NATIONAL BRANDED LITTER STUDY

ANNUAL RESULTS 2011/ 12

Principal Funder: National Packaging Covenant Industry Association (NPCIA)
In Kind Funder: Keep Australia Beautiful

Prepared for: Keep Australia Beautiful National Association

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Based on field surveys conducted in Nov. 2007, May 2008, Nov. 2011 and May 2012

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CONTENTS

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Section 1:
Executive Summary

An average total of 10,565 branded litter objects (down from 12,544 items in 2007/08) were recorded across all national sites surveyed during November 2011 and May 2012. This figure represents a significant statistical proportion of all items counted as part of the National Litter Index. When adjusted for the removal of cigarette butts, branded litter items account for 24% (unchanged from 2007/08) of the total litter stream across Australia. Across both counts, a total of 1,500 individual brands were identified.

The Branded Litter Study analyses litter by assigning branded items to eight different industry categories. It displays the most prevalent brands overall and within each category, both nationally and across all states and territories. An analysis of the location (site type) and main material type of the branded litter was also conducted from the national figures.

Non-alcoholic beverage containers and packaging represented the largest proportion of the branded litter objects identified nationally (25.9%, up from 21.4% in 2007/08). Other industry categories that were associated with large proportions of the branded litter recorded nationally included alcoholic beverage containers & packaging (16.2%, down from 19.5% in 2007/08), take-away food & drink containers & packaging (18.6%, up from 15.3% in 2007/08) and snacks wrappers & packets (16.8%, down from 17.0% in 2007/08).

As a proportion of all branded litter items recorded across Australia, McDonald's (12.78%, up from 9.85% in 2007/08) and Coca Cola (9.85%, down from 9.96% in 2007/08) clearly made the most significant contributions to the national litter stream. Within each of the industry categories nationally (excluding other litter), the most commonly identified brands were:

- **Alcoholic Beverage Containers & Packaging** – Carlton (12.2%, up from 7.9% in 2007/08) and Tooheys (11.3%, up from 9.9% in 2007/08)
- **Milk Beverage Containers & Packaging** – Masters (19.6%, down from 26.5% in 2007/08) and Farmers Union (12.9%, up from 12.0% in 2007/08)
- **Non-alcoholic Beverage Containers & Packaging** – Coca Cola (38.1%, down from 46.5% in 2007/08)
- **Retail Brands & Packaging** – Coles (28.1%, up from 24.0% in 2007/08) and Woolworths (24.5%, down from 30.6% in 2007/08)
- **Snacks Wrappers & Packets** – Cadbury (24.1%, up from 22.0% in 2007/08)
- **Take-away Food & Drink Containers & Packaging** – McDonald's – (68.8%, up from 64.3% in 2007/08)
- **Tobacco** – Winfield (31.2%, down from 31.4% in 2007/08)

Analysis of category results throughout Australia shows that highway sites generally contributed the highest proportion of branded litter across all eight industry categories. Additionally, the contribution of branded litter by the main material categories shows that the majority of branded litter objects were either paper/ paperboard (35.7%, down from 39% in 2007/08) or plastic (33.7%, up from 31.3% in 2007/08) items.

Section 2: Overview

Keep Australia Beautiful

Keep Australia Beautiful (KAB) commenced in 1968 and is Australia's leading community based litter prevention organization. Best known for its Tidy Towns, Sustainable Cities and Clean Beaches Awards, KAB is also responsible for Keep Australia Beautiful Week each spring and the Annual National Litter Index.

The Keep Australia Beautiful National Association coordinates the KAB Network of independent state and territory offices. It is committed to providing cost effective accurate data to inform the litter debate. Its members include independent state and territory offices on both sides of the container deposit debate. It takes a neutral stance on the issue of container deposit legislation.

The National Litter Index is based on a methodology that has been refined over many years in South Australia – and more recently Nationally – and provides a summary of what litter occurs where and in what volumes. See www.kab.org.au/nli.

Branded Litter Study

In 2006/7, KAB introduced an extension to the National Litter Index - the Branded Litter Study. This initiative was trialed in two pilot studies in November 2006 and May 2007.

Based on the knowledge gained from these pilot studies, the format for the Branded Litter Study was established in consultation with government and industry. This allowed for the presentation of 'baseline' findings for the year 2007/08, these results have now compared to the findings for the year 2011/12, which forms the basis of the current report.

Purpose

The purpose of the Branded Litter Study is to provide information regarding the extent and distribution of branded litter across Australia. It is expected that this report will be used by brand owners in order to (1) determine the location(s) in which branded litter is most predominant and (2) measure the contribution of their own brands towards the overall litter stream.

Further, an understanding of which brands are in the litter stream and where they are found will help industry (i.e. the packaging supply chain) to meet its responsibilities under the National Packaging Covenant. Schedule 4 of the Covenant quotes: “The range of consumer packaging materials to be addressed in Action Plans should include in-house and distribution packaging (secondary and tertiary) and packaging-related aspects of litter.” The covenant also requires signatories to: “Address issues of packaging litter and to contribute to improved consumer decision-making relating to the areas of consumption, value, use and disposal of packaging”.

Methodology

The National Litter Index counts components of litter at 983 sites across Australia by type of site (residential, beach, industrial, car park, shopping centre, retail, recreational park and highway) and by material type (glass, metal, plastic etc) by number and by volume.

The sites are distributed in a similar way across the major states and pro-rated in the smaller states and territories. For more detail on survey methodology see the National Litter Index reports on the KAB website.

The 2007/08 Branded Litter Study was the first report in which branded litter items have been recorded and summarised across biannual counts in November 2007 and May 2008. Subsequently, these results have now been reported on incorporating average figures corresponding to November 2011 and May 2012.

Where necessary, average figures for each individual brand have been rounded up to the nearest figure. This rounding is not expected to create a variation more than +/- 1%.

This report focuses on brand and brand owner representation within the following defined industry categories:

- Alcoholic beverage containers & packaging
- Milk beverage containers & packaging
- Non-alcoholic beverage containers & packaging
- Retail brands & packaging

- Snacks wrappers & packets
- Take-away food & drink containers & packaging
- Tobacco
- Other litter

All brands have been placed in a specific Industry Category, based on the product type that each individual brand represents. For example, McDonald's is grouped within Take-away Food & Drink Containers & Packaging, while the Woolworths brand is assigned as part of the Retail Brands & Packaging category.

This report also provides summary reports by brand owners. A list of brand owners is shown in Appendix 1.

The current Monitor has adopted a colour-coded system to clearly identify each Industry Category, and this has been standardised throughout the report. Charts outlining the most prevalent brands (both nationally and across all states and territories) utilize the same colour-coded system. This assists in matching the brands that have been identified most frequently with their respective Industry Categories.

The branded litter count for 2007/08 and 2011/12 counted branded litter items across all site types nationally and thus gives a depth of information about the frequency and volume of a brand in the litter stream as well as its spatial distribution.

For the purpose of the branded litter study, any item with a recognisable brand name or logo printed on it was counted as branded litter and recorded once. Thus a recording of items within the non-alcoholic beverage containers & packaging category could have been an aluminum can, a plastic or glass bottle, a plastic bottle top or an empty cardboard box in which multiple containers had been packed.

Due to the large number of brands identified during the course of the research, results presented within this report are based upon analysis of the most frequently recorded brands. Specifically, analysis within each industry category only discusses those brands which make up 1.9% or more of the litter stream within that category.

When measured as a proportion of all items counted as part of the National Litter Index (minus cigarette butts), branded litter items contribute almost one quarter (24%) of all items in the litter stream. For specific detail regarding all brands identified, please refer to the separate Tabulations document.

Section 3: Results

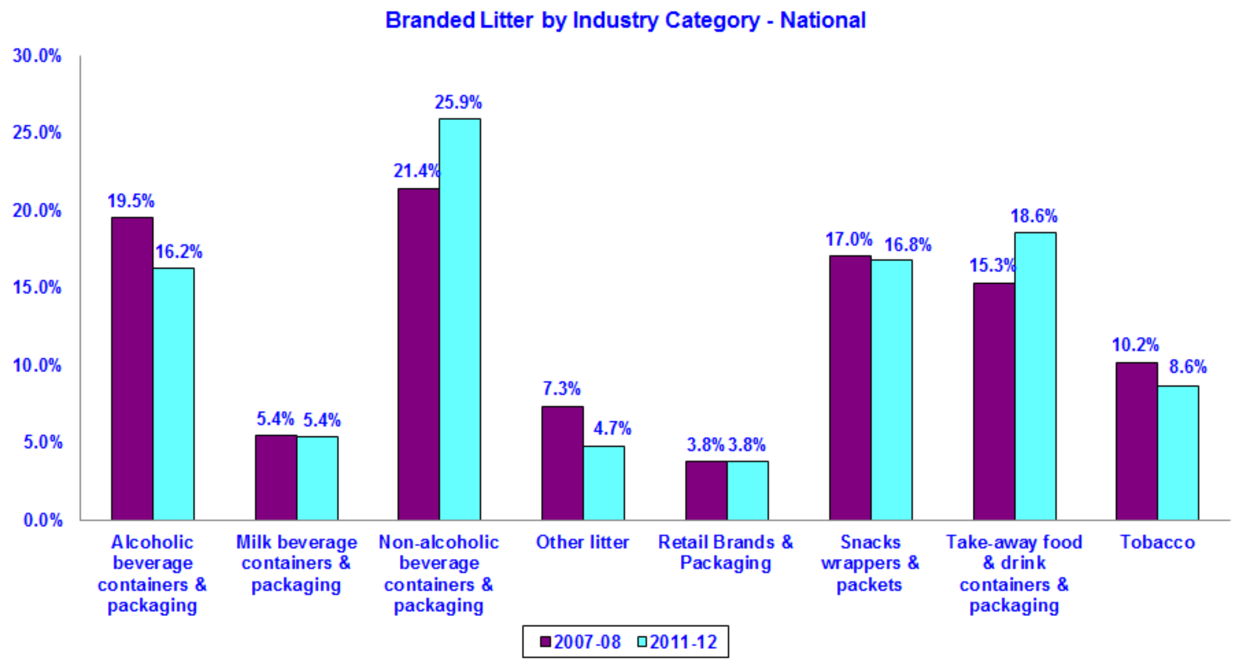
3.1 Results

Industry Categories – Overall

When counted across all sites nationally, the non-alcoholic beverage containers and packaging category (25.9%, up from 21.4% in 2007/08) represented the largest proportion of branded litter items counted across the year 2011/12.

