer <150 ml		
	Beer 150-499mL		
	Beer 500-999mL		
	Beer 1000mL-3000mL		
	Beer >3000mL		
Metal	Cider/fruit based <150 ml		
	Cider/fruit based 150-499mL		
	Cider/fruit based 500-999mL		
	Cider/fruit based 1000mL-3000mL		
	Cider/fruit based >3000mL		
Metal	Premixed spirit drinks <150 ml		
	Premixed spirit drinks 150-499mL		
	Premixed spirit drinks 500-999mL		
	Premixed spirit drinks 1000mL-3000mL		
	Premixed spirit drinks >3000mL		
Metal	Soft Dr/FW/FJD/SpD/EnD <150 ml		
	Soft Dr/FW/FJD/SpD/EnD 150-499mL		
	Soft Dr/FW/FJD/SpD/EnD 500-999mL		
	Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL		
	Soft Dr/FW/FJD/SpD/EnD >3000mL		
Metal	Wine Bladders <150 ml		
	Wine Bladders 150-499mL		
	Wine Bladders 500-999mL		
	Wine Bladders 1000mL-3000mL		
	Wine Bladders >3000mL		
Glass	Wine <150 ml		
	Wine 150-499mL		
	Wine 500-999mL		
	Wine 1000mL-3000mL		
	Wine >3000mL		
Glass	Spirit <150 ml		
	Spirit 150-499mL		
	Spirit 500-999mL		
	Spirit 1000mL-3000mL		
	Spirit >3000mL		
Glass	Premixed spirit drinks <150 ml		
	Premixed spirit drinks 150-499mL		
	Premixed spirit drinks 500-999mL		
	Premixed spirit drinks 1000mL-3000mL		
	Premixed spirit drinks >3000mL		
Glass	Beer <150 ml		
	Beer 150-499mL		
	Beer 500-999mL		
	Beer 1000mL-3000mL		
	Beer >3000mL		
Glass	Cider <150 ml		
	Cider 150-499mL		
	Cider 500-999mL		

		Captured in Single Use Plastic Category	Captured in Takeaway Food Packaging Category
M	Dog poo		
A	Electrical wire		
T	Face mask – disposable		
E	Face mask – reusable		
R	Fruit/vegetable/food		
I	Gum		
A	Ice Cream Stick		Y
L	Nappy		
S	Personal Effects		
	Plate/bowl (non-plastic)		
	Rope/string		
	Sanitary Items		
	Stirrers (non-plastic)		
	Straw (non-plastic)		
	Vape packaging		
	Vape pen		
	Vehicle parts		
	Wet wipes		
	Wooden items		
	Unknown item		
Fragments	Hard plastic Size 1 – Small (> 2.5 cm to 8 cm)		
	Hard plastic Size 2 – Medium (> 8 cm to 16 cm)		
	Hard plastic Size 3 – Large (> 16 cm)		
Fragments	Soft plastic Size 1 – Small (> 2.5 cm to 8 cm)		
	Soft plastic Size 2 – Medium (> 8 cm to 16 cm)		
	Soft plastic Size 3 – Large (> 16 cm)		
Fragments	Metal Size 1 – Small (> 2.5 cm to 8 cm)		
	Metal Size 2 – Medium (> 8 cm to 16 cm)		
	Metal Size 3 – Large (> 16 cm)		
Fragments	Glass Size 1 – Small (> 2.5 cm to 8 cm)		
	Glass Size 2 – Medium (> 8 cm to 16 cm)		
	Glass Size 3 – Large (> 16 cm)		
Fragments	Paper and Card Size 1 – Small (> 2.5 cm to 8 cm)		
	Paper and Card Size 2 – Medium (> 8 cm to 16 cm)		
	Paper and Card Size 3 – Large (> 16 cm)		
Fragments	Rubber Size 1 – Small (> 2.5 cm to 8 cm)		
	Rubber Size 2 – Medium (> 8 cm to 16 cm)		
	Rubber Size 3 – Large (> 16 cm)		
Fragments	Polystyrene Size 1 – Small (> 2.5 cm to 8 cm)		
	Polystyrene Size 2 – Medium (> 8 cm to 16 cm)		
	Polystyrene Size 3 – Large (> 16 cm)		
Fragments	Cloth Size 1 – Small (> 2.5 cm to 8 cm)		
	Cloth Size 2 – Medium (> 8 cm to 16 cm)		
	Cloth Size 3 – Large (> 16 cm)		

		Captured in Single Use Plastic Category	Captured in Takeaway Food Packaging Category
	Cider 1000mL-3000mL		
	Cider >3000mL		
Glass	Soft Dr/FW/FJD/SpD/EnD <150 ml		
	Soft Dr/FW/FJD/SpD/EnD 150-499mL		
	Soft Dr/FW/FJD/SpD/EnD 500-999mL		
	Soft Dr/FW/FJD/SpD/EnD 1000mL-3000mL		
	Soft Dr/FW/FJD/SpD/EnD >3000mL		
Glass	Fruit juice <150 ml		
	Fruit juice 150-499mL		
	Fruit juice 500-999mL		
	Fruit juice 1000mL-3000mL		
	Fruit juice >3000mL		
Glass	Water <150 ml		
	Water 150-499mL		
	Water 500-999mL		
	Water 1000mL-3000mL		
	Water >3000mL		
Glass	Wine-based/wine cooler <150 ml		
	Wine-based/wine cooler 150-499mL		
	Wine-based/wine cooler 500-999mL		
	Wine-based/wine cooler 1000mL-3000mL		
	Wine-based/wine cooler >3000mL		
Card	Flav. milk (Cartons) <150 ml		
	Flav. milk (Cartons) 150-499mL		
	Flav. milk (Cartons) 500-999mL		
	Flav. milk (Cartons) 1000mL-3000mL		
	Flav. milk (Cartons) >3000mL		
Card	Fruit Juice <150 ml		
	Fruit Juice 150-499mL		
	Fruit Juice 500-999mL		
	Fruit Juice 1000mL-3000mL		
	Fruit Juice >3000mL		
Card	FW/FW/FJD/SpD/EnD <150 ml		
	FW/FW/FJD/SpD/EnD 150-499mL		
	FW/FW/FJD/SpD/EnD 500-999mL		
	FW/FW/FJD/SpD/EnD 1000mL-3000mL		
	FW/FW/FJD/SpD/EnD >3000mL		
Card	Milk, plain (white) <150 ml		
	Milk, plain (white) 150-499mL		
	Milk, plain (white) 500-999mL		
	Milk, plain (white) 1000mL-3000mL		
	Milk, plain (white) >3000mL		
Any	Other beverage <150 ml		
	Other beverage 150-499mL		
	Other beverage 500-999mL		
	Other beverage 1000mL-3000mL		
	Other beverage >3000mL		