

Part 2: Away-from-home Recycling

Table 2.1 Examples of Away-from-home (AfH) locations where beverage containers are consumed and discarded

Category	Examples	
Public spaces	Parks, streets, transit stops, greenways	
Industrial, commercial, and institutional (IC&I)	Bars, restaurants, hotels, amusement parks, shopping malls, convenience stores, offices (and other workplaces), gas stations, coffee shops, some multi-residential units (with private waste service), government buildings, arenas, libraries, public daycares, community centres, colleges, universities, elementary and secondary schools	
Special events	Outdoor music festivals, sporting events, concerts, fairs, markets	

Today's beverage market is packed with convenience items, grab-and-go packages, and single-serve containers that weren't around when curbside recycling programs were first conceived in the late 1980s. Single-serve containers have grown in popularity with consumers, mostly because they're both easy-to-use and disposable. As more of these items enter the marketplace, the number of containers consumed "away-from-home" – at places like sports stadiums, concerts and parades, colleges and universities, parks, convention centers, restaurants and gas stations – is on the rise (see Table 2.1).

How Much is Generated Away-from-home?

While the majority of beverages are still consumed in households (up to 50-70%), it is estimated that anywhere between 30-50% of beverages are consumed away-from-home (AfH), in areas where recycling services may not be available. Knowing the number of beverage containers that are consumed and discarded AfH is critical to determining accurate collection rates and designing effective collection programs. Despite this importance, there is very little data on this subject. There are several reasons for this.

For one, there is little information available on the total number of industrial, commercial, and institutional (IC&I) establishments in each province that participate in beverage container recycling programs. Secondly, waste and recycling collection and management services for IC&I buildings, events, hospitals, schools, and other AfH locations are typically contracted to private sector service providers. While this may not be a problem in itself,

there are no regulatory requirements for these companies to track and report volumes collected at each location to the government or oversight authority. It is standard practice to weigh loads at the end of a route, making it difficult to obtain information about a specific location unless volumes are estimated at the point of collection by the hauler.

Moreover, there is no single provincial or municipal authority that oversees diversion performance from the IC&I sector.⁵ In Ontario, while Regulation 102/94 has required selected IC&I facilities to conduct waste audits and waste reduction work plans for several years now, there are no published results or performance measures in relation to their effectiveness.

Due to the lack of data available, we rely on findings from a series of studies to estimate a collection rate for container collection from AfH locations. Table 2.2 summarizes some of the research that has been



conducted to assess the percentage of beverage containers consumed AfH, including a brief

description of the methodologies used to arrive at those estimates.

Source	Study Methodology	Away-from-home beverage container market share (%)
IPSOS Study conducted in Ontario for CBCRA in 2012 ⁶	Not available to the public	By container type Aluminum cans: 28% PET: 28% HDPE: 20% Glass: 28% Gable top cartons: 10% All beverage containers: 26% (estimated range is between 15 and 30%)
Understanding Beverage Container Recycling: A Value Chain Assessment, 2002, prepared by R.W. Beck, in collaboration with Franklin Associates, Tellus Institute, Boisson & Associates, and Sound Resource Management	Figures for PET and aluminum are based on carbonated soft-drink point of sale data from Container Consulting Inc. (assumed to be indicative of alcoholic and non- carbonated beverages). Sales at vending machines, venues, and convenience stores are assumed to be consumed away-from-home, while sales at food stores are assumed to be consumed at home. Figures for glass are R.W. Beck estimates based on an understanding of the types of beverages packaged in glass.	<i>By container type</i> Aluminum cans: 13% PET: 63% Glass: 34%
American Beverage Association (ABA) report	Not available to the public	All beverage containers: 30- 34%
<i>Mise en Marché et Récupération des Contenants de Boissons au Québec</i> prepared by Francois Lafortune	Based on methodology used for 2002 report by R.W. Beck (see above)	By beverage type Milk containers: 5% Soft-drink containers: 17% Juice containers: 22% Wine/spirits containers: 22% Water bottles: 50%
<i>Australian Beverage Packaging Consumption, Recovery and Recycling Quantification Study, 2008</i> , prepared by Clare Davey	Based on sales data. Containers purchased at grocery stores were considered to be consumed at-home. The difference between at-home sales and total sales is assumed to represent containers consumed away- from-home.	<i>By container type</i> Glass: 25% Aluminum: 25% Plastic: 45%

Table 2.2 Estimated Away-from-home (AfH) beverage container market share



Existing Initiatives to Enhance Away-from-home Collection

For jurisdictions that do not have a deposit-return system (DRS) in place, establishing a comprehensive away-from-home (AfH) program in conjunction with a residential curbside collection program (singlefamily and multi-dwelling) can mean the difference between a successful recycling program and one that is less successful. In an effort to encourage the recycling of beverage containers consumed away from people's residences – especially those served in single-serve containers – various initiatives have been sprouting around the country.

Manitoba

Created and administered by the Canadian Beverage Container Recycling Association (CBCRA), Recycle Everywhere is Canada's first province-wide AfH beverage container recycling program. Formed in April 2010 by beverage producers and distributors, the CBCRA is a not-for-profit, industry-funded organization with a goal to achieve the Government of Manitoba's target of recovering 75% of all beverage containers sold in the province by 2016.