Other industry categories that were associated with large proportions of the branded litter recorded nationally included:

- Alcoholic beverage containers and packaging (16.2%, down from 19.5% in 2007/08)
- Take-away food and drink containers and packaging (18.6%, up from 15.3% in 2007/08)
- Snacks wrappers and packets (16.8%, down from 17.0% in 2007/08)
- Tobacco (8.6%, down from 10.2% in 2007/08)



Most Prevalent Brands

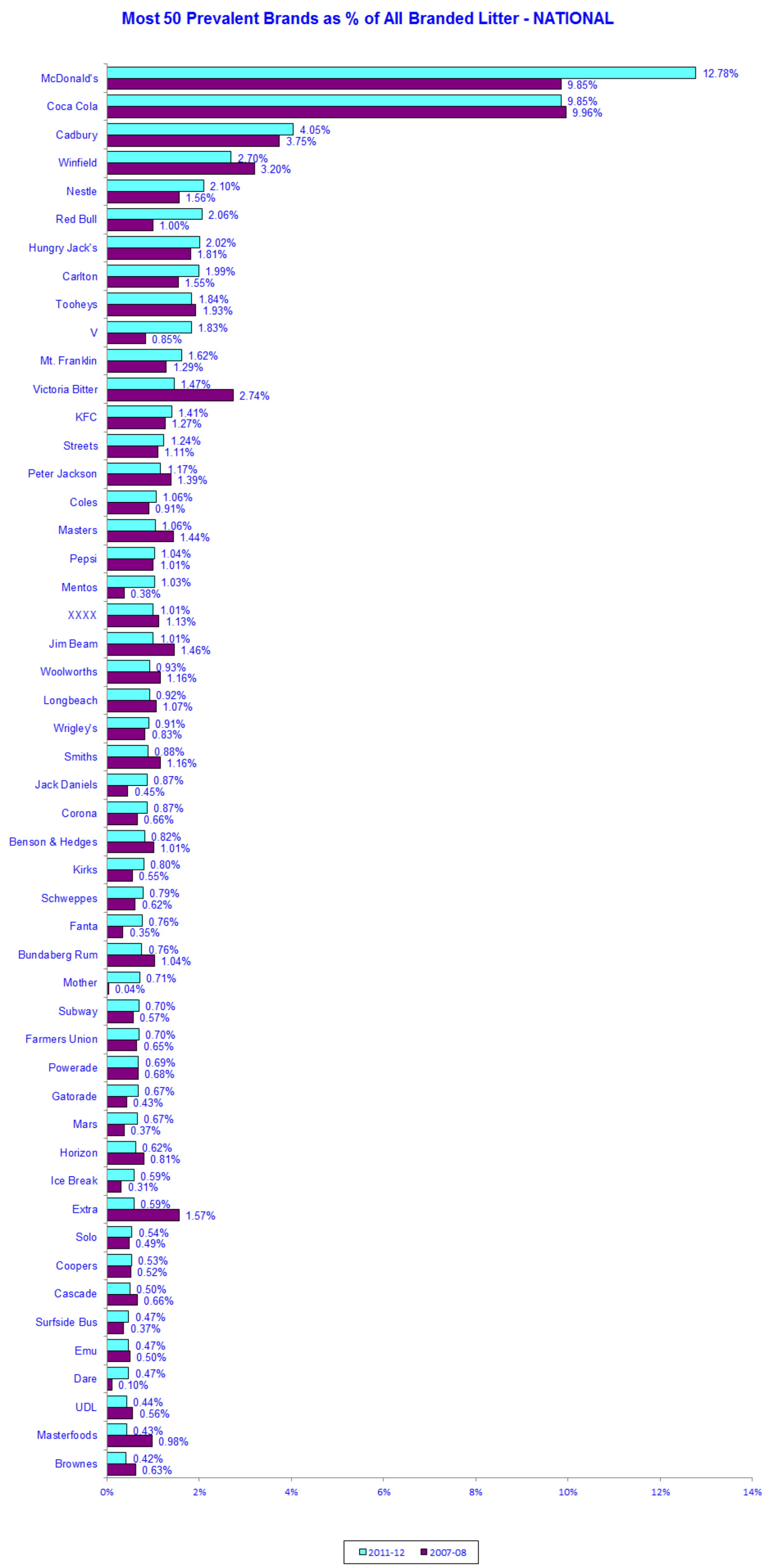
The overall average number of branded litter objects identified across all sites nationally in 2011/12 was 10,565 items (down from 12,544 items in 2007/08).

When weighted proportionally against the overall branded litter count, McDonald's emerged as the most frequently identified brand. In total, 12.78% (up from 9.85% in 2007/08) of all branded litter items recorded during 2011/12 bore this brand name.

Additionally, Coca Cola's brand represented a considerable proportion of the overall litter stream, and annual figures show that it contributed 9.85% of all branded litter recorded in 2011/12 (down from 9.96% in 2007/08).

Other brands which recorded high levels of litter as a percentage of the overall count included:

- Cadbury (4.05%, up from 3.75% in 2007/08)
- Winfield (2.70%, down from 3.2% in 2007/08)
- Nestle (2.10%, up from 1.56% in 2007/08)
- Red Bull (2.06%, up from 1.00% in 2007/08)
- Hungry Jack's (2.02%, up from 1.81% in 2007/08)
- Carlton (1.99%, up from 1.55% in 2007/08)
- Tooheys (1.84%, down from 1.93% in 2007/08)
- V Energy Drink (1.83%, up from 0.85% in 2007/08)
- Mt Franklin (1.62%, up from 1.29% in 2007/08)
- Victoria Bitter (1.47%, down from 2.74% in 2007/08)
- KFC (1.41%, up from 1.27% in 2007/08)
- Streets (1.24%, up from 1.11% in 2007/08)


Most 50 Prevalent Brands as % of All Branded Litter - NATIONAL
McDonald's 12.78% 9.85%
Coca Cola 9.85% 9.96%
Cadbury 4.05% 3.75%
Winfield 2.70% 3.20%
Nestle 2.10% 1.56%
Red Bull 2.06% 1.00%
Hungry Jack's 2.02% 1.81%
Carlton 1.99% 1.55%
Tooheys 1.84% 1.93%
V 1.83% 0.85%
Mt. Franklin 1.62% 1.29%
Victoria Bitter 1.47% 2.74%
KFC 1.41% 1.27%
Streets 1.24% 1.11%
Peter Jackson 1.17% 1.39%
Coles 1.06% 0.91%
Masters 1.06% 1.44%
Pepsi 1.04% 1.01%
Mentos 1.03% 0.38%
XXXX 1.01% 1.13%
Jim Beam 1.01% 1.46%
Woolworths 0.93% 1.16%
Longbeach 0.92% 1.07%
Wrigley's 0.91% 0.83%
Smiths 0.88% 1.16%
Jack Daniels 0.87% 0.45%
Corona 0.87% 0.66%
Benson & Hedges 0.82% 1.01%
Kirks 0.80% 0.55%
Schweppes 0.79% 0.62%
Fanta 0.76% 0.35%
Bundaberg Rum 0.76% 1.04%
Mother 0.71% 0.04%
Subway 0.70% 0.57%
Farmers Union 0.70% 0.65%
Powerade 0.69% 0.68%
Gatorade 0.67% 0.43%
Mars 0.67% 0.37%
Horizon 0.62% 0.81%
Ice Break 0.59% 0.31%
Extra 0.59% 1.57%
Solo 0.54% 0.49%
Coopers 0.53% 0.52%
Cascade 0.50% 0.66%
Surfside Bus 0.47% 0.37%
Emu 0.47% 0.50%
Dare 0.47% 0.10%
UDL 0.44% 0.56%
Masterfoods 0.43% 0.98%
Brownes 0.42% 0.63%
0% 2% 4% 6% 8% 10% 12% 14%
2011-12
2007-08

The top 50 ranking of branded litter items also included Dare, Fanta, Ice Break, Mars, Mentos, Mother and Surfside Bus not previously listed in 2007/08. The branded items that exited the top 50 as a result of the new entrants were Dunhill, Escort, Holiday, Melbourne Bitter, Red Roster, Sprite and Woodstock.

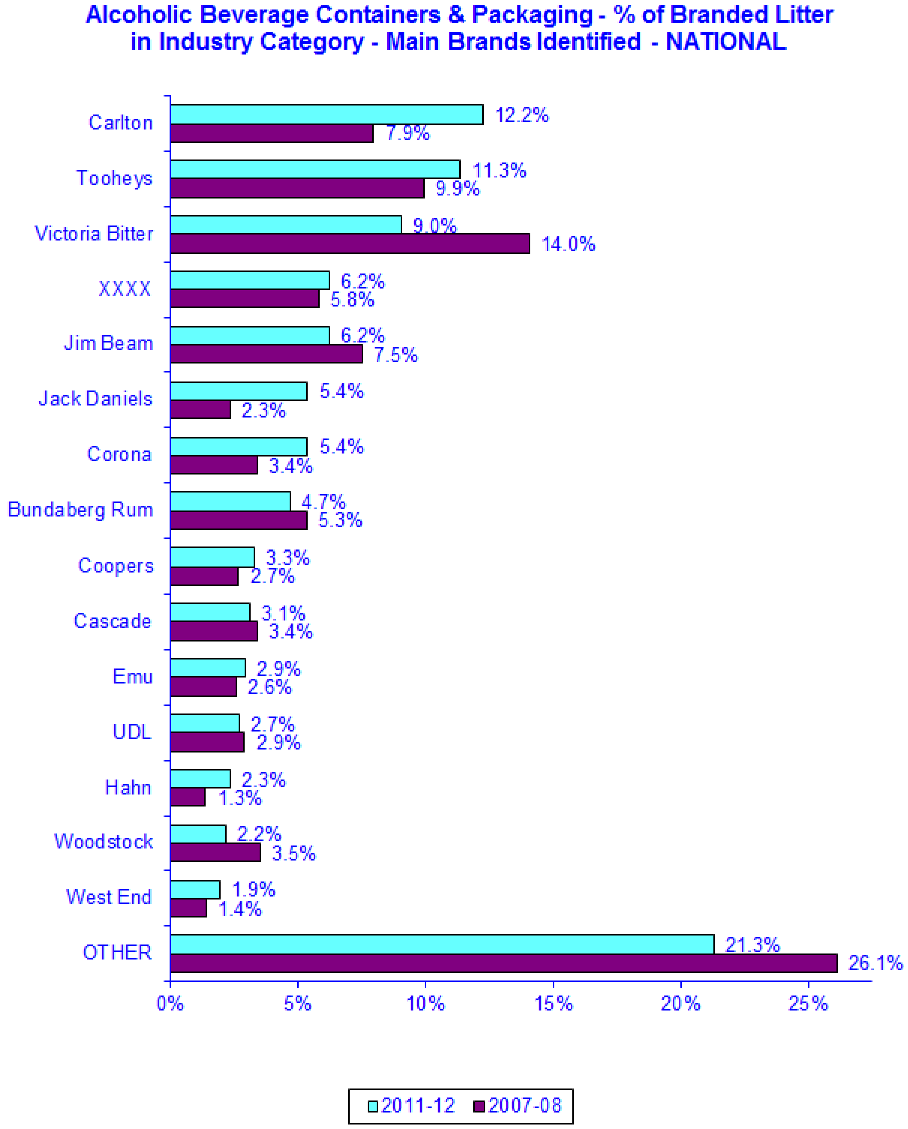
Industry Categories - Analysis

Alcoholic Beverage Containers & Packaging

Across all sites surveyed nationally, a total average of 1,716 branded litter objects (down from 2,448 in 2007/08) were counted within the alcoholic beverage containers and packaging category.

