

Assessing Seattle's Progress toward Reducing  
Single-Use Plastic Straw and Utensil  
Consumption

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## Glossary

**Bubble tea** (also called boba or pearl tea): a sweet Taiwanese tea-based drink that can be served hot or cold. Toppings such as chewy tapioca balls (boba), jellies, and/or puddings are sucked up through an extra-large straw and chewed.

**Convenience sample:** a type of non-probability sample relating to the accessibility of the subjects.

**Durables:** consumer goods, such as utensils or straws, that are reusable and meant to last a long time.

**Expanded Polystyrene (EPS):** Colloquially called “Styrofoam”, EPS is a foam made from synthetic aromatic hydrocarbon polymer. Expanded polystyrene beads are used to produce products such as food containers, coffee cups, coolers, and packaging insulation.

**FSBs:** food service businesses selling prepared food directly to consumers.

**Greenwashing:** a deceptive marketing strategy that promotes the perception that an organization's products or policies are environmentally friendly.

**Microplastics:** any type of plastic fragment that is less than five millimeters in length, which enter natural ecosystems from a variety of sources.

**Polychlorinated biphenyls (PCBs) :** Polychlorinated biphenyls (PCBs) are a group of manmade chemicals considered carcinogenic by the International Agency for Research on Cancer.

**Randomized sample** (also known as a probability sample): a sample in which each individual member of the population has a known, non-zero chance of being selected as part of the sample, in order to avoid a biased representation of the larger population.

**Serviceware:** refers to items related to the service of customers at a food service business, such as utensils, plates, bowls, cups, straws, napkins, etc.

**Single-use:** a product designed to be used once and then disposed or destroyed.

# Executive Summary

## Introduction

In 2007, the Seattle City Council adopted Zero Waste Resolution 30990 and directed Seattle Public Utilities to develop strategies to discourage disposable food service containers and food serveware through a framework of waste reduction ordinances. On July 1, 2018, Seattle Public Utilities required food service businesses to use durable or compostable straws and utensils such as spoons, forks, and knives. The focus during the first year of this ordinance has been on education and outreach to businesses about the new requirement. Seattle Public Utilities is interested in assessing compliance and perceptions of the ordinance at Seattle food service businesses.

## Research Question

This background informs our study into the following research questions for Seattle Public Utilities:

1. What is the rate of food service businesses' compliance with the straw and utensil ordinance among businesses surveyed?
2. What are barriers to, and incentives and opportunities for, increasing compliance with the ban on single-use disposable plastic straws and utensils in Seattle?

Within this research, we included work around two areas of interest to Seattle Public Utilities:

- The use of compostable straws for bubble tea at food service businesses.
- The exemption that food service businesses may supply bendable plastic straws for people with physical and medical needs, upon request.

## Research Methods

Our team designed a 15-question structured survey to be conducted in-person at 90 food service businesses throughout Seattle. 70 businesses were selected using a geographic approach to include 10 businesses from each of the seven council districts. For the remaining 20 food service businesses, we sampled bubble tea businesses in the University District and International District neighborhoods because of the high concentration of bubble tea businesses in these neighborhoods.

## Findings

Our survey of 70 food service businesses and 20 bubble tea businesses led to the following findings:

- 77% of food service businesses are in compliance with the ordinance for compostable straws and 68% are in compliance with the ordinance for compostable utensils.
- For both compostable straws and utensils across council districts, 64% food service businesses are fully compliant, 16% are partially compliant, and 20% are non-compliant.
- 82% of food service businesses are aware of the ordinance.
- 80% of respondents thought single-use disposable plastic straws and utensils were banned by the City of Seattle due to environmental reasons.
- 15% of bubble tea businesses use compliant bubble straws, 33% use compliant regular straws, and 36% use compliant utensils.
- 65% of respondents expressed a favorable reaction to the bendable plastic straw exemption.

