

# 2025 Beverage Calories Initiative: 2015 Progress on the National Initiative

# PREPARED FOR:

American Beverage Association Alliance for a Healthier Generation

# **PREPARED BY:**

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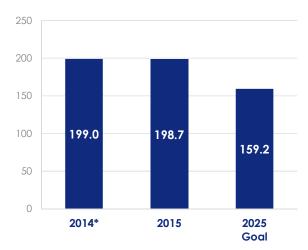
# **EXECUTIVE SUMMARY**

In September 2014, the American Beverage Association ("ABA"), The Coca-Cola Company, Dr Pepper Snapple Group, PepsiCo, and The Alliance for a Healthier Generation ("the Alliance") announced a commitment to help reduce beverage calories in the American diet. This commitment includes two key components: (1) the National Initiative, which aims to reduce liquid refreshment beverage ("LRB") calories consumed per person by 20 percent by 2025 (i.e., the national calorie goal); and (2) the Communities Initiative, which aims to achieve equivalent reductions over ten years in eight to ten select communities (i.e., the community calorie goal) where the challenge is believed to be greatest. The signatories' collective effort to fulfill these commitments is called the Beverage Calories Initiative ("BCI").

To measure and monitor progress over time, the ABA retained Keybridge as a third-party evaluator. The Baseline Report for the National Initiative, released in March 2016, estimated the 2014 benchmark level and 2025 target for the national calorie goal. As discussed in this report, the 2014 calorie estimate was revised upward from the original estimate due to update to the underlying brand-level beverage sales volume data. This first progress report estimates per person LRB calorie consumption in 2015 and the percent change from the revised baseline. Additionally, this report tracks early efforts by the commitment signatories to increase access to, interest in, and awareness of reduced-calorie beverages.

The methodology for monitoring progress toward the national calorie goal reflects three key features. First, the calculation relies on beverage sales volumes to approximate beverage consumption. Second, approach draws on data from multiple sources to corroborate trends. Specifically, the analysis uses beverage volume and calorie data primarily from Beverage Marketing Corporation's DrinkTell database and population estimates from the U.S. Census Bureau. Data from the 2015 Beverage Digest Fact Book and the Nielsen Company's Scantrack dataset corroborate results. These datasets enable the third feature of the methodology, which is to examine underlying drivers contributing to changes in beverage calorie consumption.

# Daily Per Capita Beverage Calories Average LRB Calories Per Person, Per Day



\*2014 Baseline revised due to updated data. See Appendix B. Sources: Beverage Marketing Corporation: DrinkTell Database; U.S. Census Bureau, 2015

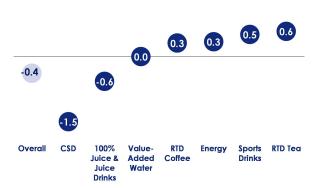
<sup>&</sup>lt;sup>1</sup> In a previous version of this report, the initiative was referred to a "Balance Calories Initiative." The initiative was renamed in May 2017.

Based on this approach, this Progress Report shows that the average American consumed an estimated 199.0 LRB calories per day in 2014 and 198.7 in 2015, a 0.4 calorie<sup>2</sup> or 0.2 percent reduction. To achieve the national calorie goal, this measure must decline by a total of 20 percent to 159.2 calories per person per day by 2025.

Underlying these calorie consumption estimates are a number of key trends:

- LRB volumes per person increased 2.2 percent from 2014 to 2015 due primarily to an increase in bottled water consumption, which rose by 0.8 ounces per person per day in 2015.
- While total LRB calories consumed per person declined, the source of those calories shifted. The average American consumed fewer calories from carbonated soft drinks ("CSDs") and 100% juice and juice drinks, and more calories from readyto-drink teas and coffees, sports drinks, and energy drinks.
- The average size of LRB containers less than or equal to one liter increased from 15.1 ounces to 15.2 ounces. This shift was driven by changes in the product mix toward beverages that are typically sold in larger containers (e.g., waters), not by increases in the average container sizes of particular beverages.

# Change in Daily Per Capita Beverage Calories By Beverage Category, Change from 2014 to 2015



Sources: Beverage Marketing Corporation: DrinkTell Database; U.S. Census Bureau, 2015

• Average calories per 8-ounce LRB serving declined from 46.6 to 45.6 calories (2.3 percent) due primarily to an increase in bottled water consumption.

To help achieve the national calorie goal, companies participating in the BCI ("BCI Companies") also committed to implement the National Calorie Awareness Program ("NCAP"). This program aims to raise awareness of beverage calories and calorie balance through the placement of calorie-awareness messages on vending machines, beverage coolers, and fountain dispensers. An independent evaluation of this program found that calorie-awareness messages were included on company-controlled vending machines at 71 percent of surveyed locations and on company-controlled beverage coolers at 61 percent of surveyed locations. The companies have not begun NCAP implementation on fountain equipment.

Finally, the BCI Companies reported qualitative information on a number of strategies that they are implementing to lay the groundwork to achieve calorie reductions over the commitment

<sup>&</sup>lt;sup>2</sup> Numbers in the figure are rounded to the nearest tenth. Estimates of per person LRB calories per day rounded down to 199.0 in 2014 and up to 198.7 in 2015. As a result the change from 2014 to 2015 rounds to 0.4 rather than 0.3.

period. Although implementation of these activities was not measured with independent data in 2015, this report describes the nature of these efforts as reported by BCI Companies.

- Consumer Awareness & Engagement Programs: In 2015, the ABA launched Mixify™, a media campaign to encourage teens and their families to balance what they eat, drink, and do, including their calories from beverages. This effort included multiple forms of engagement from television and social media to in-person events.
- Product & Equipment Innovation: BCI Companies introduced new products and equipment that increase access to reduced-calorie beverages. In 2015, companies introduced 26 new no- and low-calorie beverages and 14 new mid-calorie beverages, reformulated five products to reduce calories per ounce, and increased the number of brands and flavors available in smaller container sizes. In addition, the companies expanded the use of new vending and fountain equipment to increase access to reduced-calorie products.
- Distribution & Marketing Efforts: BCI Companies reported efforts to increase awareness of, trial, and on-going demand for reduced-calorie beverage options. The strategies reported include negotiating with retailers to allocate display and shelf space, sampling, price discounts, media campaigns, and other promotions of reduced-calorie brands and portioncontrolled beverages.

Based on the national calorie numbers and initial reports on implementation efforts, this analysis points to the following conclusions:

- Per person LRB calories declined in 2015, but these reductions will need to accelerate over the next several years to achieve the national calorie goal in 2025.
- LRB calorie reductions were smaller in 2014 and 2015 than in previous years, suggesting that calorie reduction momentum has stalled, and that new momentum must be generated.
- Growth of bottled water consumption continued in 2015. However, most of this growth was not offset by reductions in the consumption of caloric beverages and, therefore, did not appear to contribute to LRB calorie reductions.
- No- and low-calorie CSD consumption continued to fall in 2015, representing a key headwind to achieving the national calorie goal.
- BCI Companies reported developing and implementing a broad range of calorie-reduction strategies in 2015 to lay the groundwork for future calorie reductions.

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# INTRODUCTION

In September 2014, the American Beverage Association ("ABA"), The Coca-Cola Company, Dr Pepper Snapple Group, PepsiCo ("BCI Companies"), and The Alliance for a Healthier Generation ("the Alliance") announced a commitment to help reduce beverage calories in the American diet by 2025. Recognizing the contribution of excess calories to rising obesity rates, the commitment signatories aim to reduce beverage calories consumed through a two-part initiative referred to as the Beverage Calories Initiative ("BCI"). First, the National Initiative, which is the focus of this progress report, aims to reduce liquid refreshment beverage ("LRB") calories consumed per person nationally by 20 percent by 2025 (i.e., the national calorie goal). Second, the Communities Initiative, which will be the focus of a report to be published in the coming months, aims to achieve equivalent reductions over ten years in eight to ten select communities (i.e., the community calorie goal) where the challenge is believed to be greatest.

The participants in the BCI initiative also committed to independent, third-party monitoring of progress over time. In consultation with the Alliance, the ABA held a competitive request-for-proposal process and selected Keybridge to measure and monitor progress. Each year, progress toward the calorie goals will be reported publicly. The Baseline Report on the National Initiative, published in March 2016, estimated the 2014 benchmark level and 2025 target for the national calorie goal. Beverage volume estimates for some brands have since been revised in the primary beverage sales volume data sources used for this analysis.<sup>3</sup> Based on the updated data, this report provides revised estimates for the 2014 benchmark and 2025 target levels and initial estimates of per person LRB calorie consumption in 2015, the first year for which progress toward the national calorie goal can be measured. In addition to estimating changes in beverage calories per person, this report measured implementation of the National Calorie Awareness Program. This consumer awareness program involves adding calorie balance messages and calorie labels on all company-controlled vending machines, beverage coolers, and fountain machines.

Furthermore, the ABA and BCI Companies reported on a number of activities that they are implementing nationwide to encourage reduced beverage calorie consumption. The categories of activities reported by companies include: (1) consumer awareness and engagement programs; (2) product and equipment innovation; and (3) distribution and marketing efforts.

This report is structured as follows. Section 2 summarizes the methodology for estimating national calorie consumption. Section 3 presents progress toward the national calorie reduction goal. Section 4 reports on the progress of the National Calorie Awareness Program. Section 5 describes additional implementation efforts as reported by BCI Companies. Section 6 discusses the findings. Finally, summary data tables and a detailed description of the methodology are included in Appendix A and Appendix B, respectively.

<sup>&</sup>lt;sup>3</sup> These revisions are discussed in greater detail in Appendix B, Section 2.3.2.

# METHODOLOGY SUMMARY

The measurement approach used to monitor progress toward the national calorie goal consists of three features: (1) the use of sales volume data as a proxy for consumption; (2) the use of multiple data sources to corroborate shifts in beverage volumes; and (3) the measurement of underlying drivers contributing to overall shifts in beverage consumption.

Several considerations justify the use of sales data to approximate consumption. First, as long as the proportion of consumer waste and spillage (i.e., the primary difference between what is sold and consumed) does not significantly change over the measurement period, then changes in sales volumes can serve as a reliable proxy for changes in consumption. Second, using sales data enables more up-to-date reporting than would be possible using publicly-available consumption data. Third, using sales data avoids biases associated with dietary recall data.

To ensure that conclusions reflect changes that are broadly observed and not just reflective of a single data source, the verification approach relies on multiple datasets. None of the publicly available sources of beverage sales volumes are sufficiently comprehensive to measure all of the key trends relevant to this initiative. The use of multiple data sources accounts for this limitation, providing a more complete and accurate assessment of changes in beverage calories. Furthermore, the overlap across the data sources enables corroboration of findings. As described in Appendix B, Section 2.2, three sources of data measure and corroborate estimates of per person beverage calories. Specifically, the sales volume data include:

- **DrinkTell:** The primary source of volume and calorie data is the Beverage Marketing Corporation's DrinkTell database ("DrinkTell"), which provides complete brand-level data for all beverages included as LRB, but does not provide information about container sizes.
- Fact Book: Data from the Beverage Digest Fact Book ("Fact Book") corroborate trends in several beverage categories, including carbonated soft drinks, the largest category in terms of both volumes and calories. This dataset lacks coverage of other beverage categories.
- **Scantrack:** The Nielsen Company's Scantrack ("Scantrack") dataset provides detailed SKU-level product information, which allows for an examination of container size changes, though it lacks coverage of important sales channels (e.g., fountain beverages).

Furthermore, calorie information was collected from DrinkTell, Scantrack, BCI Companies, and Internet research and integrated into a comprehensive product-level calorie database. This database will be updated throughout the commitment period to reflect new products, product reformulations, and any other necessary revisions. Finally, to convert total calorie consumption to a per person basis, this analysis uses population data from the U.S. Census Bureau.