The most significant contributor to branded litter within this domain was Carlton, which was associated with 12.2% (up from 7.9% in 2007/08) of all alcoholic beverage containers and packaging. Tooheys (11.3%, up from 9.9% in 2007/08) was also a significant contributor within this stream. Other frequently identified brands included:

- Victoria Bitter (9.0%, down from 14.0% in 2007/08)
- XXXX (6.2%, up from 5.8% in 2007/08)
- Jim Beam (6.2%, down from 7.5% in 2007/08)
- Jack Daniels (5.4%, up from 2.3% in 2007/08)
- Corona (5.4%, up from 3.4% in 2007/08)
- Bundaberg Rum (4.7%, down from 5.3% in 2007/08)

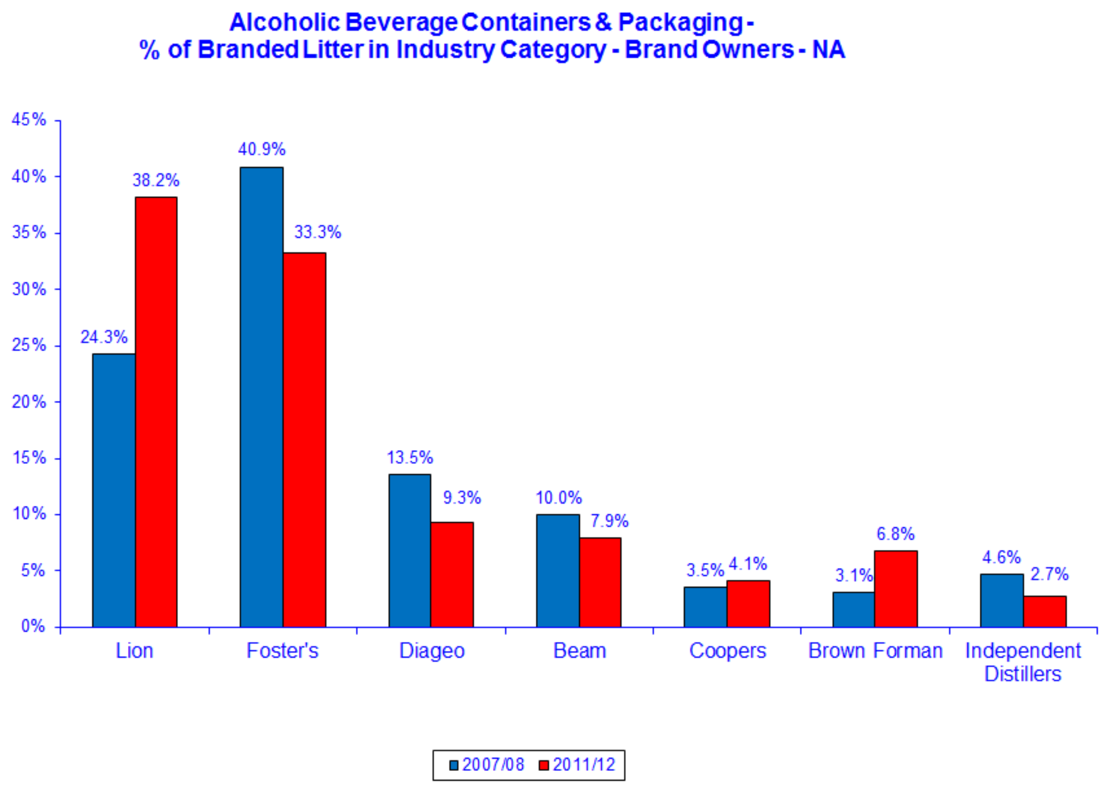


Prevalent alcoholic beverage containers and packaging brands also included Hahn and West End not previously listed in 2007/08, while brands previously identified and now not as common in the litter stream were Melbourne Bitter and Smirnoff.

Among the brands that made up at least 1.9% of the litter stream within this category, the largest proportion belonged to the Lion group which was associated with more than one third (38.2%. up from 24.3% in 2007/08) of the most frequently identified brands.

The Foster's group also contributed one third (33.3%, down from 40.9% in 2007/08) when counted as a proportion of the top brands. Other strong contributors included:

- Diageo (9.3%, down from 13.5% in 2007/08)
- Beam (Fortune Brands) (7.9%, down from 10.0% in 2007/08)
- Coopers (4.1%, up from 3.5% in 2007/08)
- Brown Forman (6.8%, up from 3.1% in 2007/08)
- Independent Distillers (2.7%, down from 4.6% in 2007/08)



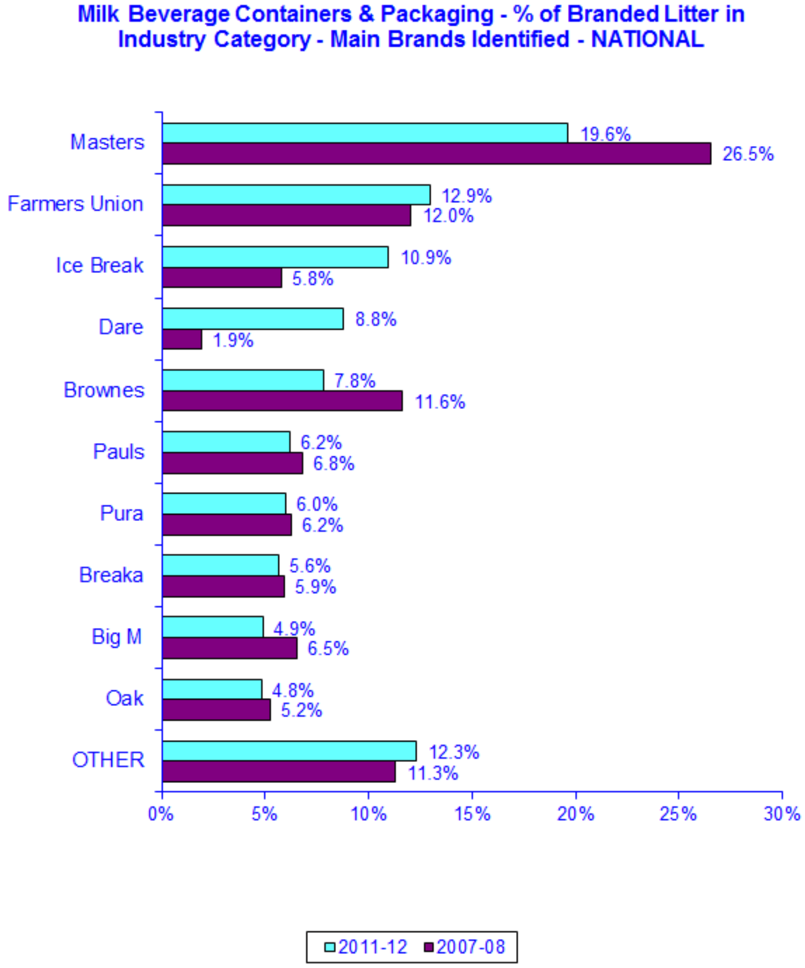
Milk Beverage Containers & Packaging

An average total of 568 branded litter items (down from 681 in 2007/08) were recorded within the milk beverage containers and packaging category for the year 2011/12.

Within this category, Masters milk was the strongest contributor to the litter stream, and this product made up 19.6% (down from 26.5% in 2007/08) of the total items counted. Farmers Union (12.9%, up from 12.0% in 2007/08) and Ice Break (10.9%, up from 5.8% in 2007/08) also represented a considerable proportion of the overall count.

Other frequently identified brands of milk beverage containers and packaging in the litter stream included:

- Dare (8.8%, up from 1.9% in 2007/08)
- Brownes (7.8%, down from 11.6% in 2007/08)
- Pauls (6.2%, down from 6.8% in 2007/08)
- Pura (6.0%, down from 6.2% in 2007/08)
- Breaka (5.6%, down from 5.9% in 2007/08)
- Big M (4.9%, down from 6.5% in 2007/08)
- Oak (4.8%, down from 5.2% in 207/08)



Prevalent milk beverage containers and packaging brands also included Dare not previously listed in 2007/08, while the Moove brand previously identified was now not as common in the litter stream.

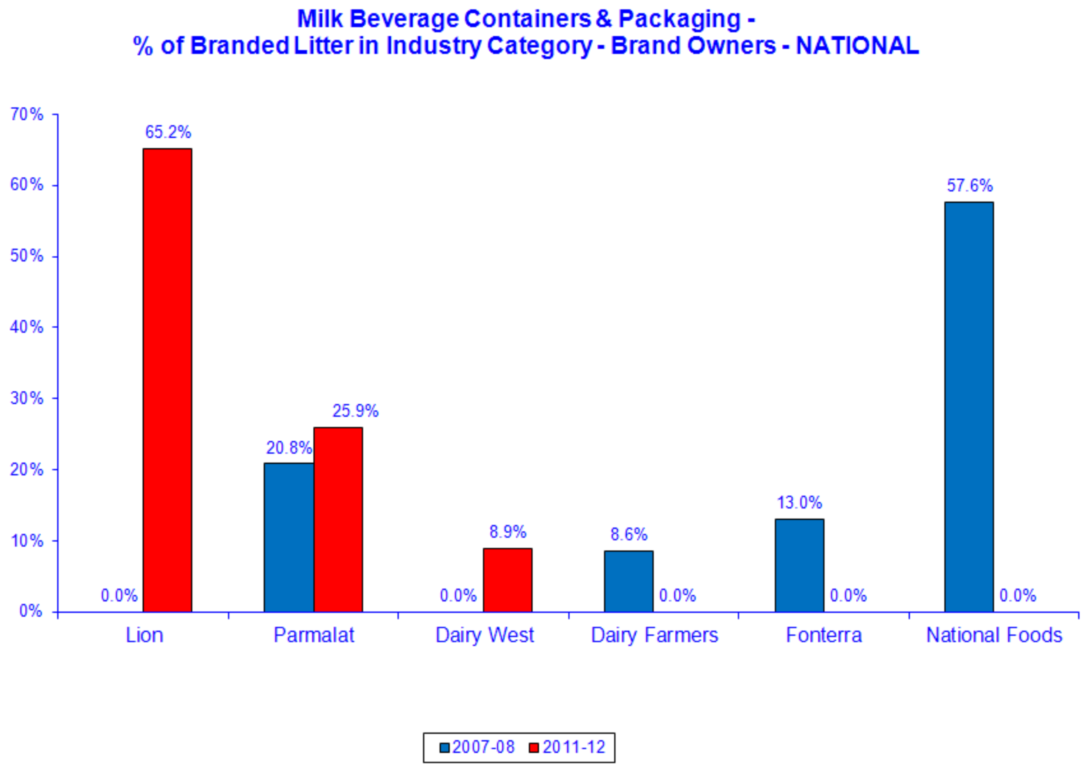
In recent years there have been several changes of the ownership of some of the dairy brands, including:

- Parmalat purchased Oak from Dairy Farmers in 2009, some of the Parmalat brands now include Breaka, Ice Break, Oak and Pauls.
- Fonterra sold Brownes to DairyWest
- Lion now has all the National Foods and Dairy Farmers brands under its banner, some of their dairy brands now include Pura, Dairy Farmers, Farmers Union, Big M, Berri, Dare, Masters and Moove.

Among the brands that made up at least 1.9% of the litter stream within this category, the largest proportion belonged to Lion which is now associated with almost two thirds (65.2%) of the most frequently identified brands.

Other companies that were associated with branded milk beverage containers and packaging in the litter stream when counted as a proportion of top brands included:

- Parmalat (25.9%, up from 20.8% in 2007/08)
- Dairy West (8.9%, up from nil in 2007/08)



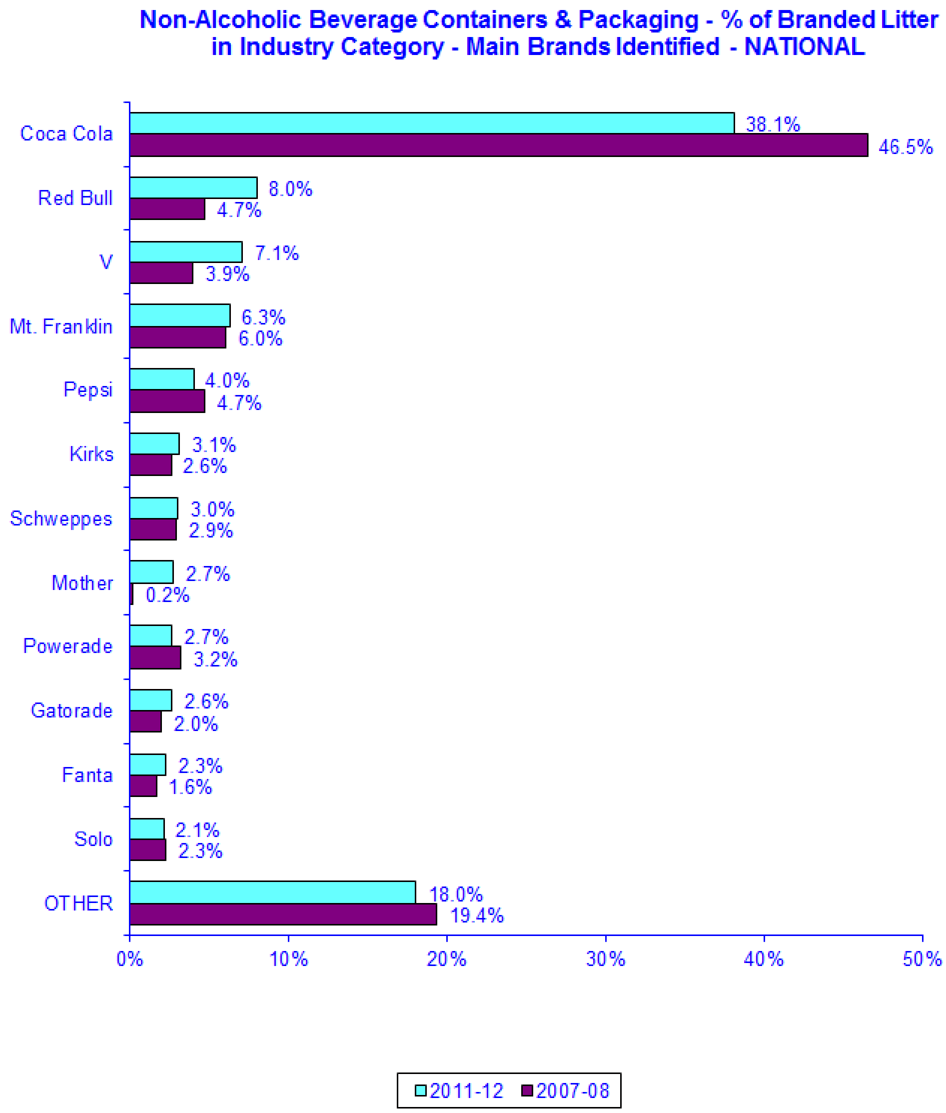
Non-Alcoholic Beverage Containers & Packaging

Across all sites surveyed nationally, a total average of 2,732 branded litter objects (up from 2,685 items in 2007/08) were counted within this category for the year 2007/08.