## **Recommendations**

Based on our findings and additional literature review and research, we suggest the following recommendations to SPU:

- Increase the number of languages on SPU outreach fliers and languages available on the same flier.
- Increase messaging around bendable plastic straw exemption in outreach fliers.
- Address ‘greenwashing’ confusion through SPU guidelines on non-compliant products.
- Develop partnerships with product suppliers to issue communication materials to FSBs.
- Examine ways to lower costs of compliant products for FSBs.
- Accelerate the compliance rate at bubble tea FSBs through manufacturer outreach, increased outreach, and encouraging durable straw options when appropriate.

# Chapter 1: Introduction

## Background

Seattle has a track record of progressive solid waste policies and a history of leading the nation in waste diversion and reduction efforts. The Comprehensive Solid Waste Management Plan implemented in 1998 made Seattle one of the earliest cities in the United States to incorporate zero waste efforts into long-term planning (Herrera, 2017). The City of Seattle uses the following definition of Zero Waste to inform policy:

*“Zero Waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use. Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health”* (Seattle Public Utilities, 2019).

In 2007, the Seattle City Council adopted Zero Waste Resolution 30990, which established new recycling goals for the city and offered suggestions for waste-reduction programs and solid waste facilities (Herrera, 2007). Seattle Public Utilities (SPU), the city-owned and operated public utility that manages solid waste for the city, plays a vital role in planning and implementing the policies necessary to meet the city’s ambitious waste reduction goals. In addition to setting a goal of recycling 70% of waste generated within the city by 2025, one of the specific guidelines provided in the resolution directed SPU to “propose strategies, including bans, to discourage the use of disposable food service containers and food service ware” (City of Seattle, 2007).

Tasked with this directive, SPU proposed, and the Seattle City Council adopted, a series of ordinances pertaining to food service packaging and serviceware to be implemented in stages. The goals of these programs are threefold:

- To reduce waste
- Recycle
- Dispose of residuals in an environmentally responsible manner (Herrera, 2007)

Figure 1 displays the timeline during which these packaging ordinances were implemented for Food Service Businesses (FSBs). Table 1 provides additional information on the specific ordinances.



Figure 1. Timeline of Food Packaging Ordinances in Seattle

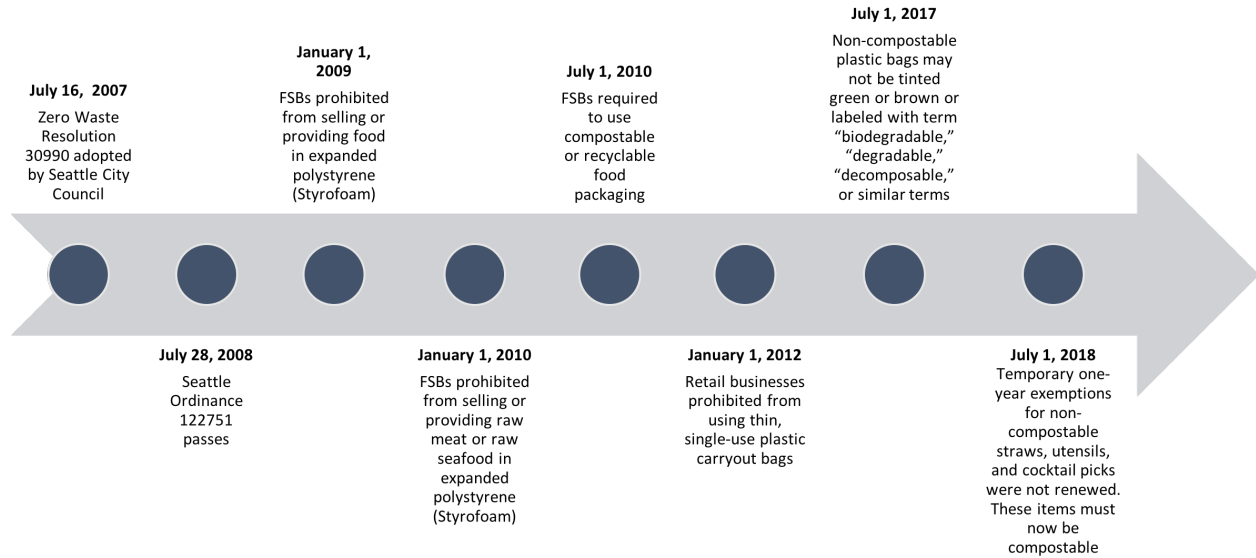


Table 1. Summary of FSB ordinances on materials that are permitted (Cao, Haider, Hornsby, and Pietschmann, 2018)

