Technical Memorandum – 2017 Yellowhead Trail Litter Audit: Branded Litter Results

Prepared for

The City of Edmonton

Prepared by

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Technical Memorandum: City of Edmonton Yellowhead Trail Branded Litter Results

Submitted below is the technical memorandum for the branded litter results for the 2017 Yellowhead Trail Litter audits that were completed for the City of Edmonton. The City contracted AET Group Inc. to conduct litter audits at 20 pre-selected locations on the Yellowhead Trail. The audits took place from May 30 through May 31, 2017 with the purpose of assessing the composition, brand and amount of litter that was present on Edmonton streets. The type of litter was classified into two size categories: large litter, which is equal to or larger than four square inches, and small litter, which is smaller than four square inches.

Branded litter was recorded for all large litter with a brand associated with it. These results were recorded on the large litter survey forms.

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1.0 INTRODUCTION

1.1 Background

The City of Edmonton contracted AET Group Inc. (AET) to conduct litter audits at 20 pre-selected locations on the Yellowhead Trail between 107 Street NW and the Beverly Bridge. The audits took place from May 30 through May 31, 2017 with the purpose of assessing the composition and amount of litter that was present on the Yellowhead Trail. The type of litter was classified into two size categories: large litter, which is equal to or larger than four square inches, and small litter, which is smaller than four square inches.

The methodology used in the 2017 Yellowhead litter audit was the same methodology used in previous audits, with the addition of branded litter and small litter assessment.

2.0 METHODOLOGY

2.1 Large Litter and Branded Litter Data Collection

After the site was measured and information about the site was recorded, an AET staff member completed the Large Items and Branded Litter Count form. After two passes of the site were completed, information about the type and brands of litter (where applicable) present within the study area were recorded. This data was then transferred to an Excel worksheet. In the worksheet, the total amount of large litter at each site was calculated as the average of the two passes. Branded litter data can be found in Appendix A.

3.0 RESULTS

While completing the large litter audits on the Yellowhead Trail, the auditor recorded the brand name of any item where brand was visible. In 2017, a total of 614.5 items were identified as a part of the regular litter audit; of these items 144 had a brand name associated with it.

In total, 59 different brands of litter were identified. Further analysis was completed on the branded litter to determine which brands were business brands and which were product brands. Business brands are large litter items that can be identified as a purchased good or service from a business such as Tim Horton's or McDonald's Restaurants. Product brands are large litter items that can be purchased at several locations such as Nature Valley products or Nestle products. Figure 3.1 and 3.2 bellow illustrates the differences between business branded litter and product branded litter. Of the 59 different brands 15 were determined to be business brands which account for 25.42% of the number of brands identified, and 44 product brands were identified which account for 74.58% of the brands identified. Business brands only account for 25.42% of the number of brands identified, but they account for 52.08% of the overall large



litter items identified. The top two business brands found include Tim Horton's and McDonald's. These two food service businesses have remained the top two within Edmonton's city wide litter audit since 2015. Food service packaging brands add up when littered because a simple disposable coffee cup contains a cup, a lid and sometimes a sleeve. A cold drink cup would contain a cup, a lid and a straw.

Figure 3.1 Number of Business Brands vs. Product Brands

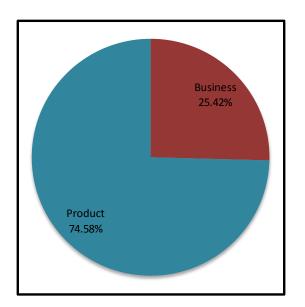


Figure 3.2 Total Amount of Business Branded Litter Items vs. Product Branded Litter Items

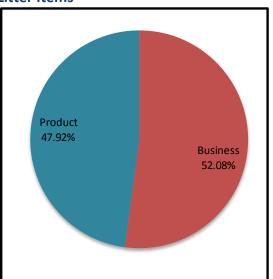


Table 3.1 illustrates the brands that were identified most frequently on the Yellowhead Trail. The most prevalent brand identified was Tim Horton's, with 39 items counted (27.08% of all of the branded litter items found). McDonald's was the second most common brand identified, with 17 items counted (11.81% of all of the branded litter items found). The brand with the next largest contribution was Health Canada with 9 items recorded, representing 6.25% of the branded litter found. The items identified as Health Canada originate from cigarette packages and are identified as a paper insert warning card. Within the top ten brands, five brands originate from the food service businesses and three brands originate from tobacco products. The top 3 brand name items were the same on both the City wide litter audit and the Yellowhead Trail audit. All of the brand names observed and recorded can be found in Appendix A.