More than one third (38.1%, down from 46.5% in 2007/08) of all non-alcoholic beverage containers and packaging displayed the Coca Cola brand name. This brand was associated with more than four times the amount of litter that was attributed to any other brand within the category.

Other brands that contributed notable proportions of litter included:

- Red Bull (8.0%, up from 4.7% in 2007/08)
- V Energy Drink (7.1%, up from 3.9% in 2007/08)
- Mt. Franklin (6.3%, up from 6.0% in 2007/08)
- Pepsi (4.0%, down from 4.7% in 2007/08)
- Kirks (3.1%, up from 2.6% in 2007/08)
- Schweppes (3.0%, up from 2.9% in 2007/08)
- Mother (2.7%, up from 0.2% in 2007/08)
- Powerade (2.7%, down from 3.2% in 2007/08)
- Gatorade (2.6%, up from 2.0% in 2007/08)
- Fanta (2.3%, up from 1.6% in 2007/08)
- Solo (2.1%, down from 2.3% in 2007/08)

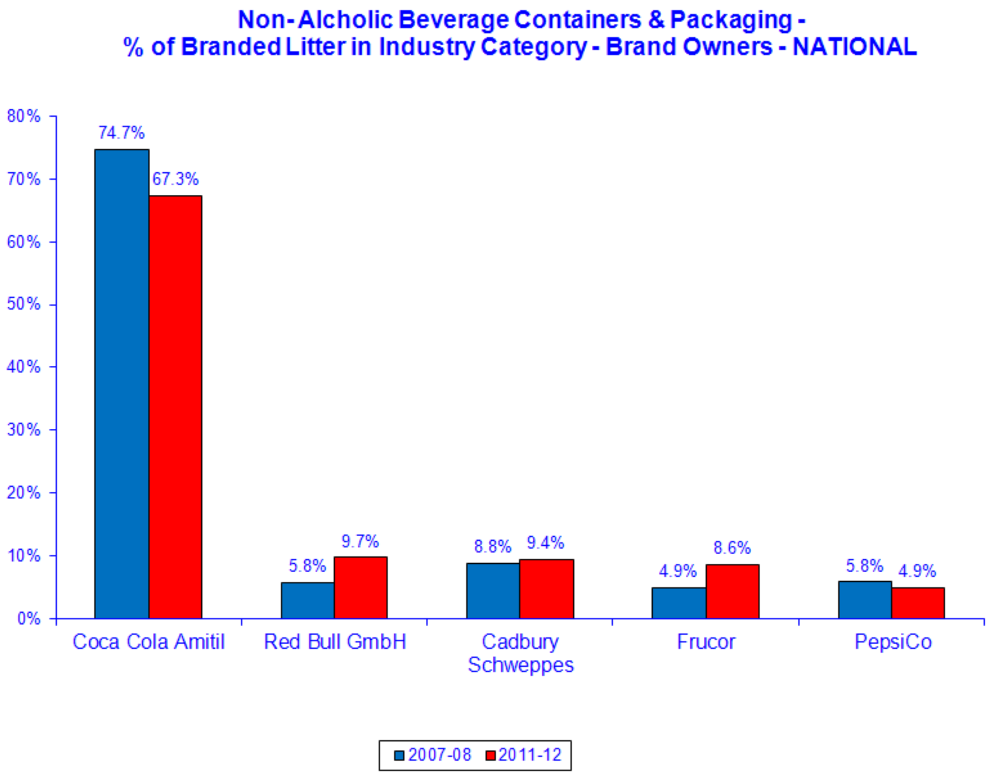


Prevalent non-alcoholic beverage containers and packaging brands also included Fanta and Mother not previously listed in 2007/08, while the Sprite brand previously identified was now not as common in the litter stream.

Among the brands that made up at least 1.9% of the litter stream in the non-alcoholic beverage containers and packaging category, Coca Cola Amatil was clearly the strongest contributor with more than two thirds (67.3%, down from 74.7% in 2007/08) of the litter in this category identified by its brands.

Other strong contributors of non-alcoholic beverage containers and packaging brands identified in the litter stream included:

- Red Bull GmbH (9.7%, up from 5.8% in 2007/08)
- Cadbury Schweppes (9.4%, up from 8.8% in 2007/08)
- Frucor (8.6%, up from 4.9% in 2007/08)
- PepsiCo (4.9%, down from 5.8% in 2007/08)



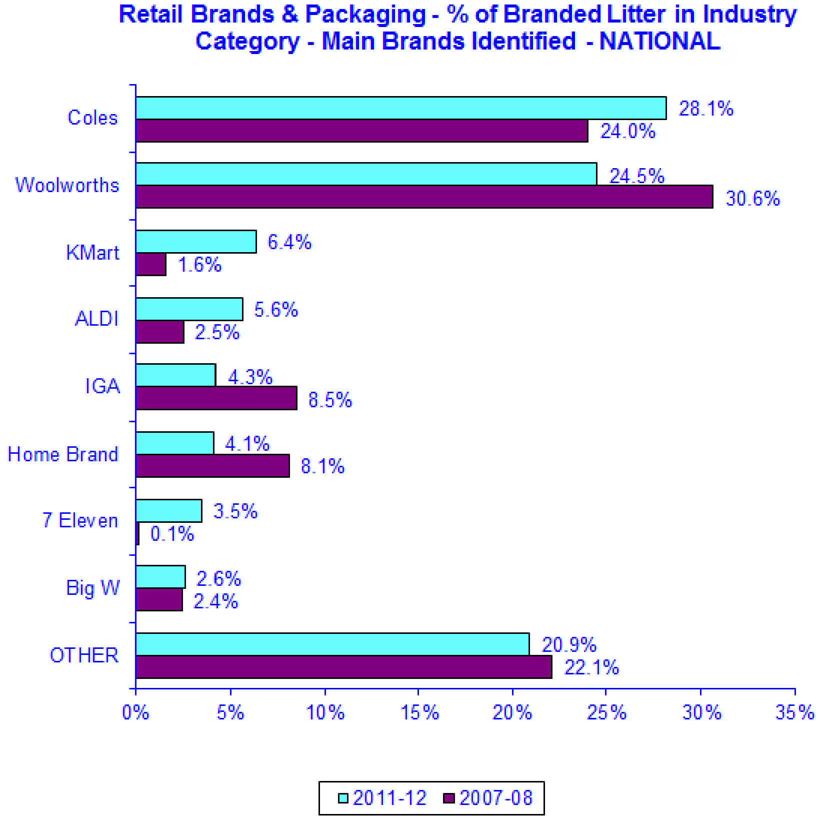
Retail Brands & Packaging

Across all sites surveyed nationally, a total average of 400 branded litter objects (down from 475 items in 2007/08) were counted within this category for the year 2011/12.

The most significant contributor to branded litter within this domain was Coles which was associated with 28.1% (up from 24.0% in 2007/08) of all retail brands and packaging. Woolworths also made a significant contribution and was associated with 24.5% (down from 30.6% in 2007/08) of retail brands and packaging litter.

Other brands that contributed a notable proportion of litter within this category included:

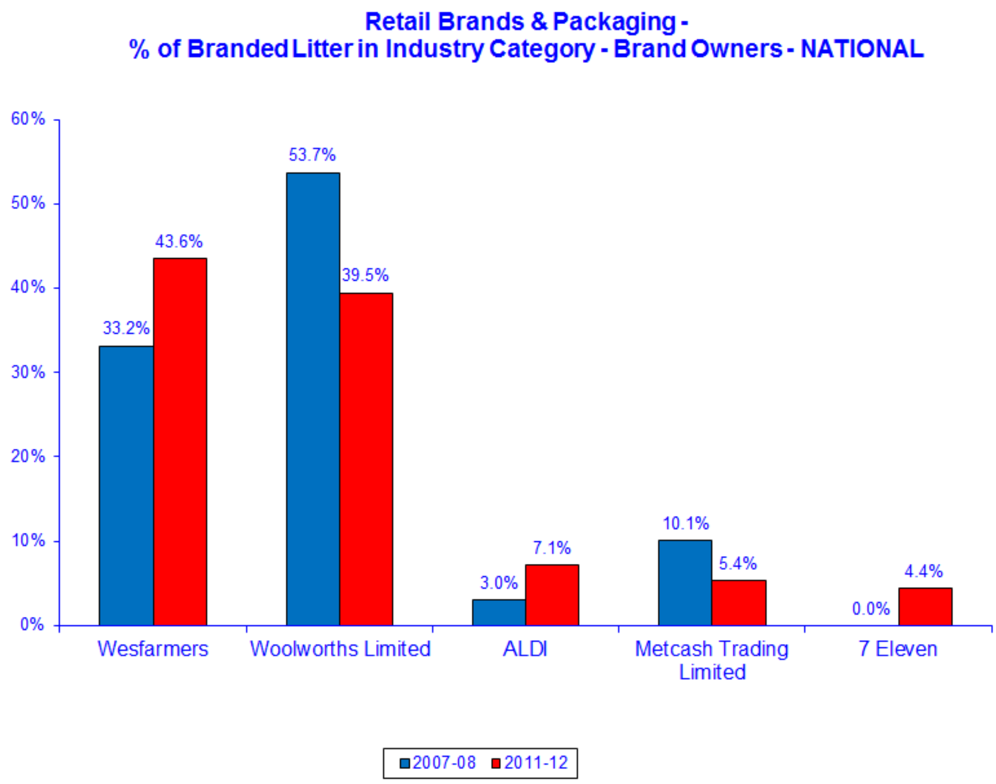
- Kmart (6.4%, up from 1.6% in 2007/08)
- ALDI (5.6%, up from 2.5% in 2007/08)
- IGA (4.3%, down from 8.5% in 2007/08)
- Home Brand (4.1%, down from 8.1% in 2007/08)
- 7 Eleven (3.5%, up from 0.1% in 2007/08)
- Big W (2.6%, up from 2.4% in 2007/08)



Prevalent retail brands and packaging brands also included 7 Eleven and Kmart not previously listed in 2007/08, while brands previously identified and now not as common in the litter stream were Bi-Lo and Safeway.