This report presents updated calculations for the 2014 baseline in addition to the first year of progress in 2015. Changes to the baseline were primarily the result of updates to the brand-level sales volume estimates due to a change in Beverage Marketing Corporation's methodology. While this analysis represents the most up-to-date information available, the findings may be updated again in future reports as new data become available.

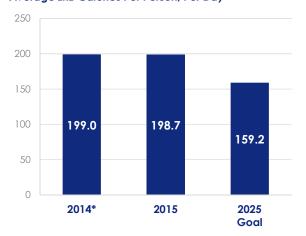
# PROGRESS TOWARD NATIONAL CALORIE GOAL

# 3.1 Overall Progress

The primary measure of progress for the national calorie goal is the change in beverage calories per person per day. Based on the most up-to-date DrinkTell data available, the average American consumed an estimated 199.0 LRB calories per day in 2014.<sup>4,5</sup> This measure declined by 0.4 calories or 0.2 percent to 198.7 calories per person per day in 2015.<sup>6</sup> To achieve the national calorie goal, this measure must decline by 20 percent to 159.2 calories per person per day by 2025.

Similar to 2014, CSDs and 100% juice and juice drinks remained the largest sources of LRB calories in the American diet. Specifically, of the 198.7 calories consumed per person per day, CSDs accounted for 126.4 (64 percent) and 100% juice and juice drinks

Figure 1
Daily Per Capita Beverage Calories
Average LRB Calories Per Person, Per Day



\*2014 Baseline revised due to updated data. See Appendix B. Sources: Beverage Marketing Corporation: DrinkTell Database; U.S. Census Bureau, 2015

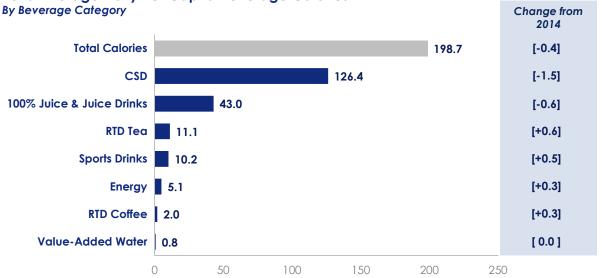
percent) and 100% juice and juice drinks accounted for 43.0 (22 percent). While these categories were the largest contributors of LRB calories, they were also the largest contributors to calorie reductions in 2015. Contributions to daily caloric consumption from CSDs and 100% juice and juice drinks declined by 1.5 and 0.6 calories per person per day, respectively. These calorie reductions were mostly offset by the increased contributions of other beverages to average LRB calorie consumption. In particular, ready-to-drink ("RTD") teas and sports drinks contributed an additional 1.1 beverage calories per person per day in 2015 as compared to 2014.

<sup>&</sup>lt;sup>4</sup> The Baseline Report on the National Initiative, released in March 2016, provided an initial baseline estimate of 198.2 calories per person per day and a 2025 target level at 80 percent of that level (158.5). Since then, the Beverage Marketing Corporation made refinements to the DrinkTell data, resulting in an upward adjustment in these initial estimates. More information about this adjustment is provided in the methodology summary and detailed methodology in Appendix B, Section 2.3.2.

<sup>&</sup>lt;sup>5</sup> According to the U.S. Census Bureau, the size of the U.S. Population was 318,907,401 in 2014 and 321,418,820 in 2015. Source: United States Census Bureau. (2015). Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2015 (NST-EST2015-01). Washington, DC: U.S. Government Printing Office.

<sup>&</sup>lt;sup>6</sup> Numbers in the figure are rounded to the nearest tenth. Estimates of per person LRB calories per day rounded down to 199.0 in 2014 and up to 198.7 in 2015. As a result the change from 2014 to 2015 rounds to 0.4 rather than 0.3.

Figure 2
2015 Average Daily Per Capita Beverage Calories



Source: Beverage Marketing Corporation: DrinkTell Database; U.S. Census Bureau, 2015

These calorie estimates were based on DrinkTell data, the most comprehensive of the beverage sales volume data sources available for purchase. This dataset was corroborated by estimates from two other data sources, the Beverage Digest Fact Book and Nielsen's Scantrack dataset. Figure 3 summarizes the calorie estimates from each data source. Key similarities and differences include the following:

- The Fact Book shows no decline in LRB calories per person from 2014 to 2015. This finding is consistent with the DrinkTell finding since the Fact Book rounds data to the nearest calorie. At the category level, the Fact Book estimates that calories from carbonated beverages, including energy drinks, did not change. This differs slightly from the DrinkTell estimates, which show calories from CSDs and energy drinks declining by a combined 1.2 calories per person per day. Differences in these estimates are likely due to a combination of differences in methodology, how brands are categorized, and rounding. For non-CSDs, overall calorie estimates differ considerably because the Fact Book does not capture sales volumes of many 100% juices, juice drinks, RTD teas, and RTD coffees that are included in DrinkTell. Despite these differences, both datasets show increases of about 1 calorie per person per day from non-carbonated beverages.
- Estimates based on the Scantrack dataset show that calories for all beverages declined by 1.9 calories per person from 2014 to 2015, compared to the 0.4 calorie reduction estimated using DrinkTell data. The DrinkTell and Scantrack data tell a consistent story in terms of the direction of change in the calorie totals for each beverage category. For example, both estimates show reductions in per person calorie consumption from CSDs and increases in calorie consumption from energy drinks. The difference between the findings from DrinkTell

<sup>&</sup>lt;sup>7</sup> See Appendix B for more details about the differences between datasets.

and Scantrack is largely driven by the 100% juice and juice drink category. DrinkTell reported a decline of 0.6 calories<sup>8</sup> per person per day from this category, while Scantrack reported a 1.3 calorie decline. The differences are likely due to differences in methodology and in the sales channels covered in each dataset. Scantrack, for example, does not include sales from foodservice and vending channels. The fact that the Scantrack data indicate larger decreases in calories than DrinkTell may suggest that channels not covered by Scantrack are offsetting reductions in the included channels.

Figure 3

Data Source Comparison: Per Capita Calories by Beverage Category

Average LRB Calories Per Person, Per Day

Beverage Category	Drin	kTell	Fact	Book*	Scantrack		
bevelage Calegory	2014	2015	2014	2015	2014	2015	
CSD	127.9	126.4	124	124	67.7	66.1	
Energy	4.8	5.1	134	134	4.4	4.8	
100% Juice & Juice Drinks	43.5	43.0			31.7	30.4	
RTD Tea	10.5	11.1	42	43	6.8	7.1	
RTD Coffee	1.7	2.0			1.7	1.8	
Value-Added Water	0.8	0.8			0.7	0.6	
Sports Drinks	9.7	10.2			6.9	7.1	
Water	0	0	0	0	0	0	
TOTAL	199.0	198.7	177	177	119.8	117.9	
CHANGE FROM 2014	-(	0.4		0	-1.9		

<sup>\*</sup> The Fact Book estimates are all rounded to the nearest whole number. It also presents calorie per person estimates for two categories: carbonated beverage (including energy drinks) and all non-carbonated beverages. Note that subtotals by category for 2014 do not equal the total due to rounding.

Source: Beverage Marketing Corporation: DrinkTell Database, Bev erage Digest Fact Book, 2016, Table 9: Calories and Beverages 2000-2015 (p. 23), Nielsen Scantrack, U.S. Census Bureau, 2015.

The national calorie goal requires reductions of roughly 40 calories per person per day by 2025. Therefore, small differences in calorie reduction estimates from one year to the next are likely inconsequential. As trends are observed over multiple years, the changes across datasets should align. If they do not, the differences could be helpful in identifying channels where additional calorie reduction efforts are needed.

#### 3.2 Examining the Factors Contributing to Calorie Reductions

The data used to measure progress toward the national calorie goal also illustrate the underlying trends contributing to changes in LRB calorie consumption. Per person beverage calorie change is a function of three key factors: the number of beverages consumed per person, the number

<sup>&</sup>lt;sup>8</sup> Numbers in the figure are rounded to the nearest tenth. As a result, changes from 2014 to 2015 as reported in the text may differ by 0.1 due to rounding.

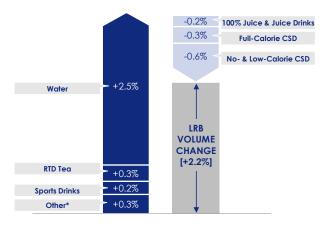
of ounces per beverage (i.e., container size), and the number of calories per ounce. A reduction in any of these factors will contribute to reductions in beverage calorie consumption. In 2015, beverage volumes per person, which is a function of both the number of beverages consumed and the average size of those beverages, increased by 2.2 percent. This increase was more than offset by the decrease in the average number of calories per ounce of beverages (2.3 percent), leading to a reduction in beverage calories per person (0.2 percent). Both trends were driven primarily by growth in bottled water volumes.

## 3.2.1 Beverage Volumes Per Person

As shown in grey in Figure 4, overall beverage volumes per person increased by 2.2 percent from 2014 to 2015. This increase was driven by the growth in bottled water volumes, which contributed 2.5 percentage points to the overall per person LRB volume growth. Smaller increases in RTD teas, sports drinks, and other beverages (i.e., RTD coffee, value-added water, energy, and mid-calorie CSDs) also contributed to growth. These increases were partly offset by decreases in CSD and 100% juice and juice drink volumes, which subtracted 1.1 percentage points from per person beverage volume growth. No- and low-calorie CSDs alone accounted for more than half of this offsetting reduction in volumes. As shown in Figure 5, these changes contributed to a shift in the product mix with water increasing from 35.0 to 36.7 percent of total LRB volume between 2014 and 2015. Shares of no-and low-calorie CSDs and full-calorie CSDs each declined by 0.9 percentage points.

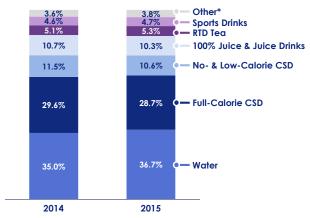
Figure 4
Change in LRB Beverage Volumes Per Person
Contributions to Volume Change by Beverage Category

Figure 5
Beverage Volume Share
Percent of Total LRB Volumes





Source: Beverage Marketing Corporation: DrinkTell Database, 2015



\* "Other" includes RTD Coffee, Value-Added Water, Energy, Mid-Calorie CSD

Source: Beverage Marketing Corporation: DrinkTell Database, 2015

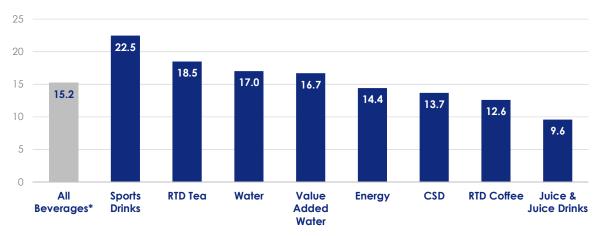
#### 3.2.2 Portion Sizes

Another driver of beverage calorie consumption is the size of beverage containers. In 2015, the average size of beverages sold in containers one liter or smaller was 15.2 ounces, up from 15.1 in 2014.9 Shifts in the product mix, rather than increases in container sizes of particular beverages, drove this increase. The three beverage categories for which volumes increased the most were water, RTD teas, and sports drinks. As shown in Figure 6, these were also the three beverage categories sold in the largest containers, on average. The beverage categories for which volumes decreased the most (i.e., CSDs and 100% juice and juice drinks) were two of the three categories with the smallest average container size.