Seattle Municipal Code (SMC) Reference	Effective Date	Summarized Description
Polystyrene 21.36.084	01/01/09	FSBs prohibited from selling or providing food in expanded polystyrene (Styrofoam).
	01/01/10	FSBs prohibited from selling or providing raw meat or raw seafood in expanded polystyrene.
Food Packaging 21.36.086	01/01/10	FSBs must use food service packaging that is durable or compostable for dine-in service. Packaging for take-out service must be recyclable or compostable.
	07/01/18	Temporary exemptions for non-compostable straws, utensils, and cocktail picks were not renewed. These items must now be compostable.
Bags 21.36.100	01/01/12	Retail businesses prohibited from using thin, single-use plastic carryout bags.
	07/01/17	Non-compostable plastic bags may not be tinted green or brown or labeled with term "biodegradable," "degradable," "decomposable," or similar terms.

## **Details of the Ordinance**

This series of regulations related to food serviceware and packaging has gradually been implemented since 2009. The latest of these policies went into effect on July 1, 2018; it became a requirement for FSBs in Seattle to use durable or compostable straws and utensils such as spoons, forks, and knives for items provided to customers.

It is important to note that the latest straw and utensil requirements are not stand-alone policy, but a component of SMC 21.36.086. This food packaging ordinance passed in 2008 stipulated that single-use food packaging must be recyclable or compostable. While other parts of this ordinance have been in effect since 2010, straws and utensils had been temporarily exempted through an annual waiver process enacted by SPU in Director's Rule SW-500.1. Under SMC 21.36.086, temporary waivers for certain products within these ordinances can exist; however, they "should be granted only for circumstances where commonly used recycling and composting technology cannot process the food serviceware, or where suitable alternative products that meet performance and food health and safety standards are unavailable" (Seattle Public Utilities, 2018).

Each year from 2010 until 2018, SPU has assessed the availability and quality of alternatives to single-use plastic packaging and serviceware. SPU deemed certain products not readily available and a one-year temporary waiver was signed each year by the SPU General Manager/CEO. Because these policies directly impact FSBs, it continues to be important for SPU to monitor the performance and availability of products in question. In early 2018, SPU determined there were suitable alternative products available for single-use straws, utensils, cocktail picks, and stir straws/sticks. As a result, it became a requirement for FSBs to provide only durable or compostable straws and utensils beginning July 1, 2018.<sup>1</sup>

For SPU, the focus during the first year of this new requirement has been on education and outreach to businesses concerning the new requirement. Six months into the implementation of this ordinance, SPU commissioned our graduate consultant team at the Evans School of Public Policy & Governance at the University of Washington to gauge compliance and perceptions of this SPU ordinance at FSBs in Seattle.

## **Research Questions**

The purpose of our research is to assess the status of SMC 21.36.086 implementation, specifically addressing the ban on single-use disposable plastic food serviceware at FSBs in Seattle.

Our research aims to address the following questions:

1. What is the rate of food service businesses' compliance with the straw and utensil ordinance among businesses surveyed?

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<sup>1</sup> A temporary exemption waiver was signed for the one year period from July 1, 2018 - June 30, 2019 that includes bendable plastic straws if needed due to physical or medical conditions, foil-faced wrap, long-handled thick plastic soda spoons, and portion cups that are 2 oz or smaller if used for hot foods.

2. What are barriers to, and incentives and opportunities for, increasing compliance with the ban on single-use disposable plastic straws and utensils in Seattle?

### Special Considerations to the Ordinance

Within our research, SPU is particularly interested in two areas of focus:

- The use of compostable straws for bubble tea at Seattle FSBs.
- The exemption that Seattle FSBs may supply bendable plastic straws for people with physical and medical needs, upon request.