Among the brands that made up at least 1.9% of the litter stream within the retail brands and packaging category, the largest proportion of brands belonged to Wesfarmers (43.6%, up from 33.2% in 2007/08). Other strong contributors of retail brands and packaging identified in the litter stream included:

- Woolworths (39.5%, down from 53.7% in 2007/08)
- ALDI (7.1%, up from 3.0% in 2007/08)
- Metcash (5.4%, down from 10.1% in 2007/08)
- 7 Eleven (4.4%, up from nil in 2007/08)



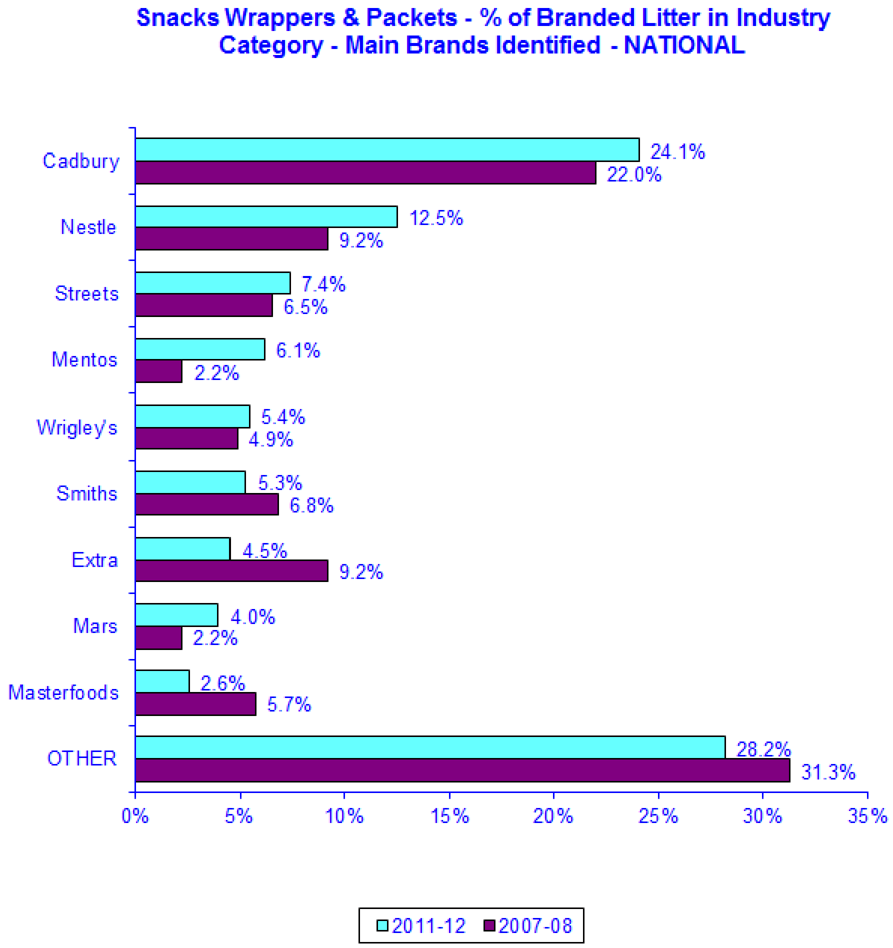
Snacks Wrappers & Packets

Across all sites surveyed nationally, a total average of 1,776 branded litter objects (down from 2,138 items in 2007/08) were counted within the snacks wrappers and packets category.

The most significant contributor to branded litter within this domain was Cadbury, which was associated with 24.1% (up from 22.0% in 2007/08) of all snacks, wrappers and packets. Nestle (12.5%, up from 9.2% in 2007/08) also contributed significantly, while a further 31.3% of branded litter in this category was associated with other objects which did not register significant frequencies.

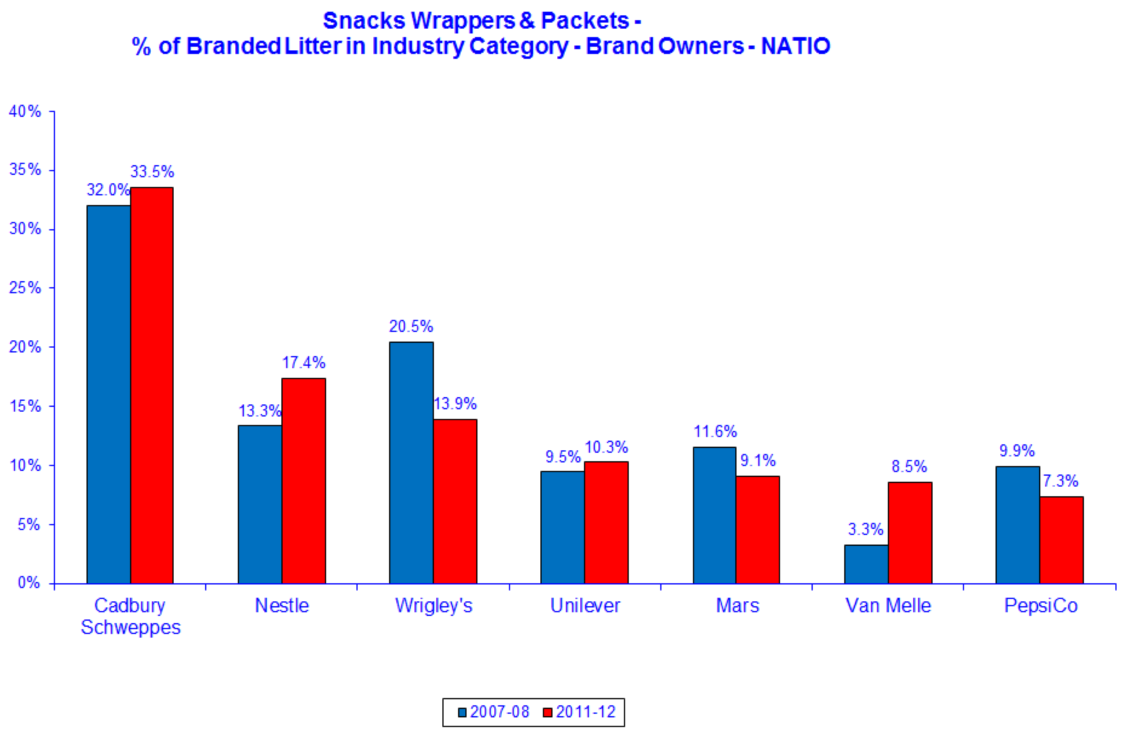
Other brands associated with notable proportions of litter included:

- Streets (7.4%, up from 6.5% in 2007/08)
- Mentos (6.1%, up from 2.2% in 2007/08)
- Wrigley's (5.4%, up from 4.9% in 2007/08)
- Smiths (5.3%, down from 6.8% in 2007/08)
- Extra (4.5%, down from 9.2% in 2007/08)
- Mars (4.0%, up from 2.2% in 2007/08)
- Masterfoods (2.6%, down from 5.7% in 2007/08)



Cadbury Schweppes owned one third (33.5%, up from 32.0% in 2007/08) of brands that made up at least 1.9% of the litter stream in the snacks wrappers and packaging category. Other companies that strongly contributed to branded litter in this category included:

- Nestle (17.4%, up from 13.3% in 2007/08)
- Wrigley's (13.9%, down from 20.5% in 2007/08)
- Unilever (10.3%, up from 9.5% in 2007/08)
- Mars (9.1%, down from 11.6% in 2007/08)
- Van Melle(8.5%, up from 3.3% in 2007/08)
- Pepsico (7.3%, down from 9.9% in 2007/08)



Take-away Food & Drink Containers & Packaging

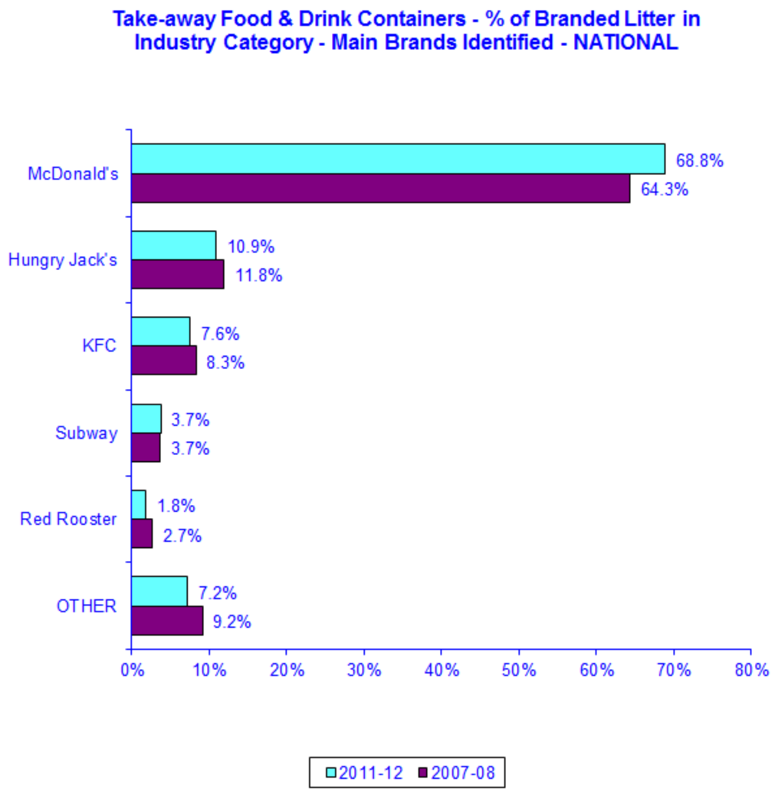
An average total of 1,961 branded litter items (up from 1,921 items in 2007/08) were recorded within the take-away food and drink containers and packaging category for the year 2011/12.

Within this category, McDonald's was clearly the strongest contributor to the litter stream, and this brand made up more than two thirds (68.8%, up from 64.3% in 2007/08) of the total items counted.

Other brands that contributed a notable proportion of litter within this category included:

- Hungry Jack's (10.9%, down from 11.8% in 2007/08)
- KFC (7.6%, down from 8.3% in 2007/08)
- Subway (3.7%, unchanged from 2007/08)
- Red Roster (1.8%, down from 2.7% in 2007/08)

*Note – No brand owner summary is presented in this category because there is no joint ownership among the most prevalent brands..



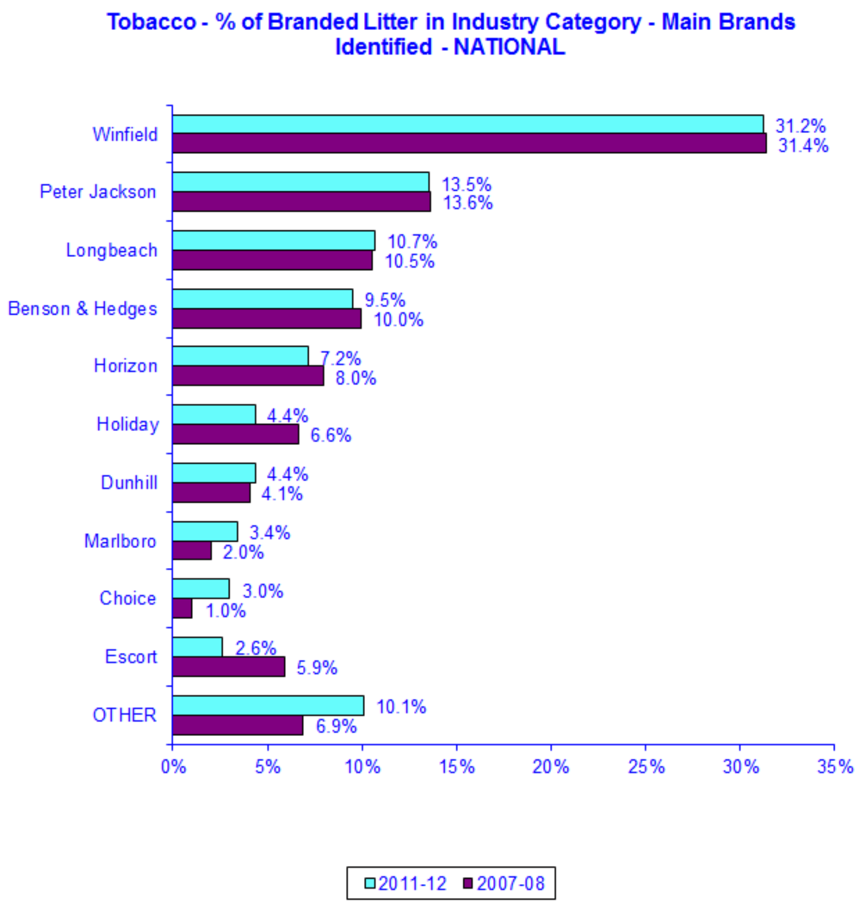
Tobacco

Across all sites surveyed, an average of 913 branded litter objects (down from 1,276 items in 2007/08) were counted within the tobacco products category.

