



# Evaluation Plan for Hawai'i's Sugar- Sweetened Beverage (SSB) Fee

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# 1

## Introduction

### BACKGROUND AND CONTEXT TO THE ACTIVITY

#### Sugar-Sweetened Beverage (SSB) Fee Background

SSB consumption is linked to excess weight gain, obesity, metabolic diseases, dental caries and other negative health consequences.<sup>1,2</sup> In Hawai'i, as elsewhere, there are racial and ethnic disparities in rates of SSB consumption<sup>3</sup> and in chronic diseases.<sup>4-7</sup> Among Hawai'i teens and adults, Native Hawaiians and Pacific Islanders have higher rates of SSB consumption than Asian and white populations of the same age groups,<sup>3,8,9</sup> and these trends are mirrored in rates of obesity.<sup>4,9</sup> In addition to health impacts, SSB consumption-related diseases like obesity and Type II diabetes have high health care costs. In 2009, Hawai'i's obesity-related direct health care costs were \$470 million annually<sup>10</sup> and in 2017, Hawai'i's diabetes-related direct health care costs were over \$1.3 billion.<sup>11</sup> Enacting a \$0.02/ounce fee on SSBs that is levied on Hawai'i's SSB distributors and is passed on to consumers through increased shelf prices, is projected to decrease individual SSB consumption, reduce health care costs, and generate between \$46.1 million to \$65.8 million in revenues that can be put back into programs to support access to healthy foods and physical activity opportunities.<sup>9</sup> These same projections show that the greatest reductions in SSB consumption due to the tax will be for groups with the highest current rates of consumption: Pacific Islanders, Native Hawaiians, and Filipinos.<sup>9</sup> These groups also have the highest prevalences of obesity<sup>4,9</sup> and diabetes<sup>6</sup> in Hawai'i.

### SSB Fee Theory of Change



#### Evaluation Context

Several United States (US) jurisdictions and over 40 countries have enacted SSB taxes or fees.<sup>12</sup> These locations have seen reduced SSB and increased water purchases and consumption after tax implementation and have generated millions of dollars to address health and socioeconomic inequities.<sup>12-14</sup> One lesson from Berkeley, California, the first US jurisdiction with an SSB tax, was that jurisdictions



should prepare for the implementation and evaluation of their SSB policies well in advance of their enactment.<sup>15</sup>

Hawai'i has introduced an SSB fee bill numerous times over the last several years.<sup>16</sup> Thus far, no bill has passed. However, Hawai'i's 2019 enactment of the Healthy Default Beverage Law for children's meals was a ground softening event that the Hawai'i Department of Health (DOH) and stakeholders felt could lead to the enactment of an SSB fee. Additionally, the COVID-19 pandemic resulted in large budget shortfalls for the state and drew attention to significant health and social inequities, that have contributed to the disproportionate impact of COVID-19 on Native Hawaiian, Pacific Islander, and Filipino populations.<sup>17-20</sup> It also highlighted the need to reduce chronic diseases, due to the increased severity of COVID-19 outcomes for those with chronic conditions.<sup>21-23</sup>

During the 2021 legislative session held during the COVID-19 pandemic, stakeholders advocated for an SSB fee to fund programs that reduce health inequities and reduce SSB consumption and SSB-related chronic diseases. The SSB fee bills that were introduced in the Hawai'i State House and Senate included language requiring an independent evaluation to assess the impact of the fee on SSB consumption, SSB beverage prices, consumer purchasing behavior, and health outcomes.<sup>24,25</sup> The bills stipulated that the evaluation would be funded by the revenues from the fee. Because there appeared to be a policy window for the SSB fee to pass, the DOH's Chronic Disease Prevention and Health Promotion Division anticipated the need for an evaluation plan in the event that one of the bills was enacted. The University of Hawai'i (UH) Evaluation Team at the UH Mānoa Thompson School of Social Work and Public Health was contracted to prepare the following ten-year evaluation plan for the SSB fee.

## EVALUATION PURPOSE

The purpose of the evaluation plan is to track and measure the impacts of the SSB fee policy on SSB prices and consumption, chronic diseases, health disparities, and health care costs in Hawai'i over ten years. Specifically, the evaluation plan outlines a detailed methodology for one essential short-term outcome of the SSB fee, the pass-through rate (*described in objective 1 under the evaluation scope below*), and summarizes the surveillance data and research study needs to evaluate additional impacts of the SSB fee over time (*objective 2 below*). Within these two objectives there are considerations for determining the fee's impact on health equity (*objective 3 below*). The logic model in Figure 1 on page 6 outlines the theoretical SSB impacts which are the foundation of this evaluation plan.

## EVALUATION SCOPE

### **Objective 1: Establish the effect and magnitude of Hawai'i's SSB fee on SSB prices (the pass-through rate)**

The pass-through rate is the amount of the SSB fee that distributors "pass-through" to consumers, in the form of price increases of SSBs at the point-of-decision (i.e., shelf price).<sup>9</sup> The SSB fee's impact on SSB purchases and consumption are predicated on SSB distributors passing on most or all of the SSB fee to consumers. However, distributors could potentially circumvent the law by absorbing the costs of the fee into its operations, passing only a portion of the fee on to SSB prices, or



passing the fee on to all of their products so all beverages (e.g., soda, water, juice) increase in price.<sup>26</sup> If prices do not increase, there will be no direct impact of the fee on consumer behavior. Thus, it is critical to the theory of change for the SSB fee to result in increased SSB prices in key retail settings after the law is enacted.

At the retail level, prices vary based on supply and demand for SSBs, as such the pass-through rate will vary as well. Data from other jurisdictions with SSB taxes have found pass-through rates ranging from 43-120%,<sup>26-30</sup> with differential pass-through rates by retailer type,<sup>26,28,30</sup> beverage size,<sup>27,28</sup> beverage type,<sup>26</sup> and neighborhood characteristics.<sup>29,30</sup> Therefore, the methodology for establishing the pass-through rate outlined in this evaluation plan will include data collection steps to enable examination of pass-through rate variations.

### **Objective 2: Conduct surveillance of behavioral, health, and economic indicators**

In addition, this evaluation plan will broadly outline the short- (1-3 years), intermediate- (3-5 years), and long-term (5-10 years) outcomes to understand the full scope of SSB fee impacts over a decade. It will highlight available data sources for these metrics and highlight gaps in data sources that should be addressed over time to enable comprehensive surveillance and evaluation of Hawai'i's SSB fee.

### **Objective 3: Impact of the SSB fee on health equity**

Finally, the evaluation will outline considerations to establish if there is equitable implementation and impact of the SSB fee across all populations, with specific consideration for Hawai'i's priority populations of Native Hawaiian, Pacific Islander, Filipino and communities with low income. Research questions around equity are derived from guidance from the Sugary Drink Tax Equity Workgroup's Centering Equity in Sugary Drink Tax Policy: Research Agenda.<sup>31</sup> This evaluation plan does not include the complete list of equity research questions outlined in the Tax Equity Workgroup report, such as items related to how the tax is designed. If the SSB fee is passed, that report should be consulted for additional equity research questions.

### **Beyond the Evaluation Scope**

The SSB fee bill introduced in 2020 also indicates that the fee's revenues will be put into a new Healthy Ohana Special Fund "for the prevention and control of obesity and chronic disease on behalf of families in Hawai'i."<sup>24,25</sup> How the funds are allocated (i.e., to the general fund or to community-driven projects) will also need to be evaluated to understand the impact of the SSB fee on consumption, health, and health disparities. For example, if funds are used for SSB health education campaigns in Native Hawaiian, Pacific Islander, and Filipino communities, those programs should be evaluated for impact on SSB consumption and health disparities. Since the establishment of a special fund itself is not guaranteed due to the legislative process, and how special fund dollars are allocated is not yet determined, this evaluation plan does not include any activities to measure impacts of SSB fee funds. However, if the law passes, it will be important to establish an evaluation plan and activities to monitor how funds are allocated and the impacts of the SSB fee revenues. When this evaluation plan was written, several research and evaluation studies from other jurisdictions had been conducted to examine the use of SSB tax revenues.<sup>12,32</sup> These studies could help inform similar studies in Hawai'i if the fee is passed.



**FIGURE 1: HAWAI'I'S SSB FEE LOGIC MODEL**

**Goal: To Reduce SSB consumption, chronic disease, and health care costs**

INPUTS	ACTIVITIES	OUTPUTS	SHORT-TERM OUTCOMES (1-3 YEARS)	INTERMEDIATE OUTCOMES (3-5 YEARS)	LONG-TERM OUTCOMES (5-10 YEARS)
<p>DOH staff</p> <p>Communications and educational activities</p> <p>Initial funding</p> <p>Fee proceeds</p> <p>Community members</p> <p>Revenue management firm (fee administrator)</p> <p>Special fund distribution organization</p>	<p>Education of distributors &amp; retailers</p> <p>Revenues collected by contracted fee administrator</p> <p>Selection of Healthy Ohana Special Fund Board inclusive of community stakeholders*</p> <p>Development of request for proposals (RFP) for use of funds in communities and dissemination of RFP*</p> <p>Revenues dispersed to communities &amp; public interest projects*</p> <p>Public education campaign about SSBs</p>	<p>Distributor &amp; retailer education campaign</p> <p>Fee administrator contracted</p> <p>Audit reports from fee administrator on volume of SSBs that fee was collected on and distributor compliance rate</p> <p>Reports of total revenues generated</p> <p>Special fund distribution organization identified</p> <p># and type of community projects proposed &amp; funded*</p> <p>Report on how generated revenues are spent.*</p>	<p><b>Increased SSB prices &amp; stable non-SSB prices</b></p> <p><b>Reduced SSB purchases</b></p> <p><b>Reduced SSB consumption</b></p> <p><b>Reduced dental caries</b></p> <p><i>Changes in attitudes toward SSBs**</i></p> <p><i>No negative impact on jobs in key industries that sell SSBs nor on net total unemployment**</i></p>	<p><b>Reduced rates of overweight/obesity for adults and children</b></p> <p><b>Reduced rates of diabetes, pre-diabetes, and heart disease</b></p> <p><b>Reduced health disparities for priority populations (NH, PI, Filipino and low income)</b></p>	<p><b>Reduced health care costs</b></p> <p>Reduced heart disease and diabetes related deaths per 100,000</p>

**Bold outcomes** are core SSB fee outcomes in the theory of change that should be evaluated.

\*What the law specifies about how revenues will be allocated and how they are utilized will impact the logic model outputs and outcomes.

\*\*Items to consider evaluating if the law is passed, in order to build the evidence-base.