### Bubble Tea

A commonly used bubble tea packaging option, the heat-sealed plastic/cellophane lid, poses particular compliance challenges to the bubble tea business community. Commonly, a plastic straw with a machine-cut angled end is served with this type of lid, enabling the customer to pierce the lid and insert the straw (see Image 1).

*Image 1. Example of heat-sealed bubble tea plastic lid (McEaney, 2019).*



This type of cup and lid combination is problematic for the recycling system: this type of sealed (and not easily removable) lid is difficult to clean well-enough to be recycled after consumption. When the single-use plastic straw and utensil ban went into effect on July 1, 2018, this type of plastic straw became non-compliant. However, since there are large diameter durable and compostable options available (with straight-cut bottom edge), an exemption was not provided for this type of plastic straw.

In the summer of 2018, FSBs in Seattle raised concerns about the availability and cost of compostable straws wide enough in diameter to be used in beverages containing tapioca balls, and about available straws not being sharp enough to puncture the top plastic film that seals the cup. FSBs that serve bubble tea reported searching for new suppliers of bubble tea straws, and requesting that product manufacturers make a compostable option. Solutions mentioned by bubble tea businesses were hand-cutting straws to make them sharp enough to pierce the plastic film, or puncturing the top wrapper before serving the bubble tea to customers (Madigan, 2018).

As the new ordinance presents a unique challenge for these businesses, especially those using sealed lids, SPU wants to assess the compliance rate for compostable bubble tea straws, determine if and how FSBs that serve bubble tea comply with the ban on non-compostable straws, and gather information on barriers to using a compostable option. This information will inform SPU on how best to assist bubble tea FSBs to comply with the ordinance.

### **Bendable Plastic Straw Exemption**

A second area of interest within the ordinance is related to bendable plastic straws. Some people with medical or physical conditions require a bendable plastic straw to safely and comfortably consume liquids (see Image 2). There is currently not a compostable alternative widely available that offers the performance of a plastic straw. Currently, there is an exemption through Director's Rule SW-500.1 allowing FSBs to provide bendable plastic straws to those who request them (Seattle Public Utilities, 2018). However, this exemption is not well-known among FSBs and there is concern from SPU that bendable plastic straws were not widely provided by FSBs for people with medical or physical conditions even prior to the ordinance. Due to these issues, SPU wants to gather information on how many FSBs among those surveyed are aware of the exemption and how many FSBs supply, and supplied prior to the ordinance, bendable plastic straws.

*Image 2. Example of bendable plastic straws (Shreeves, 2018).*



### **Report Overview**

This report is divided into five chapters encompassing a review of relevant literature, our research process, our findings and analysis, and our recommendations.

**Chapter 2: Literature Review** contains foundational information about the current landscape of food packaging regulation policies targeting FSBs in peer cities, and the current media attention surrounding these products. In order to understand the policy landscape, we analyze the policy design, outreach initiatives, and enforcement mechanisms of these regulations. We also summarize the results of previous Evans School consultant team reports on the bag ban ordinance.

**Chapter 3: Research and Methodology** details our research methods. We present our quota and convenience sampling methodology, survey design, and field script in this chapter. It also includes a discussion of the limitations of our research.

**Chapter 4: Findings and Analysis** summarizes the quantitative and qualitative findings gathered through our fieldwork.

**Chapter 5: Recommendations** presents our recommendations for SPU regarding improvements to FSBs' compliance with single-use disposable plastic utensil and straw regulations.

## Chapter 2: Literature Review Approach

The goal of our literature review is to understand what research exists related to the Seattle ordinance, deepen our understanding how Seattle’s ordinance fits into the policy landscape of similar ordinances, and compare the materials used to communicate these policies to the public. We achieve these goals through the following four objectives:

1. Examine previous research conducted by two Evans School Consulting Teams in 2017 and 2018.
2. Highlight relevant background information on plastic pollution, media attention around single-use plastic straws and utensils, and responses from the private sector around the issue of plastic pollution.
3. Conduct a review of single-use plastic straw and utensil bans within Washington State cities and other major metropolitan cities on the West Coast.
4. Provide a background of outreach and educational materials related to single-use plastic straw and utensil bans in comparable locations.