The program provides recycling bins free of charge to municipal, IC&I, sporting venues and event partners around the province to allow Manitobans to conveniently recycle their beverage containers rather than throwing them in the garbage. (For information on how the program is funded, see Manitoba's provincial program summary on page 36). In late 2013, Recycle Everywhere officially launched Recycle Everywhere 101, a brand-new province-wide initiative designed to increase the recycling of beverage containers at schools and among students. As of March 2014, over 20,000 Recycle Everywhere bins were placed in 185 communities. Currently, 368 schools and post-secondary institutions across Manitoba have Recycle Everywhere bins.⁷

Since the program began, the collection rate for beverage containers has increased from 42% in 2010, to 49% in 2011 and 53% in 2012 (by weight).⁸ The goal for 2013 is a 61% collection rate, which CBCRA expects to reach. The CBCRA is hoping to launch a similar program in Ontario, and filed an industry stewardship plan (ISP) with Waste Diversion Ontario (WDO) in July 2013 to do so.

Québec

With the objective of optimizing the AfH collection of recyclable materials, industry created La Table pour la recuperation hors foyer in 2007 (The Issue Table for Out-of-Home Recycling). Launched in June 2008, the Table's AfH recycling program extends across Québec, and initially focused on two sectors: 1. municipal public areas and 2. restaurants, bars and hotels. Several pilot projects have been implemented, including some at service stations.

To date, the Table's program has led to the installation of 7000 multi-material recycling bins at over 3000 restaurants, bars and hotels. In June 2012, the Table released a three-year report documenting the results of its activities. The findings show that dedicated recycling bins combined with effective signage can increase collection rates for beverage containers. Depending on the location of the pilot, average collection rates varied from 52% to 81%.⁹

British Columbia

B.C.'s first public spaces recycling program "Go Recycle!" started off as a pilot project in 2011. Launched in the City of Richmond by the Canadian beverage industry, the pilot included over 80 strategically placed new bins, and specially designed instructional and promotional signage.¹⁰ To measure the effectiveness of this program, industry conducted pre- and post- implementation waste audits of the pilot area and found that the number of recyclable beverage containers placed in trash bins decreased by 27%.¹¹ The study also found a 29% reduction of recyclable non-beverage containers in the garbage, and a 35% overall reduction in the amount of waste generated.

Other Provinces

Similar pilot projects have taken place in Ontario (Sarnia and Niagara Region), Nova Scotia (Halifax) and in Alberta (Calgary). Consistent with other studies, the Sarnia study found that in the



convenience stores, parks, and arenas where bins were placed and monitored, the collection rate for beverage containers was between 73% and 77%. Follow-up audits in the Niagara study showed collection rates to be an average of 65% – a 35% increase over baseline levels. The Halifax study generated even more promising results. By placing bins and signage along the Halifax Harbourwalk, the pilot project collected approximately 95% of all containers discarded in the area.

Share of Beverage Containers Discarded Away-from-home in Deposit vs. Non-deposit Jurisdictions

While each of the pilots showed that collection of beverage containers in AfH locations was enhanced by the addition of bins and signage, it is important to point out the difference in the findings between Richmond, a city where all beverage containers bear a deposit, and Sarnia and Niagara, where most beverage containers are collected at curbside.

In Sarnia and Niagara, audits revealed that recyclable beverage containers made up over 15.7% and 16.2% (by weight), respectively, of the total waste stream (PET beverage containers alone represented over 8% of the waste stream in each of the Ontario pilots). These numbers are significantly higher than those reported in the Richmond study, where recyclable beverage containers were found to make up only 1.8% (by weight) of the total waste stream (Figure 2.1).

When looked at in terms of volume, the results are even more striking. In Sarnia and Niagara, beverage containers make up 34% and 38%, respectively, of the AfH combined waste and recycling streams, whereas in Richmond they make up only 3% (Figure 2.2). This data demonstrates that where deposit programs exist, beverage containers make up only a small portion of the AfH waste and recycling stream. *Figure 2.1 PET & Aluminum Beverage Containers as a Percentage (by weight) of Waste and Recycling Streams in Away-from-home Locations - Non-Deposit Jurisdictions (Sarnia and Niagara, Ontario) vs. Deposit Jurisdictions (Richmond, BC)*



Figure 2.2 PET & Aluminum Beverage Containers as a Percentage (by volume) of Total Combined Waste and Recycling Streams in Away-from-home Locations - Non-Deposit Jurisdictions (Sarnia and Niagara, Ontario) vs. Deposit Jurisdictions (Richmond, BC)





Who Pays for Away-from-home Recycling?

As is the case with curbside collection and depositreturn programs, AfH recycling is not without costs. Primary cost drivers for AfH collection programs include the costs of recycling bins, new collection vehicles and/or modifications to existing vehicles, and hauler fees.

In general, the costs associated with AfH recycling programs are borne by the entity (public or private) responsible for waste management at the location in question. For example, recycling in an office building is the responsibility of the property manager or owner. Similarly, recycling initiatives undertaken by a school are the responsibility of the school board or principal. When it comes to publicly owned and serviced areas, like parks, arenas, and municipal buildings, recycling is financed directly by the municipality. Only in Québec does industry bear a share of AfH recycling costs.

Unlike municipal recycling or deposit systems, the costs associated with AfH collection are rarely studied or discussed. It is therefore difficult – if not impossible – to determine how much of taxpayers' money is going towards these programs.

According to a recent report by the Massachusetts Sierra Club,¹² the total average minimum cost to municipalities for public recycling bins is estimated at \$216, 829 (USD) per year. For the City of Boston, it is estimated that adding public recycling bins adjacent to waste bins would add \$7 to \$12 million to the city's collection costs. Additionally, cities such as Lowell and Worcester would see added costs of up to \$2 million and \$3.4 million, respectively.