# 2

## Pass-Through Rate Evaluation Design

### STUDY DESIGN

To establish the pass-through rate, the UH Evaluation Team will conduct a longitudinal study collecting data on prices of selected beverages (SSBs and non-SSBs of varying sizes) from a sample of retailers statewide before and after the SSB fee is enacted. Ideally, data would also be collected from a control jurisdiction without an SSB fee in order to attribute price changes to the SSB fee and not some other Hawai'i-specific factor, such as SSB price increases due to increased costs of bottling in Hawai'i or retailers overstocking their inventory in anticipation of the law going into effect causing no initial price changes. However, data collection from a control location is not possible due to the unique geography and demographic make-up of Hawai'i, as well as statewide, as opposed to at the county-level), implementation of the SSB fee. To attempt to overcome this limitation, post-law data will be collected at two time points (6 and 12 months). Data will be collected using an observational data collection tool and will be collected in-person from a variety of store types in different communities statewide.

In addition to recording the prices of the identified beverages, data collectors will need to purchase a selected item at each store in order to check if retailers are applying the fee at the point-of-sale instead of the point-of-decision.<sup>27</sup>

An overview of the pass-through rate methodology is in Table 2 on page 10.

### Sample

The ideal sample would be a random selection of retailers statewide stratified by county. Sampling will need to ensure representation from low- and high-income communities, and retailer types of interest\* (supermarkets, grocery stores, and limited service stores, including convenience and drug stores). Because of the limited number of retailers and generally higher prices of items on Lana'i and Moloka'i, it may not be possible to have representation from these islands in the sample. During a 2017 study on SSB prices in Hawai'i, conducted by the Harvard CHOICES Project<sup>9</sup> in collaboration with the DOH and Hawai'i Public Health Institute (HIPHI), SSB prices from these islands were much higher than the prices from other islands and had to be removed from the data. If an SSB fee passes, decisions will need to be made to determine if data should be collected on these islands and included in Maui County prices. In addition to random sampling, where possible, the 24 retail venues visited for the Harvard CHOICES Project will be revisited.

To obtain a database of all retailers statewide from which to sample, the UH Evaluation Team will need to purchase data from either Reference USA or ArcGIS's Business Analyst feature. As of July 2021, the UH Evaluation Team has confirmed that both of these companies have comprehensive databases of food and beverage retailers in Hawai'i (See Appendix A). The price of purchasing the retailer database to establish the sample will range from \$1,250-\$5,000 and should be factored into

*\*It will not be possible to examine all types of retailers. Vending machines, warehouse stores for bulk purchasing, and retailers on military bases will be excluded from this study.*

the evaluation costs. The time needed to purchase and obtain the data also needs to be factored in to the evaluation plan, in order to meet baseline data collection timing of 6 months prior to the law's effective date.

As a backup plan to purchasing retailer data, the UH Evaluation Team can create a database of retailers statewide that sell SSBs by identifying zip codes of interest using a search engine to find applicable retail categories (e.g., supermarket, grocery store) in the specific zip codes needed for sampling.<sup>26,33</sup> Although time consuming and costly in terms of personnel, this method is a viable alternative to establish a database from which to sample. This should be started well in advance of the passage of the SSB fee. Power calculations to establish the necessary sample size will be conducted when this evaluation plan is put into effect.

## **DATA COLLECTION**

Data will be collected in person at retailers statewide using a pre-tested observational data collection tool. Data will be collected at three time points: 6 months prior to the law's effective date, 6 months after the law's effective date, and 12 months after the law's effective date.

### **Data Collection Tool**

For the 2017 Harvard CHOICES project, DOH and HIPHI collected SSB pricing data from 24 selected retailers statewide,<sup>9</sup> using a modified instrument from the Bridging the Gap Study.<sup>34</sup> Because the instrument was developed for a larger study, it includes only a limited number of beverage brands and beverage sizes compared to other instruments that were developed with the sole purpose of measuring the impact of SSB taxes in places such as Berkeley,<sup>15</sup> Philadelphia,<sup>29,35</sup> and Oakland.<sup>27,30</sup> Therefore, two additional SSB tax focused observation tools have been identified to supplement the Harvard CHOICES instrument. All three instruments include measures to collect data on sale or member prices, but the SSB tax focused instruments include additional items to capture both regular prices and sale prices when they are posted. While the SSB tax focused instruments do collect information on less well known SSBs popular in the regions where the instruments were developed (e.g., Big Hugs, Turkey Hill Lemonade), none of the instruments collect data on SSBs that are popular in Hawai'i (e.g., Aloha Maid, Hawaiian Sun, Ito En). Thus, whichever instrument is used in this study will need modifications to capture this information. All three instruments included are publicly available, but permissions should be obtained from researchers to modify and use them prior to data collection.





**TABLE 1: DATA ANALYSES**

	<b>Analysis type</b>	<b>Variables</b>
Sample characteristics	Descriptive statistics	Store type, community income, beverage type, beverage size
Mean price changes	Descriptive statistics	Prices for SSBs, non-SSBs, beverage type size (all sizes combined, individual sizes, family sizes) after weighting for volume of sales by retailer*
Pass through rate <i>Note: Jurisdictions with control groups were able to adjust for the price per ounce change in the control groups to get a true pass-through rate. This will not be possible with Hawai'i's data. However, the non-SSBs can be somewhat of a control calculation.</i>	Change in cents per ounce divided by Hawai'i's SSB fee rate (e.g., \$0.02 per ounce)	Changes in price per ounce for all SSBs combined, by beverage type (e.g., soda, juice), & by beverage size (all sizes combined, individual sizes, family sizes)
Pass through rate of SSBs relative to non-SSBs	Change in cents per ounce for SSBs minus changes for non-SSBs divided by Hawai'i's SSB fee rate	Mean changes in price per ounce for all SSBs & all non-SSBs
Differences in pass-through rates by beverage type, retailer type, community type (low vs high income), and time	General Linear Mixed Models (with clustering at the store level and adjusting for county)	Mean price changes for SSBs overall, beverage type, size, retailer type, community (low vs high income), and time

\*Weighting by overall distribution of volume sold by beverage category and size is necessary because data collection instruments capture a range of SSB types, brands, and sizes, which will result in overrepresentation of certain beverage categories and sizes relative to their proportion of volume sold by retailers.<sup>27,33</sup> For example, a grocery store may sell few energy drinks compared to sodas, and compared to convenience stores. Since volume of products sold affects the price of items, weighting will help to obtain a better estimate of the pass-through rate. Because Hawai'i is so small, only two marketing data companies have sales data specific to Hawai'i, from which to conduct weighting. However, they have data from a very limited number of retailers (e.g., Safeway, Target). It might be possible to use sales volume by store type from another jurisdiction or at the regional level as a proxy for sales volume in Hawai'i. These data will cost about \$50,000 based on estimates given to the UH Evaluation Team by the marketing companies (See Appendix A). Potentially, the UH Evaluation Team could collaborate with a research team on the mainland to get estimates for weighting. However, because some of the SSBs that are popular in Hawai'i are not available nationally, it will not be possible to weight the prices of these popular Hawai'i beverages. Solutions are needed to overcome this data gap. One potential solution is to conduct intercept surveys with customers exiting stores to gather sales volume data.<sup>29</sup> This data would be labor intensive and needs to be factored into the overall evaluation plan.



**TABLE 2: OVERVIEW OF PASS-THROUGH RATE METHODS**

The following table outlines the research questions for the pass-through rate. It includes a primary research question around and a secondary equity-focused research question to assess equitable impact of the SSB fee.

Question	Information required	Information source	Method	Rationale
<b>Objective: Establish if the price of SSBs changes and by how much after the SSB fee is enacted (pass-through rate).</b>				
<ul style="list-style-type: none"> <li>Is the fee being passed-through to consumers at the point-of-decision?</li> </ul>	Pre- and Post-law prices of SSBs and non-SSBs	Retail stores by: <ul style="list-style-type: none"> <li>Store type (e.g., supermarket, grocery, convenience, etc.)</li> <li>Beverage type (e.g., soda, juice, energy drink, etc.)</li> <li>Beverage size (e.g., 12 oz, 20 oz, 1 liter, etc.)</li> <li>Taxed vs non-taxed beverage (SSB vs non-SSB)</li> </ul>	Primary data collection on prices of SSBs and non-SSBs at three time points (6 months pre-law and 6- and 12-months post-law). Data will be collected through observation of prices of specific items and through the purchase of an SSB at each store.	Prices of SSBs should increase after the law is passed and prices of non-SSBs should stay the same. Data show that there are differential pass-through rates by store type and location. <sup>36</sup> Data from other jurisdictions show non-SSB prices remain mostly stable. <sup>26,27</sup>
<b>Equity Consideration: Establish if the fee is being passed-through to all Hawai'i residents equitably.</b>				
<ul style="list-style-type: none"> <li>Is the fee being passed-through at the same rate in all communities and counties?</li> </ul>	Pre- and post-law prices of SSBs and non-SSBs in low income vs high income communities and Honolulu County vs other counties	Additional indicator in the study: <ul style="list-style-type: none"> <li>Neighborhood (low vs high income communities)</li> <li>Honolulu County vs other counties.</li> </ul>	Same as above.	SSB prices should increase equitably in all communities. A Philadelphia study showed that SSB taxes are passed-through at higher rates in low income than high income communities, <sup>29</sup> whereas an Oakland study showed no difference by community. <sup>27</sup>



# 3

## Pass-Through Rate Evaluation Schedule

**TABLE 3: PASS-THROUGH RATE KEY TASKS AND DELIVERABLES**

Listed in the table 3 below are the key tasks to be undertaken, the deliverables, and timing for the core evaluation of the pass-through rate.