Figure 6

2015 Average Ounces Per Container

Containers Less Than Or Equal To One Liter Only, By Beverage Category



\* The average across "All Beverages" is weighted by volume.

Source: Nielsen: Scantrack

From a calorie perspective, the average container size of full-calorie beverages is a key metric to monitor. Overall, the average container size of full-calorie beverages increased from 13.3 ounces to 13.4 ounces. The primary reason for the increase in the average full-calorie container size was the shift in volumes across beverage categories. Full-calorie CSDs and 100% juice and juice drinks, which are served in smaller containers, on average, represented a declining share of all full-calorie beverages. Meanwhile, full-calorie RTD teas and energy drinks, which are served in larger containers, represented a growing share. 10

<sup>&</sup>lt;sup>9</sup> The analysis excludes products in containers larger than one liter, given that they are nearly always considered multi-serve beverages. While many beverage products that are less than or equal to one liter are also considered multi-serve beverages, some consumers treat them as a single portion and thus the calculation includes them. Also, products in the one-liter size range are relatively uncommon, and so their inclusion does not significantly impact the results.

<sup>&</sup>lt;sup>10</sup> Average container sizes were 11.5 ounces for full-calorie 100% juice and juice drinks, 13.4 ounces for full-calorie CSDs, 14.2 ounces for full-calorie energy drinks, and 19.0 ounces for full-calorie RTD teas. (These differ from the numbers in Figure 6 because Figure 6 shows average containers sizes for all beverages, not just full-calorie beverages.)

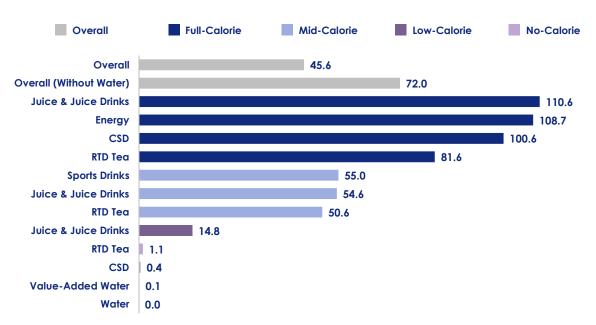
Other container size changes from 2014 to 2015 contributing to changes in per person calorie consumption include:

- The average container size of mid-calorie sports drinks, which were the source of about 5 percent of LRB calories in 2015, declined from 23.0 to 22.5 ounces per container. This decline was driven by the expanded shares of 12- and 28-ounce sports drinks and the declining share of 32-ounce sports drinks.
- The number of full-calorie CSDs sold in 24-ounce containers declined by more than half as BCI Companies discontinued many 24-ounce CSD offerings.

#### 3.2.3 Calories Per Ounce

The third driver of beverage calories consumed is calories per ounce. Average beverage calories per 8-ounce serving decreased from 46.6 in 2014 to 45.6 in 2015, a 2.3 percent decline. This reduction was driven by changes in the product mix. As shown in Figure 7, average calories per ounce declines when consumers shift from higher to lower-calorie beverage categories (e.g. from full-calorie CSDs to full-calorie RTD teas) or from higher to lower-calorie beverages within a category (e.g. from full-calorie to mid-calorie RTD teas). In 2015, consumption of full-calorie CSDs and 100% juice and juice drinks declined, and consumption of full-calorie RTD teas and mid-calorie sports drinks increased. While these shifts contribute to reductions in average calories per 8-ounce serving, shifts to no- and low-calorie beverage volumes can have a much larger impact.

Figure 7
2015 Average Calories Per 8-Ounce Serving
By Beverage Category & Calorie Category



Note: The beverage categories shown for each calorie category were selected based on a volume threshold of 0.5% of the total LRB volume.

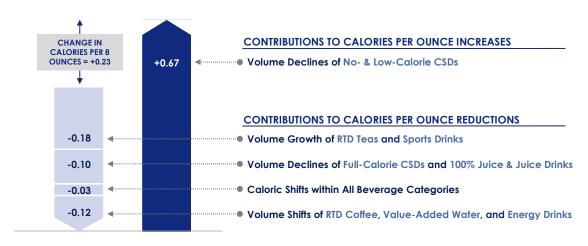
Sources: Beverage Marketing Corporation: DrinkTell Database; U.S. Census Bureau, 2015

Indeed, the significant growth of water volumes in 2015 was the key reason why overall calories per 8-ounce serving declined. As water's share of the overall product mix grew, it reduced the average number of calories per 8-ounce serving. Growing consumption of no-calorie CSDs has the same potential to reduce calories. However, because the volume of those beverages decreased in 2015, it had the opposite effect. No- and low-calorie CSD volumes decreased at a faster rate than all other beverage categories in 2015. As a result, they represented a smaller share of total LRB volumes, which drove a 0.23 increase in the average calories per 8-ounce serving for beverages other than water. Figure 8 shows how changes in the volumes and calories of different beverage categories contributed positively or negatively to the change in calories per 8-ounce serving. It shows that the declining no- and low-calorie CSD volumes more than offset the impacts of all other beverage trends – except the growth of waters, which is not shown. This demonstrates how the decreasing popularity of no- and low-calorie CSDs can counteract the beneficial impacts of other trends on average calories per 8-ounce serving.

Figure 8

Change in Calories per 8 Ounces of Non-Waters

Contributions to Changes in Calories Per 8 Ounces from 2014 to 2015



Source: Beverage Marketing Corporation: DrinkTell Database, 2015

# NATIONAL CALORIE AWARENESS PROGRAM

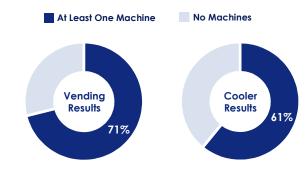
As part of the National Calorie Awareness Program ("NCAP"), BCI Companies are adding calorie balance messages on all company-controlled vending machines, beverage coolers, and fountain machines. The messages, "Balance What You Eat, Drink & Do" or "Calories Count: Check Then Choose", were developed through ABA-led consumer research. Along with the calorie information being added to vending machines and already on the front of all beverage containers, the messages intend to help consumers make more informed choices by raising awareness of beverage calories and calorie balance.

Progress on NCAP was measured through independent audits of company-controlled vending machines and coolers.<sup>11</sup> These audits were conducted by the crowdsourcing firm Field Agent in June 2016. The locations were selected randomly from lists of the more than 1.5 million locations where BCI Companies reported operating vending machines or beverage coolers.<sup>12</sup> At the selected locations, auditors photographed the front of vending machines or coolers that were identified by a BCI Company brand. All photographs were then reviewed to check for the presence of one of the two calorie awareness messages. In total, complete surveys were conducted at 149 vending machine locations and 156 cooler locations. Appendix B provides a detailed description of the methodology.

The independent audit conducted in June 2016 found that:

- 71 percent of locations (106 of 149) with one or more company-controlled vending machines displayed a calorie awareness message on at least one machine.
- 61 percent of locations (95 of 156) with one or more company-controlled beverage coolers displayed a calorie awareness message on at least one cooler.

Figure 9
2015 NCAP Vending & Cooler Audit Results
Independent Audit Results



Source: Field Agent, Audit Conducted in June 2016

<sup>&</sup>lt;sup>11</sup> BCI Companies reported that they have not started placing calorie messages on fountain machines, and therefore these machines were excluded from the audit.

<sup>&</sup>lt;sup>12</sup> In total, the companies reported more than 1.1 million coolers and more than 425,000 vending machines. These lists did not include equipment owned and operated by independent bottlers.

# OTHER NATIONAL BCI IMPLEMENTATION EFFORTS

#### 5.1 Overview

To achieve the national calorie goal, the commitment signatories are engaging in efforts to increase awareness of, access to, and interest in reduced-calorie beverages and to expand consumers' awareness of the need to balance calorie consumption. This section reports on the implementation of efforts to help drive these consumer behavior changes, including: (1) consumer awareness and engagement programs; (2) product and equipment innovations; and (3) distribution and marketing efforts. Through confidential questionnaires, the ABA and BCI Companies reported implementation activities within each category. These different strategies were designed by signatories to help drive calorie reductions over the commitment period. The metrics shown in this section, all of which were reported by companies, demonstrate the scale of these efforts.

# 5.2 Consumer Awareness & Engagement Programs

The ABA and BCI Companies are implementing consumer awareness and engagement programs to raise awareness of beverage calories and calorie balance. In addition to NCAP, which was independently monitored as discussed in Section 4, the ABA and the BCI Companies implemented Mixify<sup>TM</sup> in 2015. This campaign encouraged teens and their families to balance what they eat, drink, and do, including their calorie consumption from beverages. This effort included multiple forms of engagement from television and social media to in-person events. GMMB, the communications firm responsible for the development and implementation of Mixify<sup>TM</sup>, reported statistics to illustrate the reach – that is, the percent of teens and moms of teens reached by this campaign. Additionally, Public Opinion Strategies (POS), a public opinion research firm, collected and reported survey data to understand how teens responded to the messages communicated and how moms of teens felt about the message. GMMB and POS reported the following statistics:

- Through 2015, Mixify™ paid media reached 80 percent or 25,500,000 of teens aged 12 to 17 years old, nationwide, and 85 percent or 20,680,000 of moms with teens.
- Surveys of moms showed that 88 percent thought the message was helpful in communicating to teens the importance of balancing what they eat, drink, and do.
- Surveys of teens showed that 93 percent said the Mixify™ message of balancing what you eat, drink and do, including calories consumed from beverages, was easy to understand.

### 5.3 Product & Equipment Innovation

BCI-related innovations, as reported by companies, include a wide range of strategies to expand access to reduced-calorie and reduced-package size products. First, product innovations – including the introduction of brands and flavors, reformulations, and new container

sizes and designs – give consumers more beverage options with fewer calories. Second, equipment innovations related to vending and fountain machines enable increased availability of reduced-calorie beverages. Company-reported activities related to these areas are summarized here:

• New Brands & Flavors: BCI Companies reported that they introduced 26 no- and low-calorie, 14 mid-calorie, and 27 full-calorie brands and flavors in 2015. While it is beneficial that the majority of the new brands and flavors introduced in 2015 are no-, low-, and mid-calorie products, whether these products contribute to future calorie reductions will depend on creating and sustaining consumer interest in them. For this reason, it will be helpful to monitor the sales of new products and companies' efforts to grow them in future years, not just in the year they were introduced. Call-out Box 1 describes recent examples of PepsiCo's product innovations.

# CALL-OUT BOX 1: BCI IMPLEMENTATION FEATURE, PEPSICO

As discussed in this section, BCI Companies can achieve calorie reductions through product innovations that include new reduced-calorie products, new reduced-size containers, and reformulations of existing products. Innovations on three PepsiCo brands illustrate each of these three strategies.

PepsiCo launched Mountain Dew Kickstart in 2013. Kickstart is a low-calorie CSD with 40 calories per 8-ounce serving. It is not promoted for its low calories, but instead, like regular Mountain Dew, it is promoted for its "bold flavor and attitude". Thus far, the strategy appears to be working as Kickstart volumes have grown rapidly since its introduction. **Kickstart** also demonstrates PepsiCo's strategy to reduce average container sizes. In 2015, two new flavors of Mountain Dew Kickstart were introduced. Unlike previous flavors which come in 16-ounce cans, the new flavors were only offered in 12-ounce cans.

12-Ounce Kickstart "Skinny Cans"



Reformulated Brisk Teas





PepsiCo's reformulation of Brisk iced teas and juice drinks over the last several years represents a third type of product innovation. Nine different Brisk flavors have been reformulated to reduce calories per ounce by 28 to 44 percent. Using a blend of caloric and non-caloric sweeteners, PepsiCo was able to closely match the flavor of the previous Brisk formulas. The brand did not tout the reformulation and most Brisk customers appear to have seamlessly made the switch to lower calorie versions. This strategy was replicated in 2015 with the introduction of a reformulated and lower-calorie version of Manzanita Sol, an apple flavored CSD. In order to achieve the national calorie goal, product innovations like these will play a role in shifting consumers of full-calorie products to lower-calorie alternatives.