Table 3.1 Brand Name Large Litter Results Yellowhead Trail 2017

#	Brand Name	Total	Percent	Brand Type
1	Tim Horton's	39	27.08%	Business
2	McDonald's	17	11.81%	Business
3	Health Canada	9	6.25%	Product
4	7-Eleven	6	4.17%	Business
5	Nature Valley	3	2.08%	Product
6	Nestle	3	2.08%	Product
7	Pepsi	3	2.08%	Product
8	Ultra	3	2.08%	Product
9	A&W	2	1.39%	Business
10	Canadian Classic	2	1.39%	Product

4.0 CONCLUSIONS

While completing the Large Litter audit on the Yellowhead Trail, the brand name of items was recorded when visible. The key findings include:

- Tim Horton's and McDonald's items were most common, representing 27.08% and 11.81% of all the branded litter that was recorded; and,
- 59 different brands of litter were observed across the 20 Yellowhead Trail sites.



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Disclaimer

AET Group Inc. makes no warranty and assumes no liability for the information contained in this report outlining the litter audit results. These results reflect measurements made over a onetime "snapshot" time period, meaning they only represent the conditions for the period of time in which they were collected. Seasonal variability, holidays and weather, among other factors, can affect the amount of litter within an area.

APPENDIX A

BRANDED LITTER DATA

#	Brand Name	Total	Percent	Brand Type
1	Tim Horton's	39	27.08%	Business
2	McDonald's	17	11.81%	Business
3	Health Canada	9	6.25%	Product
4	7-Eleven	6	4.17%	Business
5	Nature Valley	3	2.08%	Product
6	Nestle	3	2.08%	Product
7	Pepsi	3	2.08%	Product
8	Ultra	3	2.08%	Product
9	A&W	2	1.39%	Business
10	Canadian Classic	2	1.39%	Product
11	Dairy Milk	2	1.39%	Product
12	Great Value	2	1.39%	Product
13	Jolly Rancher	2	1.39%	Product
14	Mr. Freeze	2	1.39%	Product
15	Old Dutch	2	1.39%	Product
16	Pall Mall	2	1.39%	Product
17	Van Houtte	2	1.39%	Product
18	Work Armour	2	1.39%	Product
19	Accord	1	0.69%	Product
20	Big Chief	1	0.69%	Product
21	Brew House	1	0.69%	Business
22	Burger King	1	0.69%	Business
23	Cadbury	1	0.69%	Product
24	Canada Dry	1	0.69%	Product
25	Canadian Tire	1	0.69%	Business
26	Cling Wrap	1	0.69%	Product
27	Compliments	1	0.69%	Product
28	Cool Whip	1	0.69%	Product
29	Corn Nuts	1	0.69%	Product
30	Danone	1	0.69%	Product
31	DuMaurier	1	0.69%	Product
32	Elimitaste	1	0.69%	Product
33	Exact	1	0.69%	Product
34	Excel	1	0.69%	Product
35	Export A	1	0.69%	Product
36	Frito Lay	1	0.69%	Product
37	Hershey's	1	0.69%	Product
38	KFC	1	0.69%	Business
39	Kernels	1	0.69%	Business
40	Kirkland	1	0.69%	Product
41	Kisko Kub kananaka	1	0.69%	Product
42	Kushbarry	1	0.69%	Business Product
43	Kushberry Lit Tools	1 1	0.69% 0.69%	Product
45	Mentos	1	0.69%	Product
46	Miller	1	0.69%	Product
47	Mr. Christie	1	0.69%	Product
48	Next	1	0.69%	Product
49	Oh Henry	1	0.69%	Product
50	Oral B	1	0.69%	Product
51	Pabst	1	0.69%	Product
52	Skor	1	0.69%	Product
53	Shaw	1	0.69%	Business
54	Subway	1	0.69%	Business
55	Telus	1	0.69%	Business
56	Vega	1	0.69%	Product
57	Wendy's	1	0.69%	Business
58	Wonder	1	0.69%	Product
59	London Drugs	1	0.69%	Business
	Total	144	100.00%	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
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