Key tasks	Deliverables	Timing
<b>Pass-through rate evaluation</b>		
Establish final law criteria for the types of beverages that will have a fee and modify the survey instrument (e.g., fee for diet drinks?, fee on soda fountains?)	Modified data collection tools and finalized data collection training materials.	Upon close of legislative session.
Establish study sample of retail venues	Study sample list	Upon close of legislative session
Submit a UH IRB application and obtain approval	IRB approval	7 months prior to law's effective date (ideally around May of the legislative session)
Train data collectors	Data collection schedule	6 months prior to law's effective date (ideal)
Pre-law data collection of SSB and non-SSB prices to establish baseline data	Database of SSB and non-SSB prices	6 months prior to the law's effective date (ideal)
First post-law data collection & pre-/first post-law data analysis	Initial pass-through rate calculations and evaluation brief report.	6 months post-law (data collection) 10 months post-law (Preliminary brief report)
Second post-law data collection	Final pass-through rate calculation, evaluation report, legislative brief, and a manuscript.	12 months post-law (data collection) 16 months (reports) 24 months post-law (manuscript)



# 4

## Surveillance Data Collection

### SURVEILLANCE METHODS OVERVIEW

The second objective of this evaluation plan is to outline the surveillance data needs to track expected behavioral, health, and economic outcomes from the SSB fee as outlined in the SSB fee logic model (on page 6 and excerpted below). Tracking these outcomes will provide a comprehensive surveillance and evaluation of Hawai'i's SSB fee over time. Unfortunately, there are gaps in existing data sources for many of the key indicators of the SSB fee's theory of change. Therefore, Table 4 (pages 13-20) outlines the research questions, existing data sources, and methods for additional data collection to close data gaps for the logic model outcomes shown in Figure 2 below. It will not be feasible to answer all research questions in the subsequent table, therefore, it also includes a rationale for each of the indicators to enable stakeholders to prioritize which data to collect if an SSB fee is passed. All of the existing data sources suggested in Table 4 have limitations. Due to space restrictions, not all limitations are discussed. However, if this plan is implemented, limitations will need to be discussed when determining which data source to use for each indicator. Timelines for data collection of these indicators are not included in the table. However, data should be collected prior to the law and at regular intervals over the next ten years.

**FIGURE 2: SSB FEE LOGIC MODEL OUTCOMES**

SHORT-TERM OUTCOMES (1-3 YEARS)	INTERMEDIATE OUTCOMES (3-5 YEARS)	LONG-TERM OUTCOMES (5-10 YEARS)
<p>Increased SSB prices &amp; stable non-SSB prices</p> <p>Reduced SSB purchases</p> <p>Reduced SSB consumption</p> <p>Reduced dental caries</p> <p><i>Changes in attitudes toward SSBs**</i></p> <p><i>No negative impact on jobs in key industries that sell SSBs nor on net total unemployment**</i></p>	<p>Reduced rates of overweight/obesity for adults and children</p> <p>Reduced rates of diabetes, pre-diabetes, and heart disease</p> <p>Reduced health disparities for priority populations (NH, PI, Filipino and low income)</p>	<p>Reduced health care costs</p> <p>Reduced heart disease and diabetes related deaths per 100,000</p>
Core change theory outcomes	Core change theory outcomes	Core



**TABLE 4: BEHAVIORAL, HEALTH, AND ECONOMIC OUTCOME SURVEILLANCE**

The research questions included in Table 4 (pages 13-20) are additional questions to evaluate if the key behavioral, health, and economic outcomes outlined in the SSB fee logic model are being met.

Question	Information required	Information source	Method	Rationale
<b>Objective: Establish if purchasing habits/sales change after the SSB fee is enacted.</b>				
<ul style="list-style-type: none"> <li>Are consumers purchasing fewer SSBs due to the SSB fee?</li> </ul>	Pre- and post-law sales of SSBs and non-SSBs	Potential data sources: <ul style="list-style-type: none"> <li>Conduct customer intercept surveys to establish purchasing habits and attitudes.<sup>29,37</sup></li> <li>Request sales data from selected private businesses.<sup>38</sup></li> <li>Purchase retail scanner data: As of June 2021, IRI &amp; SPINS have data for a few Hawai'i retailers (e.g., Safeway, Target, etc.) that are aggregated at the state-level. Data is estimated to cost about \$50,000. Other retail databases reported they do not have Hawai'i specific data (e.g., BMC, Nielson).<sup>39</sup></li> </ul>	Examining pre-/ post-law sales data from retailers or conducting customer intercept surveys outside selected retailers to obtain customer sales receipts.	In theory, price increases will result in decreased SSB purchases and increased non-SSB purchases (due to substitution purchases). Sales data will also help to see what impact the fee has on businesses. Ideally, there will be a net zero impact from SSB and non-SSB purchases. Other considerations about measuring impacts on retailers are shared on page 23.
<b>Equity Consideration: Establish impacts on priority populations SSB purchases compared with other groups.</b>				
<ul style="list-style-type: none"> <li>How are purchases changing among communities with high proportions of priority populations?</li> </ul>	Pre- and post-law sales of SSBs and non-SSBs in low income vs high income communities and communities with high rates of NH, PI & Filipinos vs whites & Japanese	Potential data sources: <ul style="list-style-type: none"> <li>Customer intercept surveys</li> <li>State-added questions to BRFSS or a panel survey contracted by a survey company (e.g., Omnitrack). Survey costs should be factored into the evaluation plan if this is pursued.</li> </ul>	Need to collect data that can be examined by community/zip code. National sales datasets are aggregated at state-level.	According to the SSB fee change theory, groups with higher consumption should have greater reductions in purchases relative to other groups.



Question	Information required	Information source	Method	Rationale
<b>Objective: Establish if the SSB fee results in reduced SSB consumption.</b>				
<ul style="list-style-type: none"> <li>Are Hawai'i residents consuming fewer SSBs due to the fee?</li> </ul>	SSB consumption data	<ul style="list-style-type: none"> <li><u>Adults</u>: BRFSS Soda (2017, 2019, 2020, 2021); Other SSBs (2017, 2019, 2020, 2021); HEAL Polling Survey question on SSBs combined (2019, 2020)</li> <li><u>Children under 12</u>: BRFSS- 2 state added questions for soda and other SSBs (2021) asked of parents for children ages 2-11, using the asthma call back survey &amp; random child selection module. Identical question asked on HEAL Polling survey (2020)</li> <li><u>High School Teens</u>: YRBS Soda, 100% juice, juice drink, &amp; milk (2015, 2017, 2019)</li> <li><u>Optional</u>: Separate telephone survey specifically to capture SSB, non-SSB, and water consumption as a result of the fee using the BEVq-15 tool.</li> </ul>	<p>Cross-sectional data analysis of SSB consumption.</p> <ul style="list-style-type: none"> <li>These questions need to be asked regularly (e.g., every 5 years) once the law is passed to get trend data.</li> <li>Child consumption data needs to be captured 2 years in a row because of small sample sizes in single year datasets.</li> </ul>	According to the SSB fee theory of change, consumption should decline due to the fee. This outcome should be prioritized and tracked over time in order to evaluate if the SSB fee will have an impact chronic disease.
<b>Equity Consideration: Establish impacts on priority population SSB consumption compared with other groups.</b>				
<ul style="list-style-type: none"> <li>How is consumption changing among priority populations compared to high income, white, and Japanese populations?</li> </ul>	SSB consumption & race/ethnicity data	Same data sources as above	Cross-sectional data analysis of consumption statewide and by race/ethnicity.	In theory, consumption should decline the most among NH, PI and Filipino populations because of their higher consumption levels at baseline.



Question	Information required	Information source	Method	Rationale
<b>Objective: Establish if the SSB fee helps to reduce dental caries/decay in Hawai'i.</b>				
<ul style="list-style-type: none"> <li>Are rates of dental caries and decay declining in Hawai'i as a result of the SSB fee?</li> </ul>	Dental caries and decay or other proxy measures from self-report surveys (e.g., pulled teeth)	<p>Existing surveillance data sources:</p> <ul style="list-style-type: none"> <li><u>Adults</u>: BRFSS Number of teeth removed from tooth decay (2018, 2020); at least one tooth removed (2018, 2020)</li> <li><u>Teens</u>: YRBS toothache in the past 12 months (2013, 2015, 2017) collected for high and middle schools</li> <li><u>Children under 12</u>: National Children's Health Survey (NCHS) has indicators and data for Hawai'i.</li> </ul> <p>Data to collect:</p> <ul style="list-style-type: none"> <li>DOH Family Health Services Division (FHSD) has surveyed Headstart and 3<sup>rd</sup> graders using the Hawai'i Smiles Survey. Funding could enable more years of data collection.</li> </ul>	<p>Cross-sectional data analysis. Existing data sources can be utilized.</p> <p>Alternatively, funding could be dedicated to enable the FHSD to collect data among specific populations with the Hawai'i Smiles Survey.</p>	Reduced SSB consumption should help to reduce dental caries. <sup>40</sup>
<b>Equity Consideration: Establish impacts on priority populations' dental caries and decay compared with other groups.</b>				
<ul style="list-style-type: none"> <li>How are rates of dental caries and decay declining among priority populations compared with other groups?</li> </ul>	Same as above plus MedQuest Decayed Missing or Filled Teeth (DMFT)/ Decayed Missing or Filled Surfaces (DMFS) billing data and race/ethnicity data	<ul style="list-style-type: none"> <li>Same as above plus questions on income &amp; race/ethnicity. NCHS race/ethnicity categories are limited to US Census categories.</li> <li>MedQuest treatment data for low income youth and adults. This data is supplied to the DOH FHSD regularly.</li> </ul> <p><i>Note: FHSD was consulted on data sources for dental caries and decay.</i></p>	<p>Examination of MedQuest data.</p> <p>Data collection from Headstart programs with the Hawai'i Smiles Survey.</p>	With priority populations' high rates of SSB consumption and direct link between consumption and decay, priority populations will potentially see reduced dental effects.

Question	Information required	Information source	Method	Rationale
<b>Objective: Establish if attitudes about the SSBs change over time.</b>				
<ul style="list-style-type: none"> <li>Do attitudes toward SSBs change over time?</li> </ul>	People's attitudes about the effects of SSBs	Existing surveillance data sources: <ul style="list-style-type: none"> <li>HIPHI Polling Data has included questions about perceived effects of SSBs (2014-2020). This data is somewhat limited in that the mean age since 2014 has been between 44 and 54 and the amount of the tax in the question has changed over time.</li> </ul> Potential data sources: <ul style="list-style-type: none"> <li>Telephone or intercept survey could collect additional data that is needed for other indicators.</li> </ul>	Repeat HIPHI polling questions, conduct another telephone survey, or conduct an intercept survey.	In behavior change theories, changing attitudes about a behavior can aid in changes to that behavior. Thus, changes in attitudes can be a proxy for behavior changes. Also, DOH plans to support the SSB fee with a public education campaign about the effects of SSBs. Both should lead to attitude changes.
<b>Equity Consideration: Establish how priority populations' attitudes to SSBs change over time compared to other groups.</b>				
<ul style="list-style-type: none"> <li>Do these attitude changes differ by income and racial/ethnic group?</li> </ul>	Same as above plus data on income level and race/ethnicity	Same as above	Need to ensure sufficient sampling to examine race/ethnicity and income differences	This would help to understand if the fee is benefiting communities with high SSB consumption.