- Reformulations: BCI Companies reported that they reformulated five beverages to have fewer calories per ounce, including four juice drinks and one CSD. On average, calories in these products declined from 106 calories to 68 calories per 8 ounces. The contribution of reformulated beverages to overall calorie reductions will depend on maintaining consumer interest in these products. This requires finding ways to reduce calories without affecting a product's taste.
- New Container Sizes & Designs: The BCI Companies reported introducing two additional fullcalorie CSDs in the reduced-size 7.5- and 8-ounce mini-cans in 2015. This number was relatively small compared to previous years because BCI Companies had already introduced 7.5- to 8.5-ounce cans of most major CSD brands prior to 2015, including all of the top 20 CSD brands. With most full-calorie CSD brands now offered in 7.5 to 8.5 ounce cans, the focus for BCI Companies going forward will be on expanding the availability and appeal of these mini-cans, as well as other small-size containers. This effort will include offering new multi-pack configurations of mini-cans and other small containers to appeal to different consumers. For example, while 8-pack mini-cans have become common in grocery stores, companies are working to introduce new container designs, such as 8 and 8.5-ounce aluminum and glass bottles, that appeal to consumers purchasing single beverages for immediate consumption. Call-out Box 2 describes Coca-Cola's efforts to drive growth of small containers of its major CSD brands. Finally, efforts to reduce container sizes are not limited to 7.5- to 8.5-ounce containers. BCI Companies reported new offerings that can help achieve container-size reductions for different types of consumers, such as the 12-ounce "skinny" cans that could appeal to consumers of 16-ounce cans and new 1.25- and 1.5-liter bottles that could appeal to consumers of 2-liter containers.
- Fountain Machines: Historically, fountain machines have dispensed product primarily from six, eight, or 12 valves. Because both retailers and beverage companies want to include the top selling brands in those valves, only one or two valves are typically dedicated to reduced-calorie products. Coca-Cola's Freestyle machine can offer consumers many more beverage choices than traditional machines, creating an opportunity to offer more reduced-calorie options. Also, a larger proportion of the choices in Freestyle machines are reduced-calorie brands than in traditional machines, in part because reduced-calorie brands represent a larger share of the top 100 brands than they do of the top 6 or 8 brands. Similarly, PepsiCo's Spire machines offer more brands than traditional machines and the percentage of reduced calorie options available to consumers is higher. In addition, the Spire equipment enables consumers to customize their beverage by adding zero calorie flavor shots that can displace caloric beverage volumes. While these new machines are currently a small share of overall fountain machines, the companies report that they will become more mainstream over time, providing enhanced potential to reduce calorie consumption in the fountain sales channel.

# CALL-OUT BOX 2: BCI IMPLEMENTATION FEATURE, THE COCA-COLA COMPANY

Reducing container sizes is a key strategy for the BCI Companies in reducing beverage calorie consumption. Since 2010, The Coca-Cola Company ("Coca-Cola") has developed and marketed a variety of new reduced-size package options for the top Coca-Cola CSD brands. The most successful of these offerings is the 7.5-ounce can (i.e., mini-can), available now in many grocery stores across the country. Specifically, sales volumes of 7.5ounce cans of Coca-Cola products grew from 3.5 to 4.0 percent of their sales of multipack CSD containers between 2014 and 2015.

Additionally, Coca-Cola's promotion of 8 to 8.5ounce CSD bottles also gained traction. These smaller bottles are commonly purchased individually from coolers for immediate consumption. In particular, Coca-Cola increased the availability of 8.5-ounce aluminum bottles of four top brands (Coke, Sprite, Coke Zero and Diet Coke) in 2015.

To support these reduced size packages, Coca-Cola launched a multi-platform marketing campaign, including price discounts and special features of these packages on billboards, displays, and a 2016 Super Bowl ad. By increasing availability of smaller CSD containers and by committing marketing resources to promote them, Coca-Cola is making a concerted effort to reduce calories by driving consumers to smaller containers. While these

7.5-8.5 Ounce Coke Containers







2016 Super Bowl Advertisement



new containers still represent small shares of the multi-pack and immediate consumption markets, their growth in sales represents a positive trend for reducing calories.

Vending Machines: BCI Companies are also driving availability and marketing of reducedcalorie products through the increased use of glass-front vending machines. These machines enable consumers to view and select from up to 45 different beverage options as compared to more traditional machines, which can typically only offer 8-12 options. As with the fountain machines, this change can expand both the number and the proportion of reduced-calorie choices, including smaller size packages, available to consumers.

As part of the analysis of the National Calorie Awareness Program, surveyors took pictures of all audited vending machines. In glass-front machines, 48 percent of the products offered were no-, low-, or mid-calorie products, as compared to 37 percent in the traditional vending machines. These findings could be driven by biases based on where companies use glass-front machines (i.e., if glass-front machines are more commonly used in places where reduced-calorie beverages are expected to be more popular). These estimates, however, demonstrate how investments by BCI Companies in glass-front vending machines can increase access to reduced-calorie options and support the calorie reduction effort.

## 5.4 Distribution & Marketing Efforts

BCI Companies described distribution and marketing efforts to increase the availability of, awareness of, trial, and on-going demand for reduced-calorie and reduced-portion size products. These strategies can be grouped into three categories: (1) distribution and merchandising; (2) in-store marketing; and (3) external advertising through measured and unmeasured media.

- Distribution & Merchandising: These efforts include expanding availability of reduced-calorie products to more retail stores, increasing the amount of space within stores dedicated to reduced-calorie products, and improving the positioning of reduced-calorie products on store shelves. These strategies require working closely with retailers to sequence and implement changes at an appropriate pace. Retailers are hesitant to allocate limited shelf space to new products or products with an unknown customer base. As a result, changing the products on store shelves is a multi-year process. In 2015, beverage companies reported working with retailers to change planograms the diagrams that illustrate the space allocations and placements of products on store shelves. Planograms are typically negotiated annually and based on historical sales with accommodations made for new products. While retailers ultimately define their planograms, beverage companies can work to negotiate gradual increases in the presence of lower-calorie beverages and smaller container sizes. However, sales of these products will need to grow in order to make the changes on shelves sustainable. Call-out Box 3 describes efforts by the Dr Pepper Snapple Group to increase the presence of smaller-sized CSD containers in stores nationally.
- In-store Marketing: This category of activities includes other store-based marketing efforts designed to draw consumers' attention to reduced-calorie products and drive sales. This includes in-store sampling, price discounts, displays, and other promotions. Similar to distribution and merchandising efforts, beverage companies must negotiate these activities with their retail partners. Unlike changes to shelf space, however, BCI Companies reported that these promotional activities can usually be influenced over a shorter time horizon. All companies reported incremental use of end-of-aisle, rack, pallet, and other displays to support in-store promotions. Some reported the increased use of feature activity (i.e., ads in retailers' weekly circulars) and other in-store ads. In particular, the companies reported increased use of these strategies to promote carbonated and still bottled waters, reducedsize CSDs, and new reduced-calorie products. Dr Pepper Snapple Group, for example, reported a 12 percent increase from 2014 to 2015 in feature ad activity for carbonated and still waters. Companies also reported other activities designed to drive interest in reducedcalorie products, from price discounts to in-store sampling programs. One such promotional effort involved pairing reduced-calorie beverages with healthy snack foods and offering these products together at a reduced price.
- Paid Media & Sponsorships: BCI Companies reported increasing investment in measured and unmeasured media to raise awareness of reduced-calorie products, including advertisements purchased on television, the Internet, billboards, print, and other media. For example, PepsiCo reported that the 2015 advertising spend relative to sales was 15 times higher for the low-calorie Mountain Dew Kickstart beverage than it was for the Mountain Dew brand overall. Companies also reported key sponsorships dedicated to no- and low-

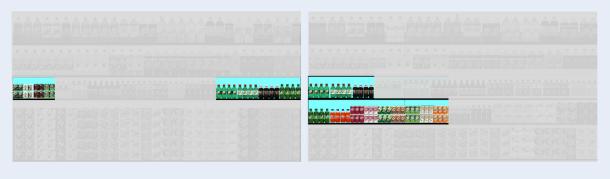
calorie alternatives, instead of full-calorie CSD brands. For example, Coca-Cola reported that Coke Zero was the lead brand for the company's football and NCAA/March Madness sponsorships, rather than regular Coca-Cola, even though the latter's sales are many times larger than Coke Zero's.

#### CALL-OUT BOX 3: BCI IMPLEMENTATION FEATURE. DR PEPPER SNAPPLE GROUP

One way BCI Companies are working to increase interest in reduced calorie products is by altering the space allocations and placement of beverage products on store shelves. To help drive reductions in average container sizes, Dr Pepper Snapple Group ("DPSG") designed a strategy to: (1) increase the total number of product facings (i.e., units of space on a shelf) dedicated to smaller products, including 7.5-ounce cans and 12-ounce bottles, and (2) consolidate these products on shelves. The images below illustrate the changes being made to the standardized shelf layout used by a specific large retail chain for CSDs manufactured by DPSG. The new plan increases the number of facings of 7.5-ounce CSD cans from 8 to 21 and the number of 12-ounce plastic bottle facings from 16 to 20. The plan also displays these products together, helping to increase prominence.

Product placement can significantly affect consumers' attention and purchasing behavior. By increasing the size and prominence of sections featuring smaller container sizes, DSPG aims to promote the idea of portion control and influence consumer choices. After initial tests with a small number of retailers in 2015 and early 2016, DPSG is now working with its retail chain partners to make similar changes across stores nationally. Ultimately, retailers must agree to these changes – and many are.

Before: Pre-Reset Planogram After: Post-Reset Planogram



# **DISCUSSION OF FINDINGS**

This section provides an assessment of the results presented in Sections 3-5. This analysis points to five key observations.

(1) Per person LRB calories declined in 2015, but will need to accelerate over the next several years to achieve the national calorie goal in 2025.

This analysis found that per person LRB calorie consumption declined by 0.2 percent in 2015. To meet the national calorie goal, this metric must decline by an additional 19.8 percent by 2025. Therefore, calorie reductions will need to accelerate over the remaining commitment period.

(2) LRB calorie reductions were smaller in 2014 and 2015 than in previous years, suggesting that calorie reduction momentum has stalled, and that new momentum must be generated.

According to the 2014 Beverage Digest Fact Book, beverage calorie consumption declined at an average rate of 1.0 percent per year from 2000 to 2013, half the average annual pace needed to meet the 2025 national calorie goal. The estimated declines were driven entirely by declining calorie consumption from carbonated beverages. The reductions represent the collective impact of changes in consumer taste preferences, pre-BCI beverage company efforts to create and market reduced-calorie products, efforts led by the public health community to encourage reduced beverage calorie consumption, and many other factors. In contrast with the calorie reduction trend observed from 2000 to 2013, the most recent two Fact Books show that per person beverage calorie consumption was flat for carbonated beverages and slightly increasing for the non-carbonated beverages from 2013 to 2015. The results of this progress report show that across all beverages included in LRB, calorie reductions were much smaller than during the period from 2000 to 2013. These data confirm that the previously existing beverage calorie reduction trend has stalled. Therefore, momentum toward the national calorie goal will need to be built anew, not just accelerated.

(3) Growth of bottled water consumption continued in 2015. However, most of this growth was not offset by reductions in the consumption of caloric beverages and, therefore, it did not appear to contribute to LRB calorie reductions.