The most significant contributor to branded litter within this domain was Winfield, associated with 31.2% (down from 31.4% in 2007/08) of all tobacco products. Other frequently identified brands included:

- Peter Jackson (13.5%, down from 13.6% in 2007/08)

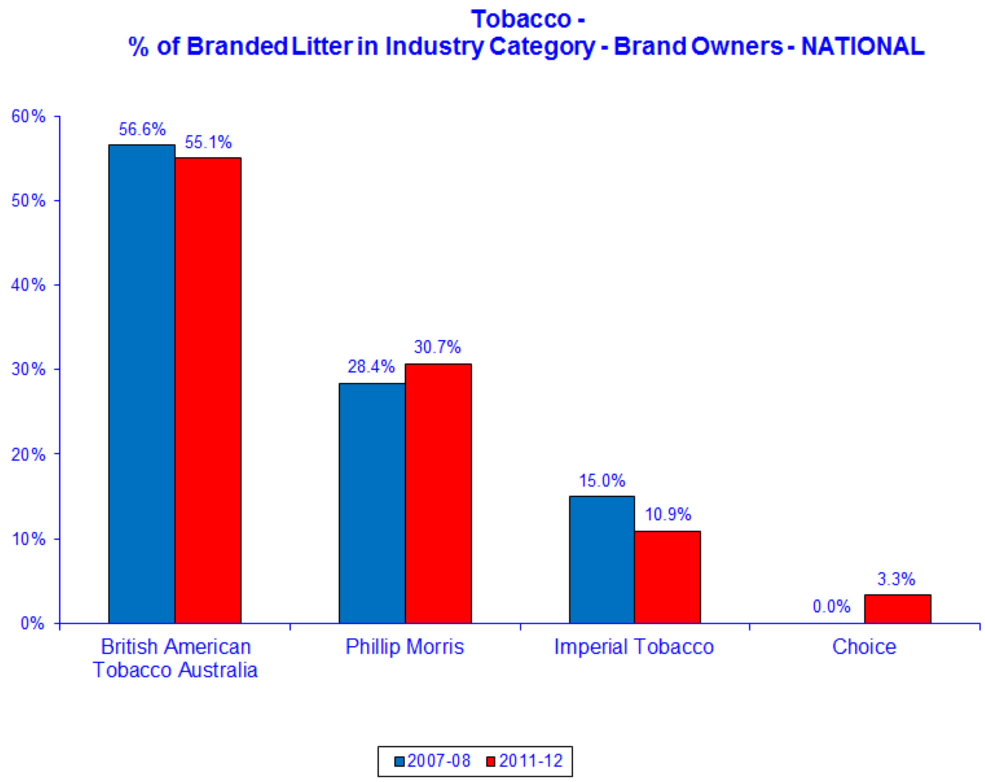
- Longbeach (10.7%, up from 10.5% in 2007/08)
- Benson & Hedges (9.5%, down from 10.0% in 2007/08)
- Horizon (7.2%, down from 8.0% in 2007/08)
- Holiday (4.4%, down from 6.6% in 2007/08)
- Dunhill (4.4%, up from 4.1% in 2007/08)
- Marlboro (3.4%, up from 2.0% in 2007/08)
- Choice (3.0%, up from 1.0% in 2007/08)
- Escort (2.6%, down from 5.9% in 2007/08)



Among the brands that made up at least 1.9% of the litter stream within the tobacco category, the largest proportion belonged to British American Tobacco Australia. This organisation was associated with more than half (55.1%, down from 56.6% in 2007/08) of the most frequently identified brand names. Other companies that strongly contributed to branded litter in this category included:

- Phillip Morris (30.7%, up from 28.4% in 2007/08)

- Imperial Tobacco (10.9%, down from 15.0% in 2007/08)
- Choice (3.3%, up from nil in 2007/08)



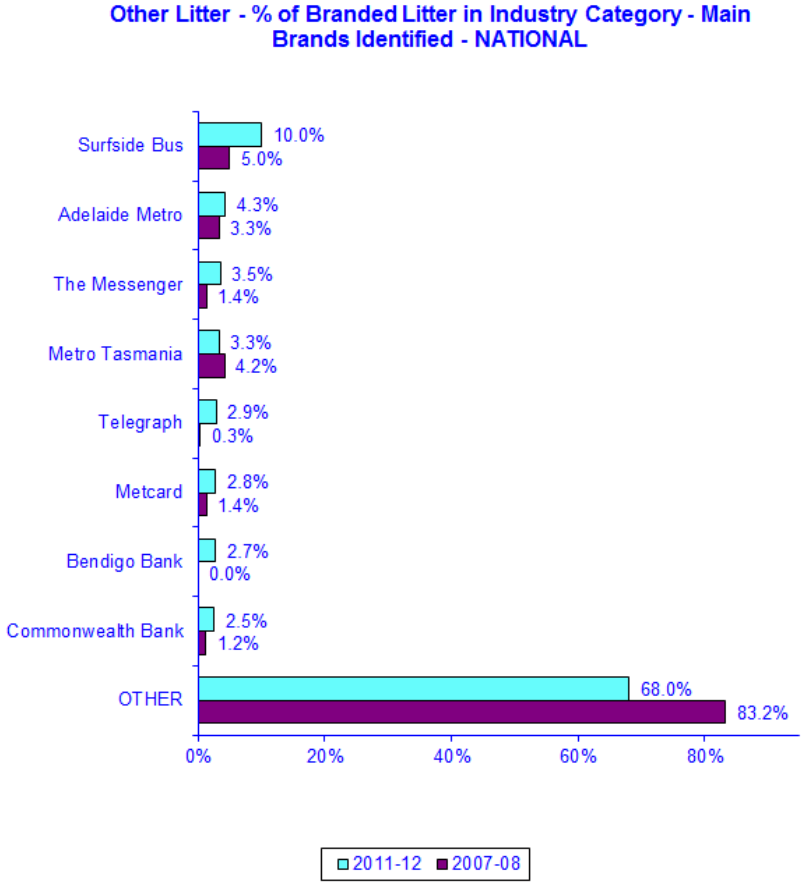
Other Litter

An average total of 500 items (down from 922 items in 2007/08) were recorded within the other litter category for the year 2011/12. The majority (68%) of these branded litter objects were associated with a very broad range of brands which were not recorded with significant frequencies.

Noteworthy contributors to branded litter objects within this category were predominantly state transport authorities and banks. This is primarily due to the identification of bus tickets and bank ATM receipts found during litter counts across November 2011 and May 2012. Specific brands which contributed strongly to this litter stream included:

- Surfside Bus (10%, up from 5% in 2007/08)
- Adelaide Metro (4.3%, up from 3.3% in 2007/08)
- The Messenger (3.5%, up from 0.3% in 2007/08)
- Metro Tasmania (3.2%, down from 4.2% in 2007/08)

- Telegraph (2.9%, up from 1.4% in 2007/08)
- Metcard (2.8%, up from 1.4% in 2007/08)
- Bendigo Bank (2.7%, up from nil in 2007/08)
- Commonwealth Bank (2.5%, up from 1.2% in 2007/08)



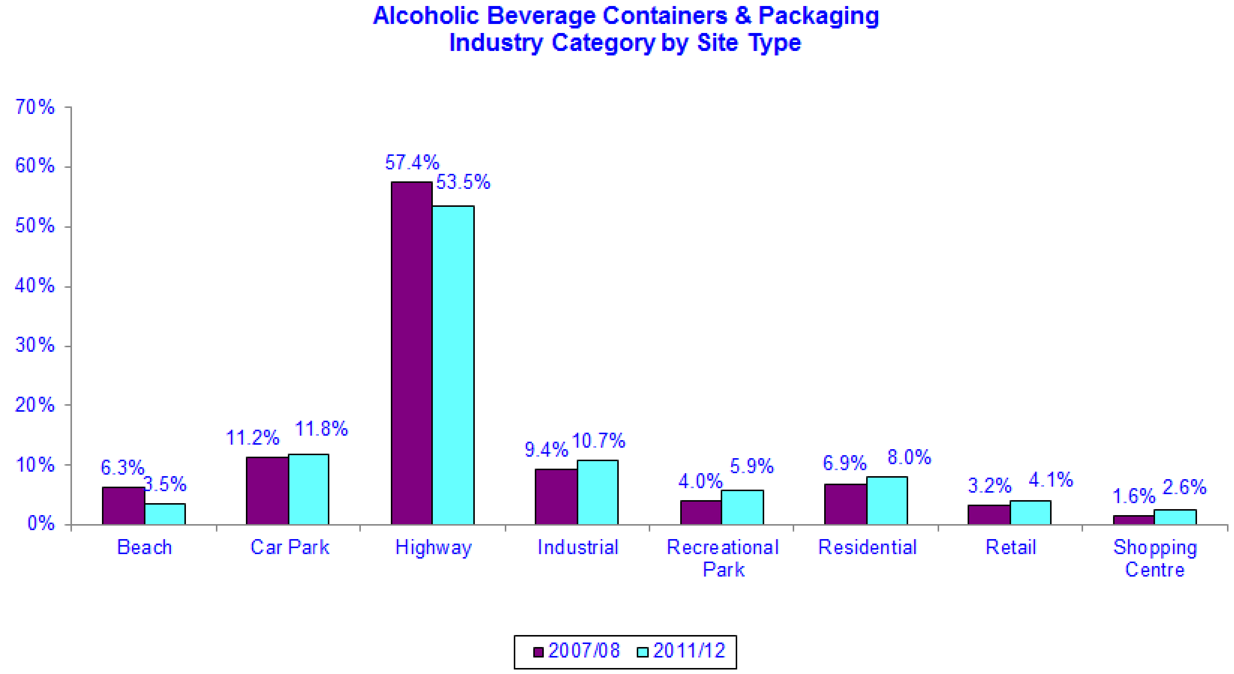
Prevalent branded other items also included Bendigo Bank, Commonwealth Bank, Metcard, Telegraph and the Messenger not previously listed in 2007/08, while brands previously identified and now not as common in the litter stream were Action Buses, Darwin Buses, National Australia Bank., TAB and Westpac.