Question	Information required	Information source	Method	Rationale
<b>Objective: Establish the impact of the fee on jobs in key industries that are involved in the sale of SSBs.</b>				
<ul style="list-style-type: none"> <li>Has there been a change in jobs in key SSB industries due to the SSB fee enactment?</li> </ul>	State-level overall unemployment rates and number of jobs in sectors of interest for SSBs	<ul style="list-style-type: none"> <li>Hawai'i Department of Business, Economic Development, &amp; Tourism (DBEDT) has a jobs dashboard which includes data by sectors. Data is available historically by month and is downloadable. However, it is only in summary format. More granular data will need to be requested from DBEDT to conduct modelling and truly establish if any significant changes occurred to the jobs due to the SSB fee.</li> </ul> <p><i>Note: DBEDT was not consulted to establish the feasibility of data access for this indicator. They should be engaged if this research question is pursued.</i></p>	DOH would need to engage DBEDT to access more detailed data and engage an economist who could conduct synthetic control analyses to estimate impact of the fee on jobs compared to the counterfactual. <sup>41</sup>	A main argument against the fee is that it will result in job losses. Therefore, it is hoped that the SSB fee will not significantly negatively impact overall unemployment. Some jobs may be lost in the beverage sector but reinvestments of funds into communities should result in a net zero impact on unemployment.
<b>Equity Consideration: Establish if the SSB fee is disproportionately impacting priority communities.</b>				
<ul style="list-style-type: none"> <li>What is the impact of the SSB fee on employment and businesses of priority populations?</li> </ul>	State-level job labor force and unemployment data by race/ethnicity	<ul style="list-style-type: none"> <li>DBEDT produces a data book annually with race/ethnicity and labor force/unemployment. Raw data will need to be sourced as stated above.</li> </ul>	Same as above	This is important to track over time in order to further understand if there are differential impacts of the SSB fee on the economic well-being of priority populations.



Question	Information required	Information source	Method	Rationale
<b>Objective: Establish impact of SSB fee on overweight and obesity rates in Hawai'i.</b>				
<ul style="list-style-type: none"> <li>Does the SSB fee lead to BMI reductions among Hawai'i residents?</li> </ul>	BMI data are needed instead of the dichotomous overweight/obese indicators because continuous data enables changes over time to be seen more easily and with smaller sample sizes.	<p>Existing surveillance data sources:</p> <ul style="list-style-type: none"> <li>BRFSS (Adults) and YRBS (High School Teens) includes overweight/obesity data. Special requests will be needed to access continuous data.</li> <li>National Children's Health Survey (NCHS; ages 1-17) has BMI data that can be requested for Hawai'i.</li> </ul> <p>Future Data Sources:</p> <ul style="list-style-type: none"> <li>All Payer Claims Database will have data available in the next few years to examine health indicators and costs.</li> </ul>	Cross-sectional data analysis of existing BMI data.	SSB consumption is directly linked to weight gain. <sup>1</sup> Although existing cross-sectional data sources are available, there are limits to them. If funding could be obtained to do a prospective cohort study, this would be the best study design for assessing the research question.
<b>Equity Consideration: Establish if priority populations experience health benefits of the SSB fee.</b>				
<ul style="list-style-type: none"> <li>Does the SSB fee lead to BMI reductions among priority populations?</li> </ul>	Race/ethnicity and income variables	<ul style="list-style-type: none"> <li>Same as above with race/ethnicity &amp; income variables</li> <li>NCHS data cannot be examined by smaller race/ethnicity categories relevant to Hawai'i. Oversampling can be conducted for a cost.</li> <li>DOH can access MedQuest data through an interagency data request to examine specific health and cost outcomes over time (<i>Per a conversation with MedQuest Division in April 2021</i>).</li> </ul>	<p>Cross-sectional data analysis of existing BMI data.</p> <p>Examination of MedQuest data.</p>	Because priority populations' have higher rates of consumption and chronic disease than other groups, the SSB fee should result in greater positive health impacts for priority populations.

Question	Information required	Information source	Method	Rationale
<b>Objective: Establish impact of SSB fee on pre-diabetes, diabetes, heart disease rates in Hawai'i</b>				
<ul style="list-style-type: none"> <li>Does the SSB fee lead to reductions in prevalence of pre-diabetes, diabetes, and heart disease among Hawai'i residents?</li> </ul>	Self-reported disease diagnosis or clinical data on chronic conditions	<p>Existing surveillance data sources:</p> <ul style="list-style-type: none"> <li>BRFSS (Adults) includes self-reported data on adults diagnosed with diabetes, pre-diabetes, and coronary heart disease (<i>data for all three available from 2015-2020</i>)</li> <li>Clinical data are available through Lailima, but agreements are needed to access them. Also, data are of hospitalizations or from Emergency Departments and do not provide statewide prevalence.</li> </ul> <p>Future Data Sources:</p> <ul style="list-style-type: none"> <li>All Payer Claims Database will have clinical and cost data available in the next few years.</li> <li>DOH's Coverdell grant may result in additional data sources for strokes.</li> </ul>	<p>Cross-sectional analysis of health surveillance survey data.</p> <p>Alternatively, clinical data can be sought to monitor the prevalence of these chronic conditions over time.</p>	SSB consumption is associated with diabetes and heart disease. Although changes in these chronic conditions cannot be directly attributed to the fee, they are important to track over time as they are key outcomes in the SSB fee theory of change.
<b>Equity Consideration: Establish if priority populations are reaping the chronic disease benefits of an SSB fee.</b>				
<ul style="list-style-type: none"> <li>Does the SSB fee lead to reductions in rates of pre-diabetes, diabetes, and heart disease among priority populations?</li> </ul>	Race/ethnicity and income variables	<ul style="list-style-type: none"> <li>Same as above with race/ethnicity &amp; income variables</li> <li>DOH can access MedQuest data through an interagency data request to examine specific health and cost outcomes over time (<i>Per a conversation with MedQuest Division in April 2021</i>).</li> </ul>	Same as above plus examination of MedQuest data.	Priority populations experience higher rates of diabetes and heart disease than whites and higher income communities. Data must be examined by income & race/ethnicity to evaluate if the SSB fee is helps priority populations.

Question	Information required	Information source	Method	Rationale
<b>Objective: Establish impact of SSB fee on health care costs in Hawai'i.</b>				
<ul style="list-style-type: none"> <li>Does the SSB fee result in reduced health care costs related to chronic disease.</li> </ul>	Claims data for specific conditions	<p>Existing surveillance data sources:</p> <ul style="list-style-type: none"> <li>DOH can access MedQuest data through an interagency data request to examine specific health and cost outcomes over time. This would be a special project and would require additional efforts by MedQuest. However, they are willing to work with DOH on such a special request to benefit the entire Chronic Disease Prevention and Health Promotion Division. <i>(Per a conversation with MedQuest Division in April 2021).</i></li> </ul> <p>Future Data Sources: All Payer Claims Database will have clinical and cost data available in the next few years.</p>	Exact indicators (billing codes and conditions) would need to be carefully thought out to identify what health care costs were attributed to the conditions.	Harvard CHOICES' modeling study predicted reduced health care costs over 10 years from new cases of diabetes prevented due to the fee. <sup>9</sup> If the SSB fee really impacts chronic disease rates, it should reduce overall health care costs and costs related to specific chronic conditions. However, reductions in costs could never be directly attributed to the SSB fee.
<b>Objective: Establish impact of SSB fee on death rates due to heart disease and diabetes in Hawai'i.</b>				
<ul style="list-style-type: none"> <li>Have heart disease and diabetes-related deaths declined over time?</li> </ul>	Vital statistics data	CDC Wonder has data by state on causes of death per 100,000 people.	A modelling study would need to establish the expected number of deaths in 10 years if no change in SSB consumption occurred compared with if changes occurred.	SSB consumption is linked to some of the leading causes of mortality globally. Theoretically, reduced SSB consumption and related reduced chronic diseases could prevent heart disease and diabetes related deaths.





# 5

## Evaluation Stakeholders

This table shows the key stakeholders and outlines their interest in the pass-through rate evaluation, any issues or constraints to their participation, and their expected involvement.

STAKEHOLDER	INTEREST/ STAKE	ISSUES/ CONSTRAINTS	INVOLVEMENT/ PARTICIPATION
<b>DOH Chronic Disease Prevention and Health Promotion Division</b>	Funder of evaluation, advocate and beneficiary of the fee	To manage any conflicts of interest of evaluation funder and beneficiary, data collection and analysis will be conducted independently of DOH.	Will be consulted throughout the evaluation process. Will need to provide surveillance data and interpretation of policy language
<b>Fee Administrator (contracted)</b>	Interested in ensuring fee is being applied by all distributors. Will benefit from pass-through rate findings	Will not be hired until after the law is enacted	Will be engaged in data interpretation and presentation of findings
<b>Retailers</b>	They will need to allow store observations (differing involvement and interest based on retailer size/type).	Will likely oppose having data collected on their beverage prices. Non-compliance will directly affect SSB fee outcomes.	The intent is to collect the data “secret shopper style.” Therefore, engagement will need to occur post-data collection.
<b>Distributors</b>	Their businesses will be directly impacted by the fee	Will likely oppose the fee. Non-compliance will directly affect SSB fee outcomes.	Should be involved in the interpretation of findings
<b>Advocacy Groups (HIPHI, Obesity Prevention Task Force, etc.)</b>	Advocates	Have a vested interest in positive impacts on health and disparities	Will be engaged in data interpretation and presentation of findings
<b>Priority Population Communities (NH, PI, Filipino &amp; low income*)</b>	Directly impacted by fee both positively (by benefits) and negatively (by cost burdens)	These groups have historically been left out of research projects aimed to benefit them. They may or may not support the fee.	Efforts will be made to ensure engagement of these groups in the evaluation process.

\*Although priority populations are grouped for simplicity, these populations are very diverse. The impacts on these populations will be varied, as will engagement activities.



# 6

## Other Evaluation Considerations

### CONSIDERATIONS

#### Quality and Ethical Considerations

A non-human subjects research application will be submitted to the UH Human Studies Program for approval prior to conducting the pass-through rate study.

A data collection protocol will be established and data collectors will be trained prior to entering the field, in order to ensure that data is collected accurately and consistently across stores and time periods.

SSB fee impacts on priority populations should be reported carefully as to not create stigma or blame around SSB consumption, chronic conditions, and health care costs.

#### Cost Considerations

Pass-through rate data collection will require funding for interisland travel and the purchase of a single-sized beverage item from each of the locations during data collection. These expenses will need to be factored into the evaluation budget for all three data collection periods. Costs of purchasing data for sample development and SSB weighting also need to be considered.

#### Additional Considerations

In the summer of 2021, the United States experienced a rapid increase in inflation due to factors related to the COVID-19 pandemic.<sup>42</sup> While inflation rates may have stabilized by the time the SSB fee is enacted, it will be important to include an adjustment for inflation between data collection time points, to assess if inflation is a contributing factor in any price increases seen over time. Consultation with an economist about how to best adjust for inflation in the data will be necessary.