The data show that per person water consumption grew by 7.1 percent in 2015, continuing the trend of rapid growth. Increased consumption of bottled water is generally considered to positively contribute to LRB calorie reductions. Most of this increase, however, does not appear to have contributed to calorie reductions in 2015 for two reasons:

• Much of the growth in bottled water consumption was incremental – that is, consumers were not shifting to water from another LRB option, they were drinking more. Estimated bottled water consumption increased by 0.85 ounces per person per day in 2015, while consumption of other beverages included in LRB decreased by just 0.11 ounces per person per day. This means that either total beverage consumption increased in 2015 or that increased bottled water consumption was primarily offset by reduced consumption of tap

water, milk, or other beverages not included in LRB. Either way, it appears that 0.74 of the 0.85-ounce increase in bottled water consumption (87 percent) was not offset by reductions of other beverages included in LRB.

• Within the portion (0.11 ounces or 13 percent) of increased water consumption that was offset by reductions in LRB volumes, more came from reductions of no- and low-calorie CSDs than beverages containing calories. In fact, reductions in per person consumption of no- and low-calorie CSDs represented 58 percent of the per person decline of all beverage categories that experienced declines. Shifts from no-calorie CSDs to water do not reduce calories, and shifts from low-calorie CSDs to waters only slightly reduce calories. Such shifts, therefore, do not contribute meaningfully to achieving the national calorie goal.

# (4) No- and low-calorie CSD consumption continued to fall in 2015, representing a key headwind to achieving the national calorie goal.

This analysis shows that no- and low-calorie CSD volumes declined in 2015, continuing a downward trend that began in 2006 and has greatly accelerated after 2010. From 2010 to 2014, per person no- and low-calorie CSD sales volumes fell by 20 percent (i.e., 5 percent per year) as reported by the Fact Book. From 2014 to 2015, it declined by another 5.9 percent. This outcome represents a significant headwind against achieving the national calorie goal in three ways.

- First, as discussed above, shifts from CSD consumption to water and other beverages are
  more frequently coming from no- and low-calorie CSD consumption than from full-calorie
  CSD consumption. This reduces the impact of the growth in water on calorie consumption.
- Second, more people appear to be switching from no- and low-calorie CSDs to full- and mid-calorie products than the reverse, making the national calorie goal harder to achieve.
- Third, the reductions suggest that interest in no- and low-calorie CSDs is falling. Consumers
  will be less willing to reduce consumption of full- or mid-calorie beverages if they do not find
  reduced-calorie alternatives appealing.

# (5) BCI Companies reported developing and implementing a broad range of calorie-reduction strategies in 2015 to lay the groundwork for future calorie reductions.

Achievement of the national calorie goal will require BCI Companies to invest in approaches to increase access to and interest in reduced-calorie beverages. Such efforts require significant planning, preparation, and investment. Sections 4 and 5 of this report discuss strategies being pursued to generate both immediate and future calorie reductions. Activities that were broadly implemented in 2015 are primarily ones that BCI Companies developed and tested before the BCI commitment was announced. Other strategies that were pilot tested in 2015 represent strategies that have been designed with the national calorie goal in mind. BCI Companies reported using a "test and learn" approach in 2015 – that is, testing strategies before implementing the most promising ones on a broader scale. With this approach, the companies anticipate that the groundwork laid in 2015 will drive calorie reductions in future years. By providing a status update on progress toward the national calorie coal, and identifying promising and problematic trends, this report aims to inform BCI Companies and other partners of the degree to which additional investments are needed to achieve that goal

# **APPENDIX A: DETAILED SUMMARY TABLES**

				BALAN	CE CALORIES 2015 PRO		ATIONAL							
Category	(Millions,		Share of Total		Average Calories Per	Average Calories per Person per Day <sup>2</sup>	Average oz.	Percent of Containers (Not Volumes) by Size Category <sup>3</sup>						
	8 oz. Servings) <sup>2</sup>	Day (Ounces) <sup>2</sup>	Volume <sup>2</sup>	Calories <sup>2</sup>	8 oz. Serving <sup>2</sup>		(Containers ≤ 1L Only) <sup>3</sup>	<12 oz.	12 oz.	>12 oz. to <20 oz.	20 oz.	> 20 oz. to ≤ 1 L	> 1	
Total .														
CSD	201,016	13.7	39.3%	63.6%	73.8	126.4	13.7	3%	69%	10%	9%	3%	7%	
100% Juice & Juice Drinks	52,545	3.6	10.3%	21.6%	95.9	43.0	9.6	60%	3%	7%	1%	5%	23%	
RTD Tea	26,884	1.8	5.3%	5.6%	48.6	11.1	18.5	5%	9%	47%	5%	19%	159	
RTD Coffee	1,862	0.1	0.4%	1.0%	127.2	2.0	12.6	34%	2%	59%	0%	1%	4%	
Sports Drinks	23,902	1.6	4.7%	5.2%	50.2	10.2	22.5	1%	21%	0%	35%	41%	1%	
Energy	10,068	0.7	2.0%	2.6%	59.5	5.1	14.4	17%	16%	62%	2%	4%	0%	
Value-Added Water	7,531	0.5	1.5%	0.4%	13.0	0.8	16.7	28%	5%	26%	23%	17%	0%	
Water	187,819	12.8	36.7%	0%	0	0	17.0	4%	1%	85%	4%	3%	3%	
ALL BEVERAGES	511,627	34.9	100.0%	100.0%	45.6	198.7	15.2	10%	31%	38%	7%	6%	7%	
Full-Calorie (More than a	67 calories per	8 07 1					•							
CSD	146,934	10.0	28.7%	63.4%	100.6	126.0	13.4	3%	70%	8%	10%	2%	7%	
Juice & Juice Drinks	40,747	2.8	8.0%	19.3%	110.6	38.4	11.5	45%	3%	11%	2%	7%	319	
RTD Tea	10,705	0.7	2.1%	3.7%	81.6	7.4	19.0	7%	2%	41%	4%	25%	229	
RTD Coffee	1,784	0.7	0.3%	1.0%	130.8	2.0	12.7	33%	0%	64%	0%	1%	227	
Sports Drinks	1,704	0.0	0.3%	0%	95.0	0	14.7	1%	35%	59%	5%	0%	0%	
Energy	5,434	0.0	1.1%	2.5%	108.7	5.0	14.7	1%	19%	56%	2%	4%	0%	
Value-Added Water	0	0.4	0%	0%		0	*	*	*	*	*	*	*	
Water	0	0.0	0%	0%	-	0								
FULL-CALORIE TOTAL	205,606	14.0	40.2%	90.0%	102.0	178.8	13.4	11%	53%	13%	8%	4%	119	
FULL-CALORIE IOIAL	203,606	14.0	40.2/0	70.0/6	102.0	170.0	13.4	11/0	33/6	13/0	0/0	4/0	117	
Mid-Calorie (41-66 calori	ies per 8 oz,)													
CSD	0	0.0	0%	0.0%	-	0	*	*	*	*	*	*	*	
Juice & Juice Drinks	9,053	0.6	1.8%	2.1%	54.6	4.2	7.7	72%	4%	2%	0%	1%	209	
RTD Tea	7,619	0.5	1.5%	1.7%	50.6	3.3	18.3	5%	21%	39%	6%	22%	7%	
RTD Coffee	49	0.0	0%	0%	50.0	0.0	13.1	12%	24%	47%	0%	0%	179	
Sports Drinks	21,275	1.5	4.2%	5.0%	55.0	10.0	22.5	1%	21%	0%	34%	42%	1%	
Energy	0	0.0	0%	0%	-	0	*	*	*	*	*	*	*	
Value-Added Water	1,728	0.1	0.3%	0.4%	48.0	0.7	19.9	7%	1%	19%	64%	10%	0%	
Water	0	0.0	0%	0%	-	0	-	-	-	-	_	-	_	
MID-CALORIE TOTAL	39,725	2.7	7.8%	9.2%	53.7	18.2	18.4	20%	17%	7%	23%	27%	6%	
Low-Calorie (5-40 calorie	s per 8 oz 1													
CSD	1,005	0.1	0.2%	0.1%	26.3	0.2	13.7	1%	56%	34%	3%	0%	5%	
			0.5%										5%	
Juice & Juice Drinks  RTD Tea	2,611	0.2		0.2%	14.8	0.3	6.8	94%	0%	1%	0%	0%	9%	
RTD Coffee	1,137	0.1	0.2%	0.2%	35.4	0.3	21.9	0%	12%	41%	6%	32%		
	28	0.0	0%	0%	34.4	0	11.6	36%	53%	0%	0%	0%	119	
Sports Drinks	1,524	0.1	0.3%	0.1%	20.0	0.3	20.1	0%	27%	0%	53%	20%	0%	
Energy	1,167	0.1	0%	0%	5.0	0	13.3	25%	22%	51%	2%	1%	0%	
Value-Added Water	360	0.0	0.1%	0.1%	40.0	0.1	7.9	85%	1%	13%	1%	1%	0%	
Water	0	0.0	0%	0%	-	0	-	-	-	-	-	-	-	
LOW-CALORIE TOTAL	7,831	0.5	1.5%	0.7%	20.0	1.3	10.5	61%	12%	13%	7%	4%	3%	
No-Calorie (Less than 5 c	calories per 8 o	z.)												
CSD	53,078	3.6	10.4%	0.1%	0.4	0.2	14.2	3%	66%	14%	7%	5%	6%	
Juice & Juice Drinks	134	0.0	0.0%	0%	3.1	0.0	10.2	60%	18%	4%	1%	3%	159	
RTD Tea	7,423	0.5	1.5%	0%	1.1	0.1	17.2	2%	5%	68%	2%	5%	179	
RTD Coffee	0	0.0	0%	0%	-	0	*	*	*	*	*	*	*	
Sports Drinks	1,102	0.1	0.2%	0%	0.0	0	26.9	4%	3%	0%	29%	63%	0%	
Energy	3,468	0.2	0.7%	0%	0.7	0.0	16.0	3%	1%	91%	0%	4%	0%	
Value-Added Water	5,443	0.4	1.1%	0%	0.1	0	18.7	16%	7%	33%	19%	25%	0%	
	187,819	12.8	36.7%	0%	0	0	17.0	4%	1%	85%	4%	3%	3%	
Water														

<sup>\*</sup> Nielsen Scanfrack data showed small volumes in these categories. However, given that the Beverage Marketing Corporation data showed no volumes, we did not report package size information. Note: All averages are weighted by volume.

