ER Planning Report Brief: Plastic Retail Bags in Litter

Environmental Resources Planning, LLC is the only U.S. firm focusing exclusively on litter-related field surveys and research studies. Our firm analyzes select components of the litter stream to better understand the dynamics underlying littering rates. Our staff led the design and project management of Keep America Beautiful's 2009 National Litter Survey. That study found that plastic bags of all types comprise only 0.6 percent of litter. Percentages for categories such as plastic bags constituted such a minute portion of roadside litter that they were not specifically addressed in the 2009 National Litter Survey.

National, state and city-wide litter surveys conducted with statistically-based scientific methodologies have established that plastic retail bags continue to comprise a small percentage of litter and the waste stream. Our staff have planned and conducted a number of recent litter surveys. These statistically-based studies were conducted with scientific rigor using trained professionals. Data and methodologies were explained in detail to allow review by interested parties and affected stakeholders.

Litter surveys showing unusually high rates of items such as plastic bags were typically conducted by volunteers rather than professional staff. These surveys tended to lack random sampling and statistical methodologies. At times, material categories were not consistent. While such studies have helped create the awareness of litter's impacts, their limitations have, in some cases, resulted in erroneous depictions of plastic retail bags as a component of the overall litter stream.

Retail Plastic Bags in Recent Litter Surveys

#	Survey	Year	Percent	#	Survey	Year	Percent
1	Toronto	2012	0.8%	11	Durham	2003	0.3%
2	Edmonton	2011	1.1%	12	Peel	2003	0.1%
3	Alberta	2009	0.0%	13	York	2003	0.4%
4	San Francisco	2008	0.6%	14	Toronto	2002	0.6%
5	San Jose	2008	0.4%	15	Florida	2002	0.5%
6	KAB	2008	0.6%	16	Florida	2001	0.7%
7	Alberta	2007	2.0%	17	Florida	1997	0.6%
8	San Francisco	2007	0.6%	18	Florida	1996	1.0%
9	Toronto	2006	0.1%	19	Florida	1995	0.7%
10	Toronto	2004	0.2%	20	Florida	1994	0.6%

As shown in the table above, recent science-based litter surveys using random sampling methodologies consistently found that retail plastic bags comprise a minor portion of litter, usually less than one percent.

Steven R. Stein, Principal

Heren Stein

Environmental Resources Planning, LLC