This evaluation plan outlines the pass-through rate study to examine statewide impacts of the SSB fee because this was the area of interest for DOH when the evaluation plan was developed. However, if DOH and partners feel understanding the impact of the fee on communities that experience greater health disparities and SSB consumption (e.g., NHOPI and Filipino communities) is the greater goal of the evaluation, then targeted data collection can be conducted in these communities.

Additionally, this evaluation plan examines changes in prices in retail venues because prices at the customer's point-of-decision are of specific interest for Hawai'i's SSB fee. However, an evaluation study examining the impacts of the SSB fee on distributor pricing of SSBs or on distributor operations could be another way to look at impacts of the SSB fee. The HI-5 Deposit Beverage Container Program, Hawai'i's beverage container fee to encourage recycling, has a list of distributors



that could be accessed for such an evaluation:

<https://health.hawaii.gov/hi5/distributors/>. However, this list also includes distributors who do not sell SSBs (e.g., only water).

This evaluation plan also discusses examining changes in sales of SSBs and non-SSBs in order to understand if the SSB fee actually affects purchasing behaviors. The sales data from marketing companies is currently limited to a few retailers in Hawai'i. However, if Hawai'i retailers were willing to supply DOH with their sales data, it could also provide insights into the fee's impacts on retailers' businesses. DOH and partners may also want to conduct additional studies, such as key informant interviews with business owners or managers to understand the effects of the SSB fee on retailers' business operations.

## LIMITATIONS

### Pass-through rate evaluation

As mentioned above, the lack of a comparison jurisdiction without an SSB tax will limit the ability to draw conclusions about the fee's true impact on prices. Multiple data collection points are planned in this study to try to mitigate this limitation. To further strengthen this study, data could be collected at additional time points before the law (e.g., 2 years, 1 year, 6 months). This would enable trends in SSB prices to be established. A significant change in SSB price trends after the SSB fee went into effect would provide strong evidence of the SSB fee's impact on SSB prices beyond other factors that had affected SSB prices in Hawai'i in previous years. However, conducting additional pre-law data collection would require resources to be invested in the SSB fee evaluation long before there was certainty that the law would be passed, which may not be feasible. Additionally, multiple pre-law data collection time points are not an exact substitute for a control group, so conclusions of causes for SSB price increases will still be limited. This inherent limitation should be kept in mind if the SSB fee is enacted and this study is conducted.

Another limitation is that sales data is available from only a few of Hawai'i retailers, which will affect the weighting of SSBs prices by beverage type and size. This limitation means that with the current data collection and analysis methodology, there will likely be oversampling of less popular beverages (e.g. energy drinks), which might skew the pass-through rate established by the data. It is possible that more data will be available in the future, which would improve the accuracy of the data.

### Surveillance Data Collection

Although the SSB fee will theoretically have an impact on the behavioral, health, and economic factors outlined in the surveillance section of this plan, it will not be possible to directly attribute any changes in these outcomes to the SSB fee. Also, many of the data sources are cross-sectional surveillance surveys, which may not be able to detect changes resulting from the SSB fee. Regardless, data should be collected overall to monitor population health.



# 7

## Communicating Evaluation Findings

### COMMUNICATIONS PLAN

The following table generally outlines a tentative high-level communications plan about the evaluation for different audiences and stakeholders.

Partners & stakeholders	Interest/stake in the evaluation	How best to communicate?
DOH	Will want to see a positive impact of the fee on health and details of retailer implementation in order to improve statewide compliance	Presentation and report
Legislators	Will want to see all impacts from the fee (good and bad) depending on their political stance on the fee	Legislative brief
Advocacy Groups (HIPHI, OPTF, AHA)	Will want to see full implementation and a positive impact of the fee	Presentation and evaluation report
Priority Populations (NH, PI, Filipino, Low Income)	In theory, priority populations will reap the most health benefits from an SSB fee. However, if the fee is not equitably implemented and revenues do not benefit these diverse communities, the fee will be regressive. These populations will want to see harm mitigation and benefit allocations from the fee.	Press releases and evaluation report
General Public	Public polling shows general support for an SSB fee in Hawai'i with funds dedicated to healthy keiki. However, the public will be paying higher prices for SSBs and will be interested in the effects of the fee.	Press release and evaluation report
Public Health Community	Interested in the viability of a statewide law and building the evidence-base for SSB fees/taxes.	Peer-reviewed publication if Hawai'i is one of the first states to pass this law.

### DISSEMINATION PLAN

Findings will be disseminated through presentations, evaluation reports, legislative briefs, press releases, and a peer-reviewed publication.



## 8

## Appendices

**APPENDIX A: RETAILER DATABASES****Reference USA (for Sample development)**

**Website:** <https://www.data-axle.com/what-we-do/reference-solutions/>

**Contact Name:** Bob Kunes

**Contact Email:** Bob.Kunes@data-axle.com

**Data:** List of food and beverage retailers statewide. As of July 2021, the dataset included 4,218 retailers.

**Cost:** Pricing is \$0.30/per retailer name in the dataset. The estimated cost is \$1,265, not including any other taxes and fees. Data is as of July 2021. Larger datasets (5,000-10,000 records) are cheaper (\$0.25 per record) and smaller data sets (<1000 records) are more expensive (\$0.40 per record)

**ESRI Business Analyst for ArcGIS (for sample development)**

**Website:** <https://www.data-axle.com/what-we-do/reference-solutions/>

**Contact Name:** Mark Stewart

**Contact Email:** mstewart@esri.com

**Data:** Dataset has geocoded business information that can be mapped to identify retailers in specific communities of interest in Hawai'i.

**Cost:** \$5,000 for the Business Analyst feature added to ArcGIS costs.

**SPINS (for sales volume)**

**Website:** <https://www.spins.com/>

**Contact Name:** Caroline Davidson

**Contact Email:** cdavidson@spins.com

**Data:** As of June 2021, SPINS had sales data for only a few Hawai'i retailers (Safeway, Target, Walgreens) that is aggregated at the state-level. Some retailers do not disclose their data or disaggregate it from their regional data. SPINS has data that goes back 3 years. The advantage over IRI is that they can provide attributes based on nutrition facts label (e.g., amount of sugar),

**Cost:** Depending on the dataset pulled (e.g., amount of product categories).

**IRI (for sales volume)**

**Website:** <https://www.iriworldwide.com/en-us>

**Contact Name:** James Carlson

**Contact Email:** James.Carlson@IRIworldwide.com

**Data:** As of January 2021, IRI reported they only had Safeway and Walmart's data but were not sure these retailers would allow it to be released. Data would include UPCs and attributes to do analyses by beverage category, size of product, etc.

**Cost:** Starting at \$5,000/store group. When they have supplied other jurisdictions with data for their SSB tax studies (e.g., Colorado and Pennsylvania) costs were around \$50,000 in total.



## APPENDIX B: DATA COLLECTION INSTRUMENTS

### Instrument 1: Harvard CHOICES Project in Hawai'i, 2017

In the 2017 Hawai'i SSB pricing data collection, the Harvard CHOICES Project used elements of the Food Store Observation Form from the Bridging the Gap study, a 2012 study that broadly assessed community nutrition and physical activity environments.<sup>34</sup> The full Food Store Observation Form and complete Bridging the Gap study with other data collection instruments can be found here:

[http://www.bridgingthegapresearch.org/asset/p5mswy/BTGCOMP\\_FoodStore\\_2012.pdf](http://www.bridgingthegapresearch.org/asset/p5mswy/BTGCOMP_FoodStore_2012.pdf). Only the parts of the Food Store Observation Form that include general store details and beverage items were included in the Harvard CHOICES Project data collection. The modified instrument is included in this appendix on page 27.

### Instrument 2: Bleich and Colleagues Study, 2020

This is a comprehensive instrument developed specifically for in-person data collection for small independent retailers in Philadelphia, Pennsylvania. It was developed specifically for SSB tax evaluation and was utilized in 2016-17. The instrument is available as an appendix to the online Health Affairs article.<sup>29</sup> The instrument has been attached to this evaluation report on page 29.

### Instrument 3: Cawley and Colleagues Study, 2020

This instrument was used in multiple studies by Cawley and Colleagues to collect data specifically for SSB pricing for SSB taxes in various jurisdictions, including Oakland<sup>30</sup> and Philadelphia.<sup>35</sup> The instrument was supposed to be listed in an appendix to the online Economics and Human Biology article,<sup>30</sup> however, it wasn't attached. Mathematica Policy Research shared the instrument through email when the UH Evaluation Team requested it. The complete instrument is attached to this report on page 45.





# CHOICES SSB pricing

**\*1. Business name**

**2. Business address**

**3. What was the date data collection took place here?**

mm/dd/yyyy      MM    DD    YYYY  
mm/dd/yyyy     /  /

**4. Please choose the type of store**

- Supermarket (Jewel-Osco, Kroger, Safeway, Hannaford etc.)
- Grocery (Aldi, Trader Joe's, "mom and pop")
- Limited Service (convenience, small discount, drug store, liquor store)

Other (please specify)