Industry Category by Site Type

Alcoholic Beverage Containers & Packaging

Highway locations were associated nationally with the more than half (53.5%, down from 57.4% in 2007/08) of the branded alcoholic beverage containers and packaging recorded in the litter stream in 2011/12. The contribution of branded alcoholic beverage containers and packaging by other site types included:

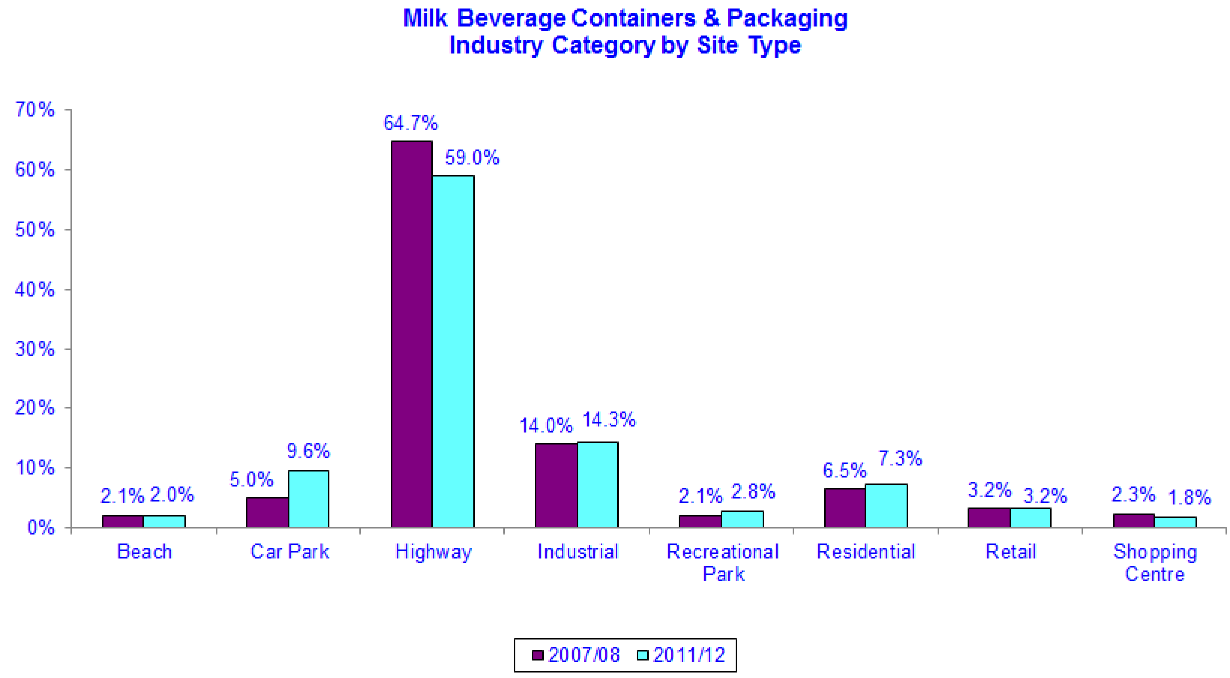
- Car parks (11.8%, up from 11.2% in 2007/08)
- Industrial sites (10.7%, up from 9.4% in 2007/08)
- Residential sites (8.0%, up from 6.9% in 2007/08)
- Recreational parks (5.9%, up from 4.0% in 2007/08)
- Retail strips (4.1%, up from 3.2% in 2007/08)
- Beaches (3.5%, down from 6.3% in 2007/08)
- Shopping Centres (2.6%, up from 1.6% in 2007/08)



Milk Beverage Containers & Packaging

Almost three fifths (59.0%, down from 64.7% in 2007/08) of branded milk beverage containers and packaging were recorded in the litter stream at highway sites across Australia in 2011/12. Branded milk beverage containers and packaging contributions by other site types included:

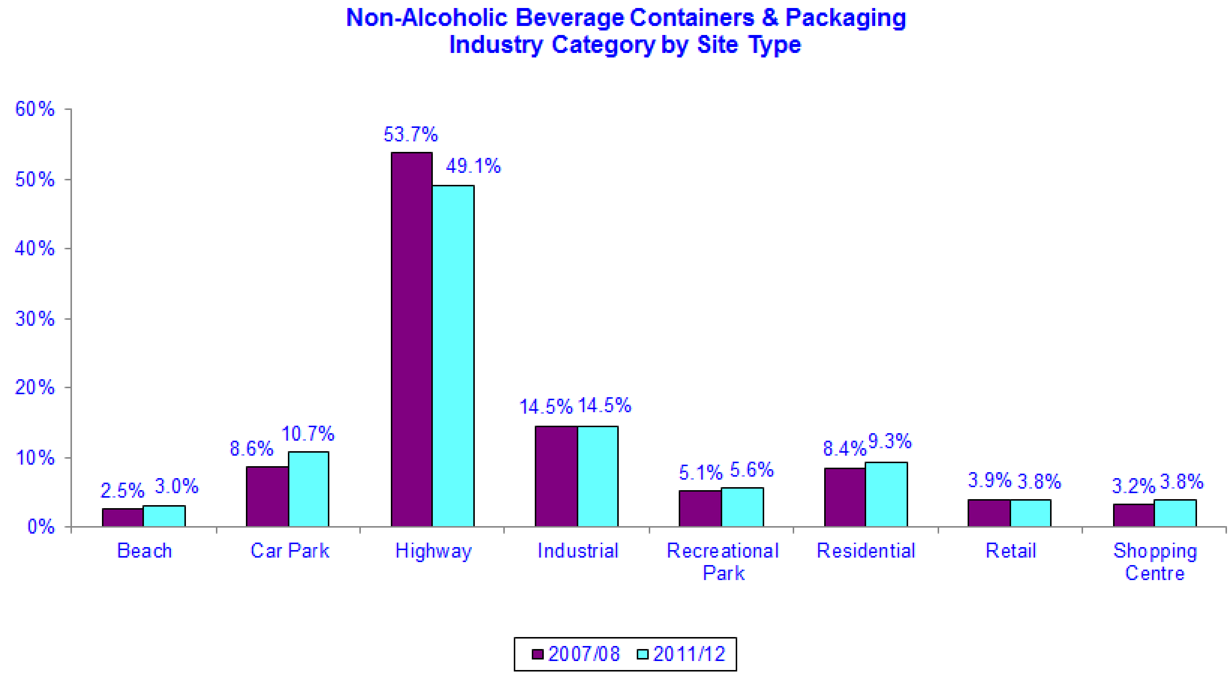
- Industrial sites (14.3%, up from 14.0% in 2007/08)
- Car parks (9.6%, up from 5% in 2007/08)
- Residential sites (7.3%, up from 6.5% in 2007/08)
- Retail strips (3.2%, unchanged from 2007/08)
- Recreational parks (2.8%, down from 2.1% in 2007/08)
- Beaches (2.0%, down from 2.1% in 2007/08)
- Shopping Centres (1.8%, down from 2.3% in 2007/08)



Non-Alcoholic Beverage Containers & Packaging

Almost half (49.1%, down from 53.7% in 2007/08) of the branded non-alcoholic beverage containers and packaging in the litter stream nationally were recorded at highway sites in 2011/12. The contribution of branded non-alcoholic beverage containers and packaging by other site types included:

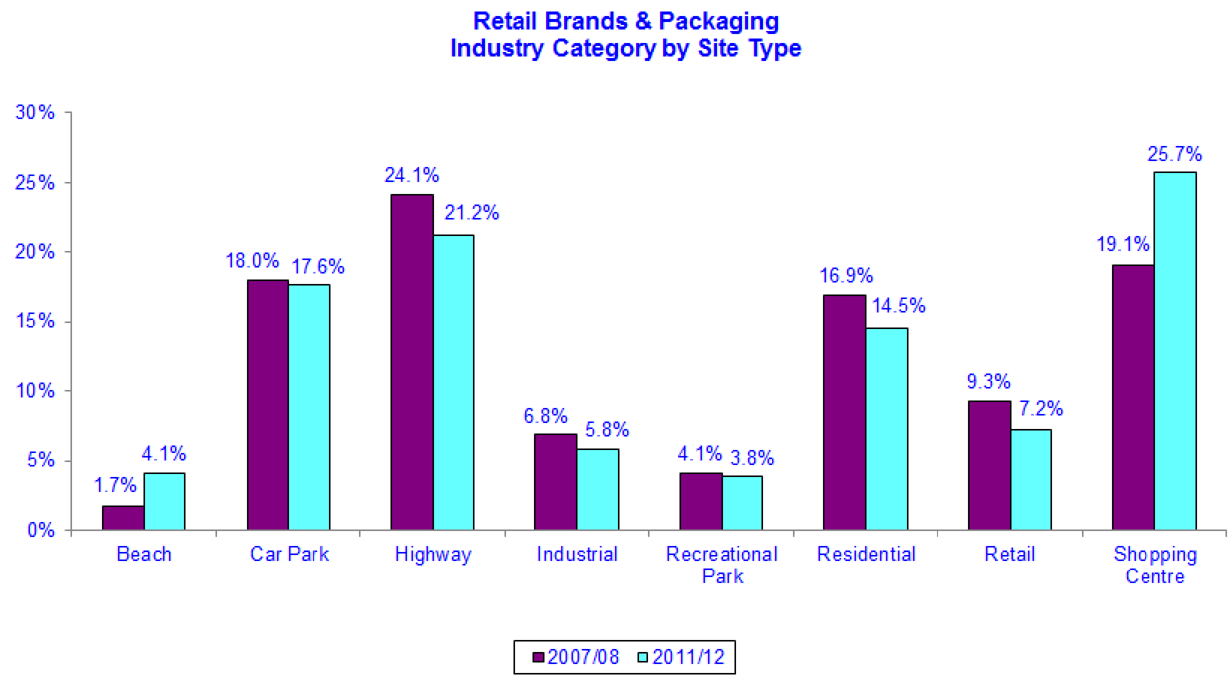
- Industrial sites (14.5%, unchanged from 2007/08)
- Car parks (10.7%, up from 8.6% in 2007/08)
- Residential sites (9.3%, up from 8.4% in 2007/08)
- Recreational parks (5.6%, up from 5.1% in 2007/08)
- Retail strips (3.8%, down from 3.9% in 2007/08)
- Shopping centres (3.8%, up from 3.2% in 2007/08)
- Beaches (3.0%, up from 2.5% in 2007/08)



Retail Brands & Packaging

Shopping centres (25.7%, up from 19.1% in 2007/08) and highway sites (21.2%, down from 24.1% in 2007/08) were associated with greater proportions of the retail brands and packaging recorded in the litter stream across Australia in 2011/12. Contributions by other site types included:

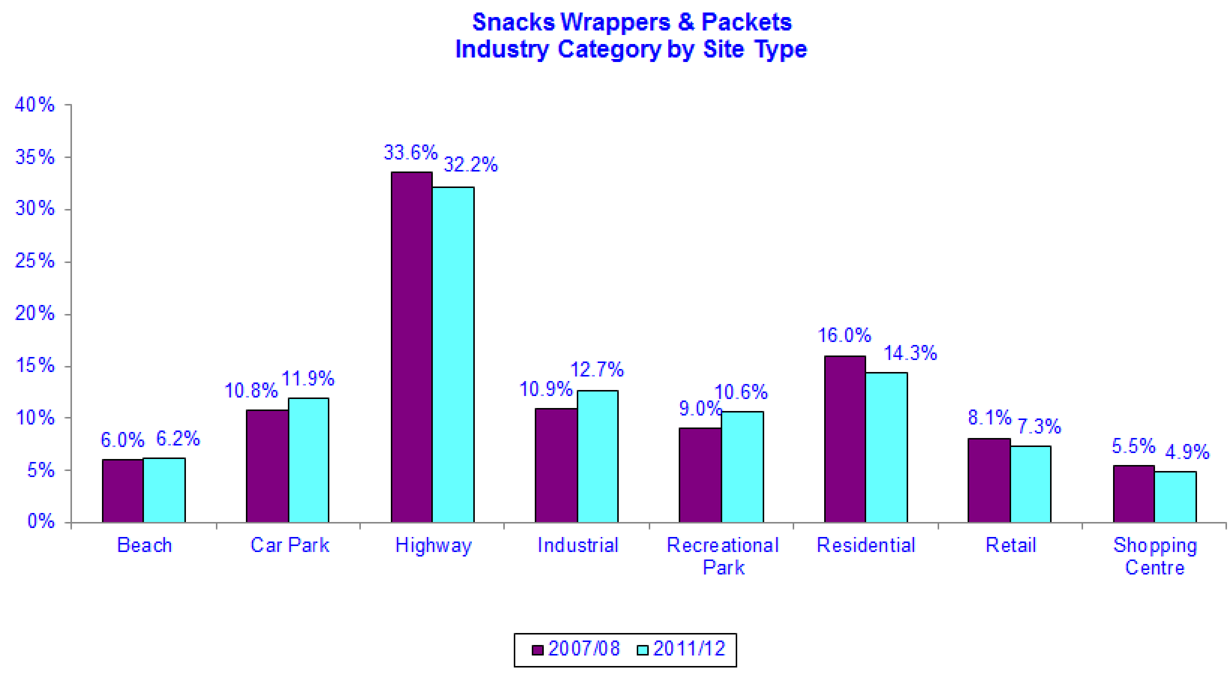
- Car parks (17.6%, down from 18.0% in 2007/08)
- Residential sites (14.5%, down from 16.9% in 2007/08)
- Retail strips (7.2%, down from 9.3% in 2007/08)
- Industrial sites (5.8%, down from 6.8% in 2007/08)
- Beaches (4.1%, up from 1.7% in 2007/08)
- Recreational parks (3.8%, down from 4.1% in 2007/08)