# BALANCE CALORIES INITIATIVE: NATIONAL 2014 PROGRESS<sup>1</sup>

Category	Total Volume (Millions,			Share of Total Calories <sup>2</sup>	Average Calories Per	Average Calories per	Average oz. per Container	Percent of Containers (Not Volumes) by Size Category <sup>3</sup>						
Caregory	8 oz. Servings) <sup>2</sup>		Volume <sup>2</sup>		8 oz. Serving <sup>2</sup>	Person per Day <sup>2</sup>	(Containers ≤ 1L Only) <sup>3</sup>	<12 oz.	12 oz.	>12 oz. to <20 oz.	20 oz.	> 20 oz. to ≤ 1 L	> 1 L	
[otal														
CSD	204,160	14.0	41.1%	64.3%	72.9	127.9	13.7	3%	70%	8%	8%	4%	7%	
100% Juice & Juice Drinks	53,049	3.6	10.7%	21.9%	95.5	43.5	9.4	61%	4%	7%	1%	5%	23%	
RTD Tea	25,350	1.7	5.1%	5.3%	48.4	10.5	18.5	5%	9%	45%	5%	21%	15%	
RTD Coffee	1,571	0.1	0.3%	0.9%	126.2	1.7	12.6	34%	3%	59%	0%	1%	4%	
Sports Drinks	22,652	1.6	4.6%	4.9%	49.9	9.7	23.0	1%	19%	0%	36%	42%	1%	
Energy	9,249	0.6	1.9%	2.4%	59.9	4.8	14.2	22%	13%	61%	2%	4%	0%	
Value-Added Water	6,902	0.5	1.4%	0.4%	14.2	0.8	16.4	31%	3%	24%	26%	16%	0%	
Water	173,997	12.0	35.0%	0%	0	0	17.1	4%	0%	85%	4%	3%	3%	
ALL BEVERAGES	496,929	34.2	100.0%	100.0%	46.6	199.0	15.1	11%	33%	35%	7%	6%	7%	
Full-Calorie (More than 67	calories per 8	77 1												
CSD	147,136	10.1	29.6%	64.0%	100.8	127.5	13.4	3%	72%	6%	9%	3%	7%	
Juice & Juice Drinks	41,166	2.8	8.3%	19.5%	110.0	38.9	11.0	47%	4%	10%	2%	7%	30%	
RTD Tea	9,869	0.7	2.0%	3.5%	81.4	6.9	19.1	7%	1%	39%	4%	27%	23%	
RTD Coffee	1,502	0.7	0.3%	0.8%	130.0	1.7	12.7	33%	0%	62%	0%	1%	4%	
Sports Drinks	1,302	0.0	0.3%	0.8%	95.0	0	14.2	1%	52%	38%	9%	0%	0%	
	5,035	0.3	1.0%	2.4%	108.5	4.7	14.2	25%	15%	54%	2%	4%	0%	
Energy Value-Added Water	0	0.0	0%	0%	108.5	0	*	25% *	*	*	×	4% *	U% *	
Water	0	0.0	0%	0%	_	0			_					
FULL-CALORIE TOTAL	204,708	14.1	41.2%	90.2%	102.1	179.6	13.3	12%	54%	11%	7%	4%	11%	
			-1112/0	70.270	102.1		10.0	12/0	0.170	1170		4,0	,	
Mid-Calorie (41-66 calorie	1		007	0.07	I			_	I .	I . I				
CSD	0	0.0	0%	0.0%	-	0	*	*	*	*	*	*	*	
Juice & Juice Drinks	9,190	0.6	1.8%	2.2%	54.7	4.3	7.6	73%	4%	2%	0%	1%	19%	
RTD Tea	7,529	0.5	1.5%	1.6%	50.3	3.3	18.4	5%	22%	36%	6%	24%	7%	
RTD Coffee	42	0.0	0%	0%	50.0	0	12.4	23%	29%	39%	0%	0%	9%	
Sports Drinks	19,972	1.4	4.0%	4.7%	55.0	9.4	23.0	1%	19%	0%	35%	43%	1%	
Energy	0	0.0	0%	0%	-	0	*	*	*	*	*	*	*	
Value-Added Water	1,718	0.1	0.3%	0.4%	48.0	0.7	19.9	6%	2%	17%	65%	10%	0%	
Water MID-CALORIE TOTAL	0 38,451	0.0 <b>2.6</b>	0% <b>7.7%</b>	0% <b>8.9</b> %	53.7	0 17.7	18.2	23%	15%	7%	22%	26%	7%	
MID-CALORIE IOIAL	30,451	2.0	7.7%	0.7%	55.7	17.7	10.2	23%	15%	1%	22%	20%	170	
Low-Calorie (5-40 calories		ı	ı		ı	ı	I							
CSD	1,215	0.1	0.2%	0.1%	24.6	0.3	14.0	1%	50%	36%	6%	0%	7%	
Juice & Juice Drinks	2,554	0.2	0.5%	0.2%	14.9	0.3	6.9	94%	0%	1%	0%	0%	5%	
RTD Tea	1,064	0.1	0.2%	0.2%	35.9	0.3	21.5	0%	9%	42%	7%	32%	10%	
RTD Coffee	27	0.0	0%	0%	33.4	0	11.6	35%	61%	0%	0%	0%	4%	
Sports Drinks	1,623	0.1	0.3%	0.1%	20.0	0.3	20.5	0%	26%	0%	52%	22%	0%	
Energy	1,090	0.1	0%	0%	5.0	0	13.2	27%	18%	53%	2%	0%	0%	
Value-Added Water	376	0.0	0.1%	0.1%	40.0	0.1	7.3	90%	0%	7%	3%	0%	0%	
Water	0	0.0	0%	0%	-	0	-	-	-	-	-	-	-	
LOW-CALORIE TOTAL	7,949	0.5	1.6%	0.7%	20.1	1.4	10.7	60%	11%	13%	8%	4%	3%	
No-Calorie (Less than 5 ca	lories per 8 oz.)													
CSD	55,810	3.8	11.2%	0.1%	0.4	0.2	14.2	3%	68%	11%	7%	6%	6%	
Juice & Juice Drinks	139	0.0	0.0%	0%	3.0	0	10.1	62%	22%	5%	0%	2%	8%	
RTD Tea	6,888	0.5	1.4%	0%	1.1	0.1	17.3	2%	3%	70%	3%	5%	17%	
RTD Coffee	0	0.0	0%	0%	-	0	*	*	*	*	*	*	*	
Sports Drinks	1,057	0.1	0.2%	0%	0	0	28.1	0%	3%	0%	27%	70%	0%	
Energy	3,124	0.2	0.6%	0%	0.7	0	15.9	4%	1%	91%	0%	4%	0%	
Value-Added Water	4,807	0.3	1.0%	0%	0.1	0	19.3	13%	5%	34%	23%	26%	0%	
Water	173,997	12.0	35.0%	0%	0	0	17.1	4%	0%	85%	4%	3%	3%	
NO-CALORIE TOTAL	245,822	16.9	49.5%	0.1%	0.1	0.3	16.3	4%	20%	62%	5%	5%	4%	

Numbers may not add up to exact totals and sub-totals due to rounding. Percentages may not add to 100%. <sup>2</sup> Data from DrinkTell and Census Bureau. <sup>3</sup> Data from Nielsen Scantrak.

Note: All averages are weighted by volume.

<sup>\*</sup> Nielsen Scantrack data showed small volumes in these categories. However, given that the Beverage Marketing Corporation data showed no volumes, we did not report package size information.

# BALANCE CALORIES INITIATIVE: NATIONAL CHANGES FROM 2014<sup>1</sup>

Category	Total Volume (Millions,		Share of Total	Share of Total Calories <sup>2</sup>	Average Calories Per 8 oz. Serving <sup>2</sup>	Average Calories per Person per Day <sup>2</sup>	Average oz. per Container (Containers ≤ 1L Only) <sup>3</sup>	Percent of Containers (Not Volumes) by Size Category <sup>3</sup>						
Culegory	8 oz. Servings) <sup>2</sup>	Day (Ounces) <sup>2</sup>	Volume <sup>2</sup>					<12 oz.	12 oz.	>12 oz. to <20 oz.	20 oz.	> 20 oz. to ≤ 1 L	> 1 L	
Total	Change	% Change	% Point Change	% Point Change	Change	Change	Change	% Point Change	% Point Change	% Point Change	% Point Change	% Point Change	% Point Change	
CSD	-3,144	-2.3%	-1.8%	-0.7%	0.82	-1.55	0.00	0.3%	-1.4%	2.1%	0.2%	-0.9%	-0.2%	
100% Juice & Juice Drinks	-504	-1.7%	-0.4%	-0.3%	0.35	-0.59	0.20	-1.0%	-0.2%	0.4%	0.1%	0.2%	0.5%	
RTD Tea	1,534	5.2%	0.2%	0.3%	0.18	0.59	-0.05	0.0%	-0.4%	2.1%	-0.1%	-1.7%	0.1%	
RTD Coffee	291	17.6%	0.0%	0.2%	0.95	0.32	-0.01	0.3%	-0.8%	0.8%	0.0%	-0.1%	-0.2%	
Sports Drinks	1,250	4.7%	0.1%	0.3%	0.31	0.52	-0.51	0.0%	1.8%	0.3%	-1.1%	-0.8%	-0.2%	
Energy	820	8.0%	0.1%	0.2%	-0.40	0.35	0.23	-4.8%	3.4%	1.5%	0.0%	-0.1%	0.0%	
Value-Added Water	630	8.3%	0.1%	0.0%	-1.16	0.00	0.32	-2.6%	1.6%	2.9%	-3.3%	1.3%	0.0%	
Water	13,821	7.1%	1.7%	0.0%	0.00	0.00	-0.05	0.3%	0.1%	0.0%	-0.3%	-0.3%	-0.1%	
ALL BEVERAGES	14,698	2.2%	0.0%	0.0%	-1.07	-0.37	0.10	-0.4%	-1.6%	2.7%	-0.1%	-0.4%	-0.3%	
Full-Calorie (More than 67	calories per 8	oz.)	1											
CSD	-202	-0.9%	-0.9%	-0.6%	-0.27	-1.51	0.00	0.3%	-1.4%	1.9%	0.3%	-0.8%	-0.2%	
Juice & Juice Drinks	-419	-1.8%	-0.3%	-0.2%	0.60	-0.49	0.44	-2.0%	-0.5%	1.0%	0.2%	0.4%	1.0%	
RTD Tea	836	7.6%	0.1%	0.3%	0.18	0.54	-0.07	-0.1%	0.1%	2.3%	0.4%	-1.9%	-0.7%	
RTD Coffee	283	17.9%	0.0%	0.2%	0.73	0.31	0.01	-0.6%	0.1%	2.2%	0.4%	-0.1%	-1.5%	
Sports Drinks	0	-14.6%	0.0%	0.2%	0.00	0.00	0.58	-0.8%	-16.5%	20.6%	-3.5%	0.0%	0.0%	
	400	7.1%	0.0%	0.0%	0.21	0.34	0.26	-6.1%	4.5%	1.9%	0.0%	-0.3%	0.0%	
Energy Value-Added Water	0	7.1/6	0.0%	0.2%	- 0.21	0.00								
							*	*	*	*	*	*	*	
Water FULL-CALORIE TOTAL	0 898	-0.3%	0.0%	0.0%	-0.10	0.00 -0.80	0.11	-0.7%	-0.9%	2.2%	0.3%	-0.6%	-0.2%	
		-0.3/0	-1.0/6	-0.2/0	-0.10	-0.80	0.11	-0.7/0	-0.7/0	2.2/0	0.3/0	-0.0%	-0.2/0	
Mid-Calorie (41-66 calories		I												
CSD	0	-	0.0%	0.0%	-	0.00	*	*	*	*	*	*	*	
Juice & Juice Drinks	-137	-2.3%	-0.1%	0.0%	-0.13	-0.11	0.07	-0.7%	0.1%	0.1%	0.0%	0.1%	0.5%	
RTD Tea	90	0.4%	0.0%	0.0%	0.27	0.03	-0.03	-0.1%	-1.5%	3.3%	0.1%	-2.0%	0.2%	
RTD Coffee	8	17.2%	0.0%	0.0%	0.00	0.00	0.73	-10.6%	-5.0%	7.2%	0.0%	0.0%	8.5%	
Sports Drinks	1,303	5.7%	0.1%	0.3%	0.00	0.54	-0.53	-0.1%	2.0%	0.3%	-1.2%	-0.8%	-0.2%	
Energy	0	-	0.0%	0.0%	-	0.00	*	*	*	*	*	*	*	
Value-Added Water	10	-0.2%	0.0%	0.0%	0.00	0.00	0.02	0.6%	-1.5%	2.4%	-1.3%	-0.1%	0.0%	
Water	0	-	0.0%	0.0%	-	0.00	-	-	-	-	-	-	-	
MID-CALORIE TOTAL	1,274	2.5%	0.0%	0.2%	0.05	0.46	0.22	-2.6%	1.5%	0.4%	0.5%	0.8%	-0.6%	
Low-Calorie (5-40 calories	per 8 oz.)													
CSD	-210	-18.0%	0.0%	0.0%	1.70	-0.03	-0.32	-0.5%	6.5%	-2.3%	-2.1%	-0.2%	-1.3%	
Juice & Juice Drinks	57	1.4%	0.0%	0.0%	-0.12	0.00	-0.17	0.7%	-0.2%	-0.4%	0.0%	-0.1%	0.0%	
RTD Tea	73	6.1%	0.0%	0.0%	-0.42	0.02	0.39	-0.2%	2.5%	-0.8%	-1.0%	0.1%	-0.5%	
RTD Coffee	1	1.6%	0.0%	0.0%	0.94	0.00	-0.05	0.3%	-8.0%	-0.2%	0.0%	0.0%	7.9%	
Sports Drinks	-99	-6.8%	0.0%	0.0%	0.00	-0.02	-0.35	0.0%	1.0%	0.0%	0.6%	-1.4%	-0.1%	
Energy	76	6.2%	0.0%	0.0%	0.00	0.00	0.05	-2.3%	3.8%	-1.8%	0.0%	0.3%	0.0%	
Value-Added Water	-16	-5.0%	0.0%	0.0%	0.00	-0.01	0.52	-4.8%	0.1%	6.1%	-1.7%	0.3%	0.0%	
Water	0	-	0.0%	0.0%	-	0.00	-	-	-	-	-	-	-	
LOW-CALORIE TOTAL	-118	-2.3%	-0.1%	0.0%	-0.08	-0.04	-0.16	0.2%	0.9%	0.1%	-0.7%	-0.3%	-0.1%	
No-Calorie (Less than 5 ca	lories per 8 oz.)													
CSD	-2,732	-5.6%	-0.9%	0.0%	0.00	-0.01	0.01	0.3%	-1.7%	2.7%	0.0%	-1.0%	-0.2%	
Juice & Juice Drinks	-5	-4.5%	0.0%	0.0%	0.09	0.00	0.10	-2.5%	-4.1%	-0.8%	0.1%	0.3%	7.1%	
RTD Tea	535	6.9%	0.1%	0.0%	-0.02	0.00	-0.06	0.1%	2.0%	-1.4%	-0.7%	0.1%	-0.1%	
RTD Coffee	0	-	0.0%	0.0%	-	0.00	*	*	*	*	*	*	*	
Sports Drinks	45	3.4%	0.0%	0.0%	0.00	0.00	-1.20	3.7%	0.0%	0.0%	2.7%	-6.4%	0.0%	
Energy	344	10.1%	0.0%	0.0%	-0.01	0.00	0.09	-0.6%	-0.2%	0.4%	0.0%	0.4%	0.0%	
Value-Added Water	636	12.3%	0.1%	0.0%	0.06	0.00	-0.58	3.0%	2.6%	-0.7%	-4.4%	-0.4%	-0.1%	
Water	13,821	7.1%	1.7%	0.0%	0.00	0.00	-0.05	0.3%	0.1%	0.0%	-0.3%	-0.3%	-0.1%	
NO-CALORIE TOTAL	12,644	4.3%	1.1%	0.0%	-0.01	0.00	0.01	0.6%	-1.8%	2.0%	-0.4%	-0.5%	-0.1%	