## F. BEVERAGES

1 4 - 1 2 - -

FAMILY SIZE (≥ 1 liter/33.8 fl oz)	<i>IF F1= NO, SKIP F2-F6</i>	F1. AVAILABLE		F2. BRAND <i>IF None, SKIP F3-F6</i>			F3. QTY	F4. PACKAGE SIZE <i>IF None, SKIP F5-F6</i>			F5. CURRENT PRICE <i>IF 77.77 (DK), SKIP F6</i>		F6. PRICE TYPE	
		NO	YES								REG	SPECIAL		
		<input type="checkbox"/> 0	<input type="checkbox"/> 1									<input type="checkbox"/> 1	<input type="checkbox"/> 2	
FAMILY SIZE (≥ 1 liter/33.8 fl oz)	<b>a. Orange Juice, 100% juice</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Minute Maid <input type="checkbox"/> 1		59 - 64 oz <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2				
				Tropicana <input type="checkbox"/> 2		89 oz <input type="checkbox"/> 2								
				None of above <input type="checkbox"/> 8		None of above <input type="checkbox"/> 8								
	<b>b. Juice Drink, &lt;50% juice</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Minute Maid <input type="checkbox"/> 1		59 - 64 oz <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2				
				Tropicana <input type="checkbox"/> 2		128 oz <input type="checkbox"/> 2								
				None of above <input type="checkbox"/> 8		None of above <input type="checkbox"/> 8								
<b>c. Juice Box/Pouch ≤ 10% juice</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Hi-C <input type="checkbox"/> 1		Box of 10 <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2					
			Capri Sun <input type="checkbox"/> 2		Case of 40 <input type="checkbox"/> 2									
			None of above <input type="checkbox"/> 8		None of above <input type="checkbox"/> 8									
<b>d. Soda, regular</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Coca-Cola <input type="checkbox"/> 1		2 Liter <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2					
			Pepsi <input type="checkbox"/> 2		12 can case <input type="checkbox"/> 2									
			None of above <input type="checkbox"/> 8		None of above <input type="checkbox"/> 8	Asked? <input type="checkbox"/> N <input type="checkbox"/> Y								
<b>e. Soda, diet</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Coca-Cola <input type="checkbox"/> 1		2 Liter <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2					
			Pepsi <input type="checkbox"/> 2		12 can case <input type="checkbox"/> 2									
			None of above <input type="checkbox"/> 8		None of above <input type="checkbox"/> 8	Asked? <input type="checkbox"/> N <input type="checkbox"/> Y								
<b>f. Soda, least expensive regular cola</b>	<i>IF NO SODA AVAILABLE, SKIP ROW</i>				2 Liter <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2					
					12 can case <input type="checkbox"/> 2		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2					
					None of above <input type="checkbox"/> 8		Asked? <input type="checkbox"/> N <input type="checkbox"/> Y							
INDIVIDUAL SIZE (< 1 liter/33.8 fl oz)	<b>g. Orange Juice, 100% juice</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Minute Maid <input type="checkbox"/> 1		15.2 oz <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2				
				Tropicana <input type="checkbox"/> 2		12 oz <input type="checkbox"/> 2								
				None of above <input type="checkbox"/> 8		None of above <input type="checkbox"/> 8								
	<b>h. Juice Drink, &lt;50% juice</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Minute Maid <input type="checkbox"/> 1		15.2 oz <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2				
				Tropicana <input type="checkbox"/> 2		12 oz <input type="checkbox"/> 2								
				None of above <input type="checkbox"/> 8		None of above <input type="checkbox"/> 8								
	<b>i. Soda, regular</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Coca-Cola <input type="checkbox"/> 1		20 oz <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2				
				Pepsi <input type="checkbox"/> 2		12 oz <input type="checkbox"/> 2								
			None of above <input type="checkbox"/> 8		None of above <input type="checkbox"/> 8	Asked? <input type="checkbox"/> N <input type="checkbox"/> Y								
<b>j. Soda, diet</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Coca-Cola <input type="checkbox"/> 1		20 oz <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2					
			Pepsi <input type="checkbox"/> 2		12 oz <input type="checkbox"/> 2									
			None of above <input type="checkbox"/> 8		None of above <input type="checkbox"/> 8	Asked? <input type="checkbox"/> N <input type="checkbox"/> Y								
<b>k. Energy Drink, regular</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Red Bull <input type="checkbox"/> 1		8-8.5 oz <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2					
			Monster <input type="checkbox"/> 2		16 oz <input type="checkbox"/> 2									
			Rockstar <input type="checkbox"/> 3		None of above <input type="checkbox"/> 8									
			None of above <input type="checkbox"/> 8											
<b>l. Isotonic Sports Drink, regular</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Gatorade <input type="checkbox"/> 1		20 oz <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2					
			Powerade <input type="checkbox"/> 2		32 oz <input type="checkbox"/> 2									
			None of above <input type="checkbox"/> 8		None of above <input type="checkbox"/> 8									
<b>m. Enhanced Water, regular</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Vitamin Water <input type="checkbox"/> 1		20 oz <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2					
			Sobe Life <input type="checkbox"/> 2		16-17 oz <input type="checkbox"/> 2									
			Propel <input type="checkbox"/> 3		None of above <input type="checkbox"/> 8									
			None of above <input type="checkbox"/> 8											
<b>n. Bottled Water, plain</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	Dasani <input type="checkbox"/> 1		20 oz <input type="checkbox"/> 1		\$ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2					
			Aquafina <input type="checkbox"/> 2		24 oz <input type="checkbox"/> 2									
			None of above <input type="checkbox"/> 8		None of above <input type="checkbox"/> 8	Asked? <input type="checkbox"/> N <input type="checkbox"/> Y								

Bleich SN, Lawman HG, LeVasseur MT, Yan J, Mitra N, Lowery CM, et al. The association of a sweetened beverage tax with changes in beverage prices and purchases at independent stores. Health Aff (Millwood). 2020;39(7).

**Appendix D. Data Collection Forms**

**D.1. Price audit form**

<b>ENVIRONMENTAL BEVERAGE SCAN FORM</b>		
<b>Store Name:</b> _____ <b>Store Address:</b> _____ _____ <b>Store ID:</b> _____ <b>Store Zip Code:</b> _____	<b>Staff Name:</b> _____ <b>Date:</b> _____ <b>RA Name:</b> _____ <b>Redcap Record ID:</b> _____	
<b>Start time:</b> _____ <b>End time:</b> _____	<b>Type of Store:</b> <input type="checkbox"/> <input type="checkbox"/> Corner Store <input type="checkbox"/> <input type="checkbox"/> Small Grocery Store <input type="checkbox"/> <input type="checkbox"/> Convenience Store <input type="checkbox"/> <input type="checkbox"/> Gas/Service Station <input type="checkbox"/> <input type="checkbox"/> Drug Store/Pharmacy <input type="checkbox"/> <input type="checkbox"/> Deli/Take Out <input type="checkbox"/> <input type="checkbox"/> Other: _____	
<b>Table of Contents:</b>		
Coca-Cola (regular, diet), 1 Pepsi (regular, diet), 2 Sprite (regular), 3 Dr. Pepper (regular), 3 Mountain Dew (regular), 3 Sunkist Orange Soda (regular), 4 Canada Dry Ginger Ale (regular), 4 Days' Soda, 4 Welch's Grape Soda, 5 Water, plain, 5	Clear Fruit Drink, 5 Little Hugs, 5 Big Hugs, 6 Big Burst, 6 Tropicana OJ, 6 Everfresh 100% Juice, 6 Kool-Aid Jammers, 6 Hawaiian Punch Fruit Drink, 6 Nantucket Nectars, 6 Arizona Drinks, 6	Turkey Hill Lemonade, 7 Red Bull, 7 Monster, 7 Gatorade, 7 G2, 7 Milk (whole), 7 Milk (2%, 1%, skim), 8 Snacks (all), 9-10 Tobacco, 11

## BEVERAGE PRICING

<i>Beverage:</i>	<i>Available?</i>		<i>Package Size:</i>	<i>Price:</i>	<i>Promo Price:</i>
	<i>Yes</i>	<i>No</i>			
Coca-Cola, regular  If Coca-Cola/Pepsi brand is not available, please write in most widely stocked brand and fill in sizes and prices (e.g. "Bubba Cola"):  _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16-16.9 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 cans	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Coca-Cola, diet  If Diet Coca-Cola/Diet Pepsi is not available, please write in most widely stocked brand and fill in sizes/prices (e.g. "Diet Cola"):  _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16-16.9 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 cans	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____

Pepsi, regular	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16-16.9 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 cans	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Pepsi, diet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16-16.9 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 cans	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____

Sprite, regular	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16-16.9 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 cans	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Dr. Pepper, regular	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16-16.9 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 cans	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____

Mountain Dew, regular	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16-16.9 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 cans	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Sunkist Orange Soda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16-16.9 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 cans	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Canada Dry Ginger Ale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16-16.9 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____



	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 cans	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Days Soda, all flavors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 24 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 cans	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Welch's Grape Soda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 cans	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Water, plain (fl oz.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16-16.9	\$ ____ . ____	\$ ____ . ____

Please list the most widely stocked brand and fill in the sizes/prices for that brand only (i.e. "Deer Park"):  _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 23-24 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 33.8 oz./ 1 L	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 24 pack (16.9 oz. bottles)	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Clear Fruit Drink, all flavors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16-16.9 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
Little Hug, all flavors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 8 oz.	\$ ____ . ____	\$ ____ . ____
Big Hug, all flavors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16 oz.	\$ ____ . ____	\$ ____ . ____
Big Burst, all flavors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16 oz.	\$ ____ . ____	\$ ____ . ____
Tropicana Orange Juice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 10-12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 15.2-16 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 59 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 89 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Everfresh Pure 100% Juice <input type="checkbox"/> Orange Juice <input type="checkbox"/> Other 100% Juice: _____ If Everfresh is not available, write in other 100% juice brand and fill in size/price:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 32 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____

_____					
Kool Aid Jammers, all flavors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 6 oz.	\$ ____ . ____	\$ ____ . ____
Hawaiian Punch Fruit Drink	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 10 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 gal.	\$ ____ . ____	\$ ____ . ____
Nantucket Nectars Juice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16 oz.	\$ ____ . ____	\$ ____ . ____
Arizona Drinks, all flavors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16.9 oz.	\$ ____ . ____	\$ ____ . ____
If Arizona Drinks is not available, please write in other sweetened tea brand and fill in sizes/prices: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 23 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 gal.	\$ ____ . ____	\$ ____ . ____
Turkey Hill Lemonade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 8 oz.	\$ ____ . ____	\$ ____ . ____
If Turkey Hill is not available, please write in other sweetened lemonade brand and fill in sizes/prices: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 18.5 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Red Bull, regular	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 8-8.4 oz.	\$ ____ . ____	\$ ____ . ____
If Red Bull/Monster are not available, please write in other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 12 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16 oz.	\$ ____ . ____	\$ ____ . ____

energy drink brand and fill in sizes/prices: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Monster Energy Drink, regular	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 15-16 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 24 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Gatorade, all flavors  If Gatorade is not available, please write in other sports drink brand and fill in sizes/prices: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 32 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____

G2 (Low-Calorie Gatorade), all flavors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 20 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 32 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Milk, Whole  Please list the most widely stocked brand of milk (all varieties: whole, 2%, 1%, skim) and fill in the sizes/prices for that brand only (i.e. "Lehigh Valley"):  _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 32 oz./ 1 quart	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ½ gal	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 gal	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Milk, Whole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 32 oz./ 1 quart	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ½ gal	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 gal	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Milk, 2%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 32 oz./ 1 quart	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ½ gal	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 gal	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Milk, 1%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 32 oz./ 1 quart	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ½ gal	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 gal	\$ ____ . ____	\$ ____ . ____

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____
Milk, Skim (nonfat)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 16 oz.	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 32 oz./ 1 quart	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ½ gal	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 gal	\$ ____ . ____	\$ ____ . ____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other: _____	\$ ____ . ____	\$ ____ . ____