Snacks Wrappers & Packets

Highway locations across Australia were associated with almost one third (32.2%, down from 33.6% in 2007/08) of the branded snacks wrappers and packets recorded in the litter stream in 2011/12. The contribution of branded snacks wrappers and packets by other site types included:

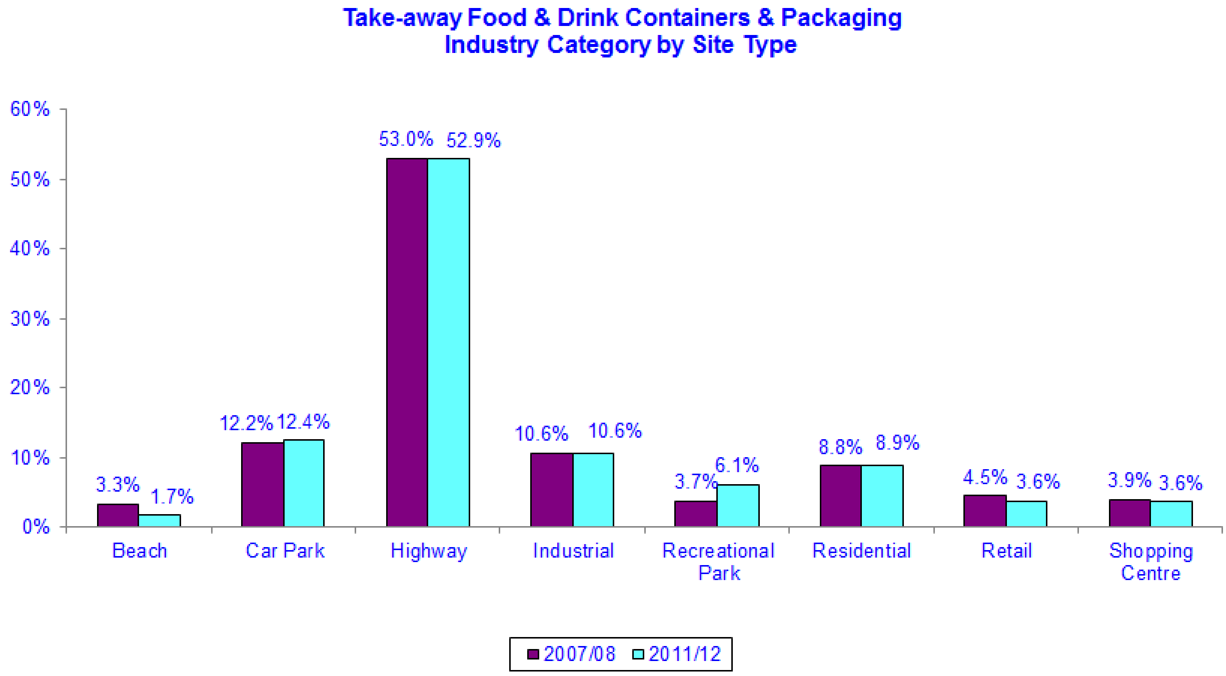
- Residential sites (14.3%, down from 16.0% in 2007/08)
- Industrial sites (12.7%, up from 10.9% in 2007/08)
- Car parks (11.9%, up from 10.8% in 2007/08)
- Recreational parks (10.6%, up from 9.0% in 2007/08)
- Retail strips (7.3%, down from 8.1% in 2007/08)
- Beaches (6.2%, up from 6.0% in 2007/08)
- Shopping centres (4.9%, down from 5.5% in 2007/08)



Take-Away Food & Drink Containers & Packaging

More than half (52.9%, down from 53.0% in 2007/08) of the branded take-away food and drink containers and packaging in the litter stream nationally were recorded at highway sites in 2011/12. The contribution of branded take-away food and drink containers and packaging by other site types included:

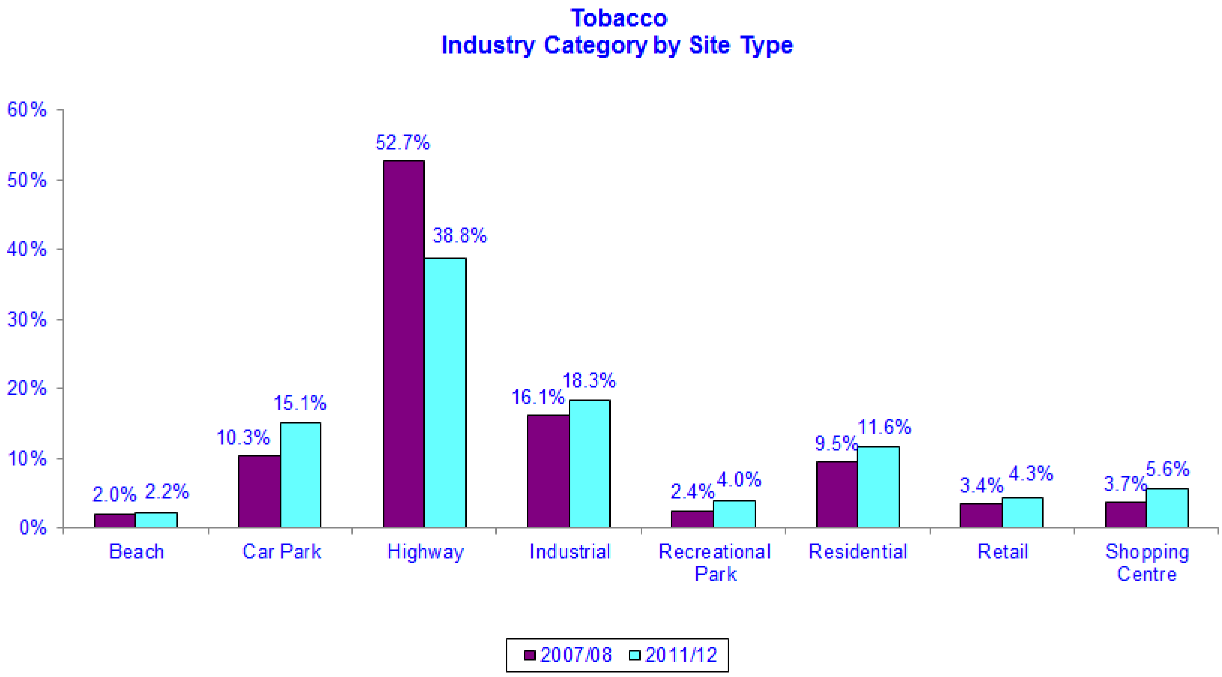
- Car parks (12.4%, up from 12.2% in 2007/08)
- Industrial sites (10.6%, unchanged from 2007/08)
- Residential sites (8.9%, up from 8.8% in 2007/08)
- Beaches (1.7%, down from 3.3% in 2007/08)
- Recreational parks (6.1%, up from 3.7% in 2007/08)
- Retail strips (3.6%, down from 4.5% in 2007/08)
- Shopping centres (3.6%, down from 3.9% in 2007/08)



Tobacco

More than one third (38.8%, down from 52.7% in 2007/08) of the branded tobacco items in the litter stream across Australia were recorded at highway sites in 2011/12. The contribution of branded tobacco items by other site types included:

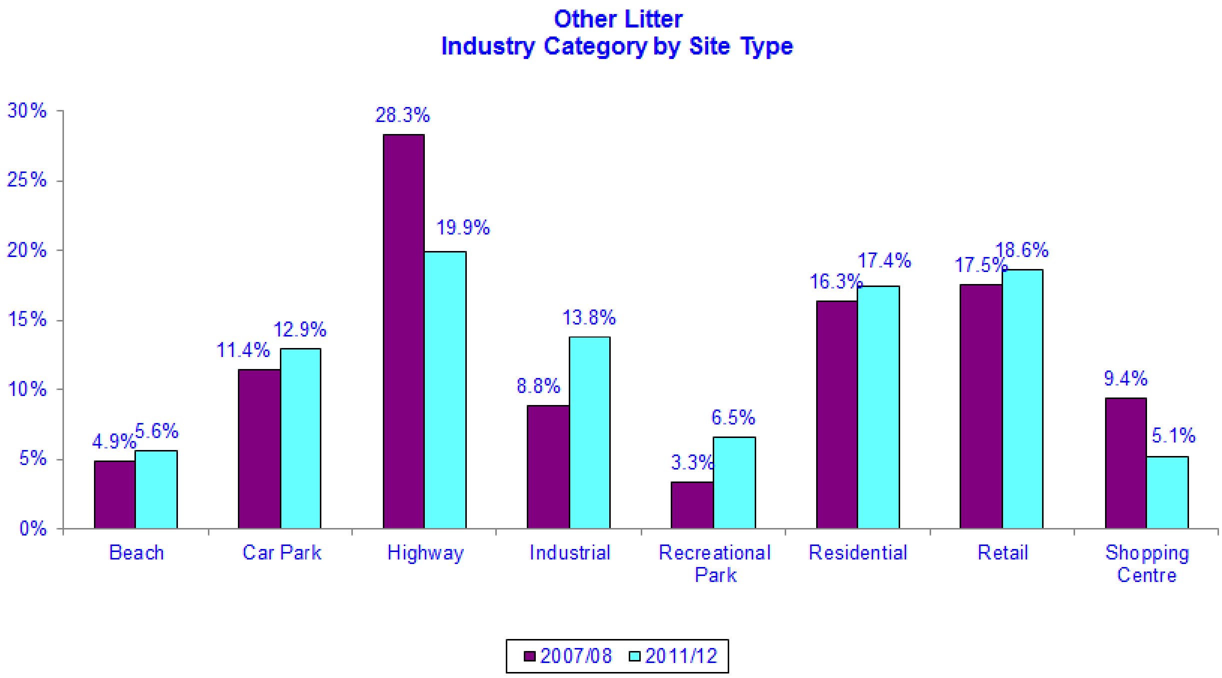
- Industrial sites (18.3%, up from 16.1% in 2007/08)
- Car parks (15.1%, up from 10.3% in 2007/08)
- Residential sites (11.6%, up from 9.6% in 2007/08)
- Shopping centres (5.6%, up from 3.7% in 2007/08)
- Retails strips (4.3%, up from 3.4% in 2007/08)
- Recreational parks (4.0%, up from 2.4% in 2007/08)
- Beaches (2.2%, down from 2.0% in 2007/08)



Other Litter

Other branded litter items were more evenly distributed across site types within Australia compared to other branded categories. Greater proportions of other branded litter items were associated with highways (19.9%, down from 28.3% in 2007/08, retail strips (18.6%, up from 17.5% in 2007/08) and residential sites (17.4%, up from 16.3% in 2007/08). There were smaller but notable contributions of other branded litter from the remaining site types:

- Beaches (5.6%, up from 4.9% in 2007/08)
- Car parks (12.9%, up from 11.4% in 2007/08)
- Industrial sites (13.8%, up from 8.8% in 2007/08)
- Recreational parks (6.5%, up from 3.3% in 2007/08)
- Shopping centres (9.4%, up from 5.1% in 2007/08)



Percentage Contribution by Material Categories – All Brands

When partitioned according to material category distinctions, paper/ paperboard contributed more than one third (35.7%, down from 39.0% in 2007/08) of all items in the branded litter stream across Australia in 2011/12. The branded litter contributed by the other material categories included:

- Plastic (33.7%, up from 31.3% in 2007/08)
- Metal (22.1%, up from 20.4% in 2007/08)
- Glass (8.1%, down from 8.8% in 2007/08)
- Miscellaneous (0.5%, down from 0.5% in 2007/08)