Numbers may not add up to exact totals and sub-totals due to rounding. Percentages may not add to 100%. <sup>2</sup> Data from DrinkTell and Census Bureau. <sup>3</sup> Data from Nielsen Scantrak.

<sup>\*</sup> Nielsen Scantrack data showed small volumes in these categories. However, given that the Beverage Marketing Corporation data showed no volumes, we did not report package size information. Note: All averages are weighted by volume.

# APPENDIX B: DETAILED METHODOLOGY

The core objective of the BCI independent evaluation is to measure progress toward the goal of reducing per person beverage calorie consumption by 20 percent nationally by 2025. A secondary objective is to understand the specific strategies BCI Companies are implementing to achieve this goal. This detailed methodology describes the measurement approach designed to monitor both the calorie goal and implementation efforts.

Appendix B is organized as follows. Section 1 presents terminology relevant to the agreement and data sources. Section 2 discusses the general analytical approach for monitoring and verifying progress of the national calorie goal and discusses the methodology for estimating per person calorie consumption, including data adjustments and calculations. Section 3 discusses the methodology for verifying implementation of the National Calorie Awareness Program.

#### I. KEY TERMS & CATEGORIES

This section briefly explains some of the key terms used throughout the report.

- Baseline Year: The commitment did not specify a baseline year for setting the 2025 target level. Given that the agreement was announced toward the end of 2014, this independent evaluation uses 2014 as the baseline. Progress toward the 2025 goal will be benchmarked against the 2014 level of per person beverage calorie consumption.
- Liquid Refreshment Beverages ("LRB"): The BCI effort includes beverages referred to as liquid refreshment beverages ("LRB"). LRB refers to most beverages available for purchase through retail stores, fountain, vending machines, and restaurants, and covers nearly all beverages manufactured by the BCI Companies. LRB excludes alcoholic beverages, dairy products, brewed beverages, drink mixes, energy shots, lemon and lime juice, coconut milk, concentrates, flavor drops, and tap water.<sup>13</sup>
- **Beverage Categories:** This report displays results using a set of beverage categories as defined by the Beverage Marketing Corporation. These eight categories are: carbonated soft drinks ("CSDs"), sports drinks, ready-to-drink ("RTD") teas, RTD coffees, 100% juice and juice drinks (i.e., beverages with less than 100 percent juice), energy drinks, value-added waters (e.g., flavored waters), and water (i.e., unenhanced still and carbonated water).
- Calorie Categories: This report relies on the same four calorie categories provided in the
  DrinkTell dataset to segment brands. For an 8-ounce serving, "no-calorie" beverages have
  fewer than five calories, "low-calorie" beverages have between six and 40 calories, "mid-

<sup>&</sup>lt;sup>13</sup> The inclusion of brewed beverages would make accurate measurement of progress toward the national calorie goal much more difficult given that retail outlets and consumers often add their own sugar, cream, and other caloric additives to brewed teas and coffees. Brewed teas are the only beverages that are made by the BCI Companies in substantial quantities, but not measured.

calorie" beverages have between 41 and 66 calories, and "full-calorie" beverages have 67 calories or more. 14

#### II. MEASUREMENT OF THE NATIONAL CALORIE GOAL

## 2.1 Analytical Approach

The measurement approach includes three features, including: (1) the use of beverage sales volume data as a proxy for consumption; (2) the use of multiple data sources to corroborate shifts in beverage volumes; and (3) the measurement of underlying factors driving changes in per person beverage calorie consumption.

#### 2.1.1 Sales Volumes as a Proxy for Consumption

This analysis uses beverage sales volumes as a proxy for beverage consumption. The primary difference between sales volumes and consumption is waste, both pre-consumer and consumer waste. BCI Companies and independent data suppliers estimate that pre-consumer waste, such as beverages that expire or are damaged prior to final sale, is small (i.e., likely a couple of percentage points) and confirm that most of it is netted out of reported sales volumes. Consumer waste is more difficult to quantify, but even if substantial, it would not affect estimates of the percentage change in calories consumed, as long as the share of beverage waste does not change significantly over the commitment period.

In future years, consumption data collected through the Centers for Disease Control and Prevention's National Health and Nutrition Examination Survey ("NHANES") can be used as a corroborative data source. It will not be used as a primary data source for two reasons. First, the NHANES dataset is only available with a significant lag (i.e., data from the 2013-14 survey are not yet available), and its use would not allow for up-to-date progress reports. Second, NHANES data are based on dietary recall surveys. These methods are limited by biases associated with self-reporting. For example, people often have a difficult time recalling exact quantities and types of beverages consumed. Limitations around the accuracy of self-reported dietary intake are well documented.<sup>15</sup>

<sup>&</sup>lt;sup>14</sup> Beverage Marketing Corporation reports sales volumes using these definitions, which align closely, but not exactly with the FDA definitions of no- and low-calorie beverages. The difference is that beverages with exactly 5 calories per ounce are counted as no-calorie beverages in the DrinkTell dataset whereas the FDA would consider them low-calorie beverages. Mid-calorie beverages are not differentiated from full-calorie beverages by FDA. The inclusion of the category provides increased data granularity. The definition of mid-calorie used aligns with the definition used during implementation of the Alliance School Beverage Guidelines.

<sup>&</sup>lt;sup>15</sup> Westerterp, K.R., & Goris, A.H.C. (2002). Validity of the assessment of dietary intake: Problems of misreporting. *Current Opinion in Clinical Nutrition and Metabolic Care*, 5(5), 489-493. Barrett-Connor, E. (1991). Nutrition epidemiology: how do we know what they ate? *The American Journal of Clinical Nutrition*, 54(1), 182S-187S.

# 2.1.2 Data Corroboration

A second feature of this analysis is the use of multiple data sources to measure beverage sales and corroborate results. Each publicly available source of beverage volume data suffers from certain limitations and uncertainties. Using multiple data sources mitigates the constraints of any one source, thereby improving the completeness and accuracy of results. This report captures changes in beverage calories per person using three sources of beverage sales volume data: (1) Beverage Marketing Corporation's DrinkTell dataset ("DrinkTell") (2) The Nielsen Company's Scantrack dataset ("Scantrack"), and (3) Beverage Digest's Fact Book ("Fact Book"). While these data sources are robust, each has one or more limitations in terms of coverage and granularity. Once integrated, however, they present a more comprehensive picture of changes in beverage volumes. DrinkTell, the most complete data source of the three, is used as the primary source for measuring beverage calories per person nationally.

# 2.1.3 Measuring Underlying Factors

This analysis tracks some of the underlying changes contributing to the overall calorie goal. These factors include changes in (1) calories per ounce, (2) ounces per serving, and (3) servings per person. This information illustrates at a more granular level how progress toward the calorie goal is being achieved and how consumer tastes are evolving. The data collected to measure the calorie goal are also used to measure the evolution of these factors.

#### 2.2 Review of Data Sources

The national analysis relies on publicly available data from DrinkTell, Scantrack, the Fact Book, and the U.S. Census Bureau to estimate total LRB sales volumes, LRB calories, and container sizes.

### 2.2.1 Beverage Marketing Corporation DrinkTell Database

The Beverage Marketing Corporation's DrinkTell database is the primary source of information used for this analysis. This data source is based primarily on confidential sales volume data provided directly by beverage companies and is supplemented with Nielsen and IRI scanner data, publicly-available earnings reports from beverage companies, and other sources. DrinkTell covers approximately 2,500 brands across all sales channels, including fountain sales. Although comprehensive in terms of its coverage of LRB, the DrinkTell dataset reports volumes at the brand level instead of the more granular stock keeping unit ("SKU") level. As a result, it is not possible to track changes in container sizes. Another limitation of the dataset is that brands with small sales volumes are reported collectively as "other brands" within each beverage and calorie category (e.g., "other no-calorie CSDs").

#### 2.2.2 Nielsen Scantrack Dataset

The analysis uses the Nielsen Company's Scantrack data to corroborate beverage volume and calorie estimates. This dataset reports total beverage sales volumes based on transactions from a sample of stores. Hundreds of retailers report sales volume data on products scanned from thousands of stores across the country. Based on this sample, Nielsen scales up the data to

approximate all beverages sold in most food, convenience, drug, dollar, and mass merchandiser stores. A key feature of the Scantrack dataset is that it reports beverage volumes by SKU. This level of granularity enables tracking of detailed information on calories per ounce, container size (i.e., fluid ounces per bottle, can, etc.), and the number of containers per unit (i.e., individual bottle, 6-pack, 24-pack, etc.).