**D.2. Customer purchase assessment form (Philadelphia)**

*Hello, did you just buy any food, beverage, or tobacco items? **If no**, participant is not eligible. **If yes**: Would you be willing to be part of a research study we are doing at the University of Pennsylvania about grocery purchases? We are asking you to join the study because you just made a purchase at this store and we want to find out more about what you bought. If you agree to join this study, I will record everything you just bought and ask you a few questions. It should last about 5-10 minutes. We will not document any personal details which can identify you. All answers that you give will be kept private. You do not have to join this study—it is up to you and you can change your mind later, just tell us. You have the right to refuse to answer any questions. Do you have any questions before you agree? Would you like to participate? **If yes**: Great! Let’s get started. **If no**: Thanks for considering it.*

**Note to RAs:** The questions below should be completed before starting interviews.

*DK = Don’t know; Please DO NOT read the Don’t know and Refused response categories out loud.*

Date:	Time: <input type="checkbox"/> AM <input type="checkbox"/> PM	Time Block: <input type="checkbox"/> Morning <input type="checkbox"/> Afternoon <input type="checkbox"/> Evening	Day: <input type="checkbox"/> Mon <input type="checkbox"/> Tue <input type="checkbox"/> Wed <input type="checkbox"/> Thurs <input type="checkbox"/> Fri <input type="checkbox"/> Sat <input type="checkbox"/> Sun	Temperature: _____ <input type="checkbox"/> Sun <input type="checkbox"/> Rain <input type="checkbox"/> Clouds <input type="checkbox"/> Snow/Sleet/Hail	Interviewer Last Name:	Corner Store ID:
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Was verbal consent obtained for interviewing?  Yes  No Philadelphia Resident? [live in Philadelphia City limits?]  Yes  No

Home Zip Code: <input type="checkbox"/> DK <input type="checkbox"/> REFUSED	How often do you come to this store? <input type="checkbox"/> 1 time per month or less <input type="checkbox"/> 2-3 times per month <input type="checkbox"/> 1-2 times per week <input type="checkbox"/> 3-6 times per week <input type="checkbox"/> 1 time per day	<input type="checkbox"/> 2-3 times per day <input type="checkbox"/> 4 or more times per day <input type="checkbox"/> DK <input type="checkbox"/> REFUSED	How much did you spend today? \$ ____ . ____ <input type="checkbox"/> DK <input type="checkbox"/> REFUSED	Was this purchase only for you, to share or for someone else? <input type="checkbox"/> Only you <input type="checkbox"/> Share <input type="checkbox"/> Someone else <input type="checkbox"/> DK <input type="checkbox"/> REFUSED
---	--	---	---	--

**Thank you for answering those questions. Now I’m going to write down food, beverage, or tobacco products you purchased. Can I take a look in your bag? Note to RAs:** Please record ALL food, beverage and tobacco products

ITEMS PURCHASED					
Foods and beverages	Product Brand	Product Name	Ounces / Grams [indicate unit]	Quantity	Price per item
<input type="checkbox"/> Drink <input type="checkbox"/> Food					
<input type="checkbox"/> Drink <input type="checkbox"/> Food					
<input type="checkbox"/> Drink <input type="checkbox"/> Food					
<input type="checkbox"/> Drink <input type="checkbox"/> Food					
<input type="checkbox"/> Drink <input type="checkbox"/> Food					



<input type="checkbox"/> Drink <input type="checkbox"/> Food								
Was Tobacco purchased?	Tobacco Brand and Product	Is the tobacco flavored?	Is it menthol?	E-cigarette/electronic?	Loosie?	Pack Size	Quantity	Price per item
<input type="checkbox"/> Yes <input type="checkbox"/> No (IF NO → SKIP)		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

**Please take a look at these four pictures of beverages [show participants the laminated images].**

Which laminated card was used for the survey?  A  B  C  D

Coca-Cola 1 2 3 4 5	Diet Coke 1 2 3 4 5	Gatorade 1 2 3 4 5	100% Juice 1 2 3 4 5
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<p>How often do you drink beverages with added sugar such as a soda?</p> <input type="checkbox"/> NEVER <input type="checkbox"/> 1 time per month or less <input type="checkbox"/> 2-3 times per month <input type="checkbox"/> 1-2 times per week <input type="checkbox"/> 3-6 times per week <input type="checkbox"/> 1 time per day <input type="checkbox"/> 2-3 times per day <input type="checkbox"/> 4 or more times per day <input type="checkbox"/> DK <input type="checkbox"/> REFUSED	<p>How often do you drink beverages with artificial sweetener such as a diet soda?</p> <input type="checkbox"/> NEVER <input type="checkbox"/> 1 time per month or less <input type="checkbox"/> 2-3 times per month <input type="checkbox"/> 1-2 times per week <input type="checkbox"/> 3-6 times per week <input type="checkbox"/> 1 time per day <input type="checkbox"/> 2-3 times per day <input type="checkbox"/> 4 or more times per day <input type="checkbox"/> DK <input type="checkbox"/> REFUSED	<p>How often do you buy sugary drinks or diet beverages in Delaware, Bucks, Chester, or Montgomery Counties or New Jersey?</p> <input type="checkbox"/> NEVER <input type="checkbox"/> 1 time per month or less <input type="checkbox"/> 2-3 times per month <input type="checkbox"/> 1-2 times per week <input type="checkbox"/> 3-6 times per week <input type="checkbox"/> 1 time per day <input type="checkbox"/> 2-3 times per day <input type="checkbox"/> 4 or more times per day <input type="checkbox"/> DK <input type="checkbox"/> REFUSED
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<p>Philadelphia has recently passed a tax that adds 1.5 cent-per-ounce on sugary drinks and diet beverages. Some of the funds will support expanding pre-K and community schools, and fixing parks, recreation centers, and libraries.</p> <p>Before today, had you heard of this regulation or not?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> REFUSED</p> <p>Based on what you know, do you favor or oppose this regulation?  <input type="checkbox"/> Strongly favor <input type="checkbox"/> Somewhat oppose <input type="checkbox"/> DK  <input type="checkbox"/> Somewhat favor <input type="checkbox"/> Strongly oppose <input type="checkbox"/> REFUSED</p>	<p>[DO NOT ASK AT BASELINE]</p> <p>In your view, since January when the beverage tax was implemented, has the regulation made you buy more or fewer sugary drinks?  <input type="checkbox"/> More  <input type="checkbox"/> Fewer  <input type="checkbox"/> DK  <input type="checkbox"/> REFUSED</p>	<p>[DO NOT ASK AT BASELINE]</p> <p>In your view, since January when the beverage tax was implemented, has the regulation made you buy more or fewer diet drinks?  <input type="checkbox"/> More  <input type="checkbox"/> Fewer  <input type="checkbox"/> DK  <input type="checkbox"/> REFUSED</p>
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<p>Philadelphia has recently passed regulations that limit how many stores can sell tobacco in the city and how many of those stores can be located near schools.</p> <p>Before today, had you heard of these regulations or not?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> REFUSED</p> <p>Based on what you know, do you favor or oppose these regulations?  <input type="checkbox"/> Strongly favor <input type="checkbox"/> Strongly oppose  <input type="checkbox"/> Somewhat favor <input type="checkbox"/> DK  <input type="checkbox"/> Somewhat oppose <input type="checkbox"/> REFUSED</p>	<p>What is your gender:  <input type="checkbox"/> Male  <input type="checkbox"/> Female  <input type="checkbox"/> Other  <input type="checkbox"/> DK  <input type="checkbox"/> REFUSED</p>	<p>What is your age:  <input type="checkbox"/> &lt;12 years old  <input type="checkbox"/> 13 to 17 years old  <input type="checkbox"/> 18+ years old  <input type="checkbox"/> DK  <input type="checkbox"/> REFUSED</p>	<p>Are you Hispanic?  <input type="checkbox"/> Yes  <input type="checkbox"/> No  <input type="checkbox"/> DK  <input type="checkbox"/> REFUSED</p>	<p>What is your race?  <input type="checkbox"/> White  <input type="checkbox"/> Black  <input type="checkbox"/> Other:  <hr/> <input type="checkbox"/> DK  <input type="checkbox"/> REFUSED</p>
<p>What is the highest level of education you have completed (ADULTS ONLY):  <input type="checkbox"/> Less than high school <input type="checkbox"/> DK  <input type="checkbox"/> High school or GED  <input type="checkbox"/> REFUSED  <input type="checkbox"/> Some college or Associate's degree  <input type="checkbox"/> College/University degree or higher</p>	<p>What is your height in feet and inches?  ____ ft ____ in  <input type="checkbox"/> DK  <input type="checkbox"/> REFUSED</p>	<p>What is your weight in pounds?  ____ lbs  <input type="checkbox"/> DK  <input type="checkbox"/> REFUSED</p>	<p>Comments:</p>	



Was Tobacco purchased?	Tobacco Brand and Product	Is the tobacco flavored?	Is it menthol?	E-cigarette/ electronic?	Loosie?	Pack Size	Quantity	Price per item
<input type="checkbox"/> Yes <input type="checkbox"/> No (IF NO → SKIP)		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

**Please take a look at these four pictures of beverages [show participants the laminated images].**

Which laminated card was used for the survey?  A  B  C  D

Coca-Cola	1	2	3	4	5	Diet Coke	1	2	3	4	5	Gatorade	1	2	3	4	5	100% Juice	1	2	3	4	5
-----------	---	---	---	---	---	-----------	---	---	---	---	---	----------	---	---	---	---	---	------------	---	---	---	---	---

<p>How often do you drink beverages with added sugar such as a soda?</p> <input type="checkbox"/> NEVER <input type="checkbox"/> 1 time per month or less <input type="checkbox"/> 2-3 times per month <input type="checkbox"/> 1-2 times per week <input type="checkbox"/> 3-6 times per week <input type="checkbox"/> 1 time per day <input type="checkbox"/> 2-3 times per day <input type="checkbox"/> 4 or more times per day <input type="checkbox"/> DK <input type="checkbox"/> REFUSED	<p>How often do you drink beverages with artificial sweetener such as a diet soda?</p> <input type="checkbox"/> NEVER <input type="checkbox"/> 1 time per month or less <input type="checkbox"/> 2-3 times per month <input type="checkbox"/> 1-2 times per week <input type="checkbox"/> 3-6 times per week <input type="checkbox"/> 1 time per day <input type="checkbox"/> 2-3 times per day <input type="checkbox"/> 4 or more times per day <input type="checkbox"/> DK <input type="checkbox"/> REFUSED	<p>What is your gender:</p> <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other <input type="checkbox"/> DK <input type="checkbox"/> REFUSED
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<p>What is your age:</p> <input type="checkbox"/> 13 to 17 years old <input type="checkbox"/> 18+ years old <input type="checkbox"/> DK <input type="checkbox"/> REFUSED	<p>Are you Hispanic?</p> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> REFUSED	<p>What is your race?</p> <input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Other: _____ <input type="checkbox"/> DK <input type="checkbox"/> REFUSED	<p>What is your height in feet and inches?</p> ____ ft ____ in <input type="checkbox"/> DK <input type="checkbox"/> REFUSED	<p>What is your weight in pounds?</p> ____ lbs <input type="checkbox"/> DK <input type="checkbox"/> REFUSED
---	---	---	---	---

<p>What is the highest level of education you have completed (ADULTS ONLY):</p> <input type="checkbox"/> Less than high school <input type="checkbox"/> DK <input type="checkbox"/> High school or GED <input type="checkbox"/> REFUSED <input type="checkbox"/> Some college or Associate's degree <input type="checkbox"/> College/University degree or higher	<p>Comments:</p>
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**Notes**



## IN-STORE OBSERVATION: DATA COLLECTION FORM

FI FIRST AND LAST NAME: _____	DATE:  _ _ / _ _ / _ _ _ _	TIME :  _ _  :  _ _  AM / PM
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**PRODUCT PRICES: INSTRUCTIONS**

**Item not available:** If the specific item in the listed size is not available at the store, check the box in this column. Continue to the next product.