The Scantrack dataset is limited in its coverage of important market segments. Most importantly for the purpose of this report, Scantrack does not include fountain sales volumes, which represent a large segment of many beverage categories, especially CSDs. This dataset includes limited coverage of beverage volumes sold through small and independent grocery stores (i.e., stores with less than \$2 million in annual sales) and small and independent drug stores (i.e., stores with less \$1 million in annual sales). Finally, the dataset does not capture other beverage volumes sold through restaurants and bars, caterers, and full-service vending. As a result of these exclusions, Scantrack includes just over 59 percent of the LRB calories captured by DrinkTell. While comparisons of overall volumes across the two datasets may not be instructive for a given year, the Scantrack dataset will be helpful for corroborating major changes in the LRB product mix and calories as reported by DrinkTell over multiple years.

# 2.2.3 Beverage Digest Fact Book

This analysis also integrates data from Beverage Digest's Fact Book. This annual publication provides all-channel brand-level volume estimates. These data are compiled annually by Beverage Digest from various sources using a proprietary methodology. With comprehensive coverage for several beverage categories, including CSDs, the Fact Book can corroborate brand- and category-level volume estimates reported by DrinkTell. The Fact Book, however, does not include several categories important for monitoring this commitment, including refrigerated and multi-serve shelf stable 100% juices and juice drinks, some refrigerated teas, bulk bottled water, and RTD coffees. As a result of these exclusions, the calorie totals reported in the Fact Book are about 89 percent of the totals estimated from the DrinkTell dataset.

#### 2.2.4 Data on Beverage Calories

Estimating total LRB calories required the development of a comprehensive calorie database to integrate data from four sources. The DrinkTell and Scantrack datasets reported calorie information for most products along with the beverage volume estimates. To supplement and corroborate this information, BCI Companies reported information for their individual products. Finally, to fill remaining gaps in the data, particularly for individual beverage products with large volumes, Internet research provided missing calorie information.

### 2.2.5 Data on the U.S. Population Size

The calculation of calories per person uses population data from the U.S. Census Bureau. The Census Bureau integrates data on births, deaths, and migrations to produce a time series of population estimates from the most recent decennial census. This annually-updated series

provides estimates for the most recent year and updated estimates for previous years. <sup>16</sup> As newer population estimates become available, future reports will incorporate those revisions which may affect both the 2014 baseline per person estimate and the 2025 target.

#### 2.3 Methods

## 2.3.1 Adjustments

Integrating data from multiple sources enabled the identification and correction of inconsistencies and gaps in the data. Although the LRB volume estimates required no changes, this section outlines two adjustments to the calorie and package size information provided by DrinkTell and Scantrack.

Constructing the calorie database required a two-step process. The first step was to create a crosswalk between the brand-level calorie data from DrinkTell and the SKU-level calorie data from Scantrack.<sup>17</sup> By assigning each SKU to a specific brand, calorie estimates were compared across datasets. Additionally, within Scantrack, a comparison between the calorie counts for individual SKUs and the weighted average among all SKUs of the same brand revealed inconsistencies in calorie information. The next step drew upon additional information from BCI Companies and/or Internet research to resolve discrepancies. For the 2015 data, this process resulted in revisions to 12 out of the 332 brands in the DrinkTell dataset and 2,526 out of 47,482 SKUs in the Scantrack dataset.<sup>18</sup> These adjustments built on those made to products in the 2014 dataset. All changes were applied to both the 2014 and 2015 data so that all products were assumed to have the same number of calories per ounce in both years, with the exception of a small number of products that experienced a caloric change due to independently-confirmed reformulations. Over the period of the commitment, this calorie library will be updated as newer information becomes available.

A systematic review of the Scantrack container size data revealed inconsistencies that required revision. The multiple data fields available in the Scantrack dataset allowed problems to be identified and corrected. For example, if data showed that an individual product was both a 6 pack (as indicated in the product description) and a single unit (as indicated in the unit information), then the product was flagged for further investigation. Review of additional data fields, such as the average price of the SKU, helped to determine which container size information was correct. This level of scrutiny often revealed patterns that helped to correct systematic inconsistencies in the database (e.g., all 6-packs from a particular manufacturer were incorrectly listed as single units). In total, 420 out of 47,482 UPCs were corrected. This review process included, but was not limited to, the top 5,000 products in terms of both volume and calories, which represent 88.6 percent of volumes and 92.0 percent of calories in the dataset.

<sup>&</sup>lt;sup>16</sup> The data come from the table NST-EST2015-01, which provides Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2015

<sup>&</sup>lt;sup>17</sup> This analysis assumes that the smaller brands, which DrinkTell combines into "other brands" categories, have the same number of calories per ounce as the weighted average of calories per ounce among the brands within the same beverage and calorie categories. For example, the analysis assumes that the beverages lumped together as "other full-calorie CSDs" have the same calories per ounce as average of the full-calorie CSD brands that are listed individually.

<sup>&</sup>lt;sup>18</sup> This figure only includes calorie values that were adjusted by 1 calorie per 8 ounces or more.

#### 2.3.2 Revisions to 2014 Baseline Estimates

This report presents results from January to December 2015, as well as updated calculations for the 2014 baseline. Changes to the baseline are primarily the result of updates to the brand-level sales volume estimates provided by DrinkTell due to a methodological change. While the results reported in this report represent the most up-to-date information available, it is possible that results could again be updated if additional or better data become available.

In 2016, DrinkTell, the Fact Book, and Scantrack provided data for 2015 and updated data for 2014. In order to present the most accurate calculations, previous calculations were refreshed so that all estimates in this report reflect the most up-to-date data on beverage volumes and calories. In DrinkTell, the most significant revisions occurred in the 100% juice and juice drinks and RTD tea categories, though isolated brand-level changes were also reported in the CSD and RTD coffee categories.

BMC's DrinkTell reporting methodology for 100% juice and juice drinks was modified between 2014 and 2015. In this category, BMC reported data at a product-line/flavor level rather than the brand level to facilitate analysis of different flavors within brands. This more granular data created a slightly different division of sales volumes between calorie categories within each brand. BMC applied this reporting adjustment to all previous years of data. Therefore, the underlying methodology for the category is consistent across all years of data.

This new reporting framework demonstrated a potential limitation of the DrinkTell dataset. Though sales were estimated at a product line level for the purposes of the BCI analysis, the most granular sales volume data in the DrinkTell dataset is at the brand level. This limitation required BMC to make reasonable assumptions about the distribution of sales across product lines within a brand. These assumptions may decrease the precision of estimates made using DrinkTell data. However, the assumptions do not appear to create any biases. These assumptions will remain consistent throughout the commitment period, and if new data suggest that the assumptions should be changed, they will be changed for all years in the same way to ensure consistency. One known shortcoming of this data is that the DrinkTell data may not reflect changes in the share of sales among product lines of the same brand. Over time, Scantrack data, which captures sales at the UPC level, will be used to identify such shifts and to estimate if they have a material effect on the findings.

The process for cross-checking and validating Scantrack data also was revised and expanded in 2015. The number of products, represented by individual SKUs, which were validated for pack size, multipack number, calories per 8-ounces, and product category, was expanded from the top 1,000 products in terms of sales to the top 5,000 products. In addition, the calorie values for major brands for which multiple sources of data were available were checked and changed if the numbers did not align. Keyword searches were used throughout the dataset in categories such as CSDs and energy drinks to ensure that all products with descriptions that suggested they might be reduced-calorie (e.g., diet, zero, sugar-free) products, were classified as such. Though this process provided additional assurance of data accuracy, it also contributed to changes in the 2014 baseline package size and corroborating calorie estimates. This revised methodology will be consistently implemented in future years.

## 2.3.3 Key Calculations

Calculating per person beverage calorie consumption first required converting all sales volume data into ounces and then multiplying those values by average calories per ounce for each brand or SKU. Next, these calorie estimates were summed across all products to calculate total LRB calories. Third, the total LRB calorie estimate was divided by the national population estimate for 2015. Fourth, this amount was divided by 365 days to obtain a daily per person estimate of beverage calories consumed.

These calculations were performed across the different datasets. Where differences existed, the next step was to confirm that this variation could be explained by the known differences in data coverage. For further validation of findings, each BCI Company reviewed a data summary similar to those included in Appendix A, but including only data for their own brands. By confirming that the data were consistent with their internal data, this additional review further validated data for brands representing 78 percent of all LRB calories.

Furthermore, Scantrack data was used to measure changes in container sizes across beverage categories. The average container size analysis focuses on beverage containers of less than or equal to one liter in size.<sup>19</sup> For this calculation, the total number of ounces sold for each beverage category was summed and divided by the total number of containers sold in that category. To calculate the distribution of products across different container size groupings, the number of containers in each grouping was summed and divided by the total number of containers.<sup>20</sup>

### III. MEASUREMENT OF THE NATIONAL CALORIE AWARENESS PROGRAM

Independent audits measured progress by BCI Companies toward implementing the National Calorie Awareness Program. These audits were conducted through the crowdsourcing firm Field Agent.<sup>21</sup> The survey sample was constructed using a three-step process: (1) obtain lists from each company of all company-controlled vending machines and beverage coolers; (2) exclude non-publicly accessible locations (e.g., offices, airports, etc.); and (3) choose random samples of vending machine and cooler locations from each company's list. In total, the BCI Companies reported more than 1.1 million coolers and more than 425,000 vending machines. The vending machine and beverage cooler audits aimed to include 150 usable responses in each survey, including 60 locations from lists from both Coca-Cola and PepsiCo, as well as 30 locations from the DPSG list. This distribution corresponds with the total number of locations in the store lists reported by companies.

<sup>&</sup>lt;sup>19</sup> The analysis excludes products in containers larger than one liter, given that they are nearly always considered multi-serve beverages. While many beverage products that are less than or equal to one liter are also considered multi-serve beverages, some consumers treat them as a single portion and so the calculation includes them. Also, products in the one-liter size range are relatively uncommon, and so their inclusion does not significantly impact the results.

<sup>&</sup>lt;sup>20</sup> The distributional analysis splits beverages into 6 categories: (1) less than 12 ounces, (2) equal to 12 ounces, (3) greater than 12 ounces and less than 20 ounces, (4) equal to 20 ounces, (5) greater than 20 ounces and less than or equal to 1 liter, and (6) greater than 1 liter. The 12- and 20-ounce categories serve as cutoffs because they are the most common pack sizes for CSDs, the largest beverage category in terms of calories.

<sup>&</sup>lt;sup>21</sup> Crowdsourcing firms enable amateur surveyors to complete audits at pre-specified locations using a smartphone. Data are reviewed for quality and aggregated by Field Agent before submission.

The audit consisted of a review of pictures taken at randomly selected locations. Surveyors located all vending machines or coolers branded with a BCI Company beverage product and took pictures of the full front side of the machine. Photos submitted with the survey response were geo-tagged to verify the authenticity of each response. All photos were then analyzed independently by Keybridge to verify accuracy. Photos from each location were assessed together and locations were categorized as having qualifying messages on all, some, or no machines or coolers. In some cases, surveyors mistakenly assessed machines from other companies. Findings from these locations were considered valid if the branding and ID sticker matched one of the other two companies, and the location was identified in that company's list of locations. This occurred at 31 locations. A number of surveys (50 locations in total) were dropped from the sample because the surveyor could not find the correct equipment, the location was closed, or the address provided was incorrect. Locations that were dropped from the sample were replaced with other locations randomly selected from the same companies' lists.

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