**Price:** For each product, record the posted price for a single product of that brand and size. If the product is on sale for all shoppers, record the sale price. Readily available coupons that would discount the price should be “applied” when recording the price. If no price is listed, ask the store employee after you have collected all other information.

**On sale:** If the price you recorded is a sale price (product is on sale for all shoppers), check Y. If the price has a coupon factored in, check Y. Otherwise, check N.

**Loyalty club price:** If store loyalty club members pay a different price from other shoppers, record the price loyalty club members pay. If there is no special price for loyalty club members, check the box labeled “N/A.”

**Sale only for multi-buy:** If a sale only applies when multiple products are purchased, check Y. Otherwise, check N and continue to the next product.

**MB only for Loyalty club:** If there is a multi-buy deal offered only to Loyalty club members, mark Y. Otherwise, mark N.

**Describe multi-buy deal:** Explain the multi-buy deal, including required quantity, stated discount, etc.

Beverage/Size	Check if item NOT available	Price for <u>all</u> shoppers	On sale for <u>all</u> shoppers?	Record price for Loyalty Club members <u>only</u>	Sale <u>only</u> applies for multi-buy?	Is the MB deal <u>only</u> for loyalty club members?	Describe multi-buy deal (ex. Buy 2 get 1 free, 3 for \$2)
<b>Food Items</b>							
Similac Advance Complete Nutrition, Infant Formula with Iron, Powder 12.4oz	<input type="checkbox"/>	_ _ _ . _ _ _  →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_ _ _ . _ _ _  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Honey Nut Cheerios, 12.25oz box	<input type="checkbox"/>	_ _ _ . _ _ _  →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_ _ _ . _ _ _  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	

Beverage/Size	Check if item NOT available	Price for <u>all</u> shoppers	On sale for <u>all</u> shoppers?	Record price for Loyalty Club members <u>only</u>	Sale <u>only</u> applies for multi-buy?	Is the MB deal <u>only</u> for loyalty club members?	Describe multi-buy deal (ex. Buy 2 get 1 free, 3 for \$2)
<b>Sodas – Individual</b>							
Pepsi, 20oz bottle	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Diet Pepsi, 20oz bottle	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Coke, 20oz bottle	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Diet Coke, 20oz bottle	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Coke Zero, 20oz bottle	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
7 Up, 20oz bottle	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Mountain Dew, 20oz bottle	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Sprite, 20oz bottle	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
<b>Other sweetened beverages – Individual</b>							
Gatorade, 20oz bottle	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Gatorade G2, 20oz bottle	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Arizona Iced Tea with lemon flavor, 23oz can	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Arizona Diet Lemon Iced Tea, 15.5oz can	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Lipton Peach Iced Tea, 20oz bottle	<input type="checkbox"/>	____.____→	<input type="checkbox"/> YES <input type="checkbox"/> NO	____.____ <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	





Beverage/Size	Check if item NOT available	Price for all shoppers	On sale for all shoppers?	Record price for Loyalty Club members only	Sale only applies for multi-buy?	Is the MB deal only for loyalty club members?	Describe multi-buy deal (ex. Buy 2 get 1 free, 3 for \$2)
Coke, 2-liter bottle	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Coke, 12 pack of cans	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Diet Coke, 2-liter bottle	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Diet Coke, 12 pack of cans	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Coke Zero, 2-liter bottle	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
7 Up, 2-liter bottle	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Mountain Dew, 2-liter bottle	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Sprite, 2-liter bottle	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
<b>Other sweetened beverages – Family Size/Multi-Pack</b>							
Gatorade, 8 pack of 20oz bottles	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Gatorade G2, 8 pack of 20oz bottles	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Arizona Iced Tea with lemon flavor, 128oz bottle	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Arizona Diet Lemon Iced Tea, 128oz bottle	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Hawaiian Punch, 128oz bottle	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Minute Maid Lemonade, 2-liter bottle	<input type="checkbox"/>	_____ ._____ →	<input type="checkbox"/> YES <input type="checkbox"/> NO	_____ ._____  <input type="checkbox"/> N/A	<input type="checkbox"/> YES → <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	



## BEVERAGE MARKETING

### Instructions

Walk the perimeter of the store, any aisles containing beverages, and examine the check-out lanes. For each category of beverage, record how many times each specific form of marketing appears in the store. If a single sign or display features multiple product categories, count it once in each product category. Tally as you observe. Stop tallying if you have already observed ten instances of that form of marketing for that beverage category. When finished, write the total number in the total box in that cell. The maximum in each box is ten.

- **Special product or endcap displays:** Includes product stands or displays that physically separate the product from other similar products; endcap displays of a product at the end of an aisle; or special signage (usually on or attached to shelving) around or near a product that is meant to draw attention to that product. Include signage that is brand- or product-specific.
- **Signs or posters for product:** Includes any signs, posters, stickers or decals featuring a product or brand name that are displayed separately from the product itself. They may appear on windows, doors, hanging from the ceiling, on the floor, on refrigerators, etc. Include signage that is brand- or product-specific.
- **Product placement next to register to encourage impulse purchases:** Include products placed near the register (such that you could take it while waiting in line to pay). For example, a small refrigerated cooler in the check-out lane.

Type of marketing \ Type of beverage	Sweetened beverages	Diet or low-calorie sweetened beverages (<50 calories per serving)	Healthy beverages
	<ul style="list-style-type: none"> <li>• Sodas</li> <li>• Energy drinks</li> <li>• Sweetened teas/coffees</li> <li>• Lemonade</li> <li>• Fruit-flavored drinks</li> <li>• Sports drinks</li> </ul>	<ul style="list-style-type: none"> <li>• Sodas</li> <li>• Energy drinks</li> <li>• Sweetened teas/coffees</li> <li>• Lemonade</li> <li>• Fruit-flavored drinks</li> <li>• Sports drinks</li> </ul>	<ul style="list-style-type: none"> <li>• Water (unsweetened, flat, or carbonated)</li> <li>• Milk (dairy or non-dairy, including flavored milks)</li> <li>• 100% fruit or vegetable juice</li> </ul>
Special product or endcap displays	TOTAL <input type="text"/>	TOTAL <input type="text"/>	TOTAL <input type="text"/>
Signs/posters/decals around store	TOTAL <input type="text"/>	TOTAL <input type="text"/>	TOTAL <input type="text"/>
Product placement next to register	TOTAL <input type="text"/>	TOTAL <input type="text"/>	TOTAL <input type="text"/>

## MENTION OF SWEETENED BEVERAGE TAX

### Instructions

If you observe information displayed in the store, or hear a public announcement about the sweetened beverages tax, indicate whether the message conveyed was informational, supportive of the tax, or opposed to the tax with a check mark in that column. If no tax-related marketing was observed, check the box next to the table. If one sign conveyed information and another sign was opposed to the tax, check both boxes. If one sign conveys both information and a supportive message about the tax, check both boxes.

- **Informational** means that information about the tax and price differences was conveyed to educate shoppers and used neutral, non-judgmental language.
- **Supportive** marketing praises the tax for its benefits to public health or for generating revenue to support city initiatives, like Pre-K or the Parks Department.
- **Oppositional** marketing disparages the tax for its financial burden on beverage sellers, distributors, or customers, or for government overreach.

Form of Marketing	Nature of Marketing		
	Informational	Supportive	Opposed
Sign/Poster			
Intercom announcement			

No SB tax marketing observed

## SWEETENED AND DIET BEVERAGE PURCHASES

### Instructions

Record the price of a single serving sweetened beverage and a single serving diet beverage from the **Sodas- Individual** or **Other sweetened beverage- Individual** sections of this form. If no items from these sections are available, you may purchase another single serving sweetened and diet beverage.

- Record the name, size, and listed price of the items purchased.
- Ask the cashier to provide a separate receipt for each beverage. Attach the receipts in the spaces provided. If no receipt provided, then record the price you paid.

ATTACH SWEETENED  
BEVERAGE RECEIPT  
HERE

Name of <u>SWEETENED</u> beverage	Size of beverage (oz)	<u>Listed price</u>
		\$ _ _ . _ _
<input type="checkbox"/> Check here if no receipt provided for <b>SWEETENED</b> beverage and record price <u>paid</u> <div style="text-align: right; margin-top: 5px;">\$ _ _ . _ _ </div>		

ATTACH DIET  
BEVERAGE RECEIPT  
HERE

Name of <u>DIET</u> beverage	Size of beverage (oz)	<u>Listed price</u>
		\$ _ _ . _ _
<input type="checkbox"/> Check here if no receipt provided for <b>DIET</b> beverage and record price <u>paid</u> <div style="text-align: right; margin-top: 5px;">\$ _ _ . _ _ </div>		

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## Acknowledgements

### **Evaluation Plan Template**

This evaluation plan is written on a template developed by the New Zealand Foreign Affairs & Aid Programme, available for public use through the BetterEvaluation website, a platform for collaboration and capacity building in evaluation. It was obtained in April 2021.

[https://www.betterevaluation.org/en/resources/tool/evaluation\\_plan\\_template](https://www.betterevaluation.org/en/resources/tool/evaluation_plan_template).

Better Evaluation source credits for the template are:

The New Zealand Aid Program, (n.d.). *Evaluation Plan Template*. Retrieved from: <https://www.mfat.govt.nz/assets/Aid-Prog-docs/Tools-and-guides/Evaluation>.

### **Contributions to Evaluation Plan**

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