### 1a. 2017 Evans Consulting Team Report Findings

The 2017 Evans Consulting Team focused on Seattle’s ban on plastic bags. SMC 21.36.100 was amended in 2011 to ban plastic carryout bags and institute a minimum \$0.05 fee for large paper bags used at retail establishments starting on July 1, 2012. The Seattle City Council passed a second ordinance in 2016, which provided clarifications on compostable bags tinting and forbids retail establishments from using plastic bags that are tinted green or brown after July 1, 2017.

Based on the 2017 report, we note the following major findings, highlights, and recommendations:

- 67% of businesses surveyed were in compliance with the ordinance, 20% were not in compliance with the ordinance, and 12% were in partial compliance with the ordinance.
- Based on conversations with regional organic compost facilities, there was little evidence to show discernible changes or reductions of the number of non-compostable bags contaminating the organics waste stream as a result of Seattle’s bag ban.
- Their recommendations included conducting a litter composition study by the City of Seattle, creating educational messages to aid compliance, updating Seattle’s compost characterization study, and encouraging retail establishments to collaborate with WRAP (Wrap Recycling Action Program) to build awareness campaigns (Evans, Fina, & Pham, 2017).

### 1b. 2018 Evans Consulting Team Report Findings

The 2018 report focused on two policies: SMC 21.36.100, which bans plastic bags in retail establishments, and SMC 21.36.086, which requires food service businesses to provide compostable or recyclable food serviceware to customers. The report looked at two areas of research—bag ban compliance rates among convenience stores and baseline straw and utensil usage rates among food service businesses—to identify how SPU can improve compliance rates with regulations prohibiting the use of single-use plastic products.

Based on the 2018 Evans Consulting Team report, we note the following major findings, highlights, and recommendations related specifically to plastic straws and utensils:

- 36% of food service businesses were aware of the upcoming single-use disposable plastic straw and utensil ban.
- 53% of food service businesses had positive opinions about the upcoming ban, while 17% had negative opinions, 13% did not have an opinion, 11% were unsure about the upcoming ban, and 6% had mixed feelings about the ban.
- Key recommendations included environmental messaging and outreach, providing alignment with surrounding City of Seattle policies, and using equitable enforcement frameworks for these businesses.

The 2018 Evans Consulting Team also examined potential barriers that food service business perceived they would face from the upcoming plastic straw and utensil ban. These barriers included:

- Cost: compostable products will be too expensive to provide to customers.
- Availability: there will not be a large enough market to supply compostable products.
- Quality: compostable products will not be able to serve the needs of the customer.
- Product sorting: compostable products will end up in the garbage, where they will not be composted.
- Disconnectedness: addressing the feeling that these ordinances are being implemented without consideration toward the customers or business owners (Cao, Haider, Hornsby, and Pietschmann, 2018).

## 2. Why Straws and Utensils?

### *Watershed moment*

Consumption of single-use plastic is widespread in the United States. Environmental organizations such as Lonely Whale have seized the plastic straw as a “gateway plastic” to raise awareness and encourage consumer behavior change. In September 2017, Lonely Whale launched their “Strawless in Seattle” campaign, with the goal of decreasing the use of single-use disposable plastic straws. The organization reports that their month-long campaign, partnering with local businesses in Seattle to stop using plastic straws, resulted in 2.3 million fewer single-use plastic straws being used (Lonely Whale, 2019). As a gateway plastic, straws are highly visible: two market research firms, Freedonia Group and Technomic, found that Americans used between 170 and 390 million straws per day in 2017 while the Plastic Pollution Coalition estimates Americans use over 100 million plastic utensils per day (A commonly referenced statistic – Americans use 500 million straws per day – was generated by a student without access to more rigorous knowledge and standards from the industry) (Chokshi, 2018; Plastic Pollution Coalition, 2018). As Kara Lavender Law, researcher and professor at the Sea Education Association believes, plastic straws and utensils are low-hanging fruit precisely because consumers feel some agency over their consumption: “These are things that we have easy alternatives for” (Goffinet, 2016). Other cities and organizations have taken notice; while Seattle became the first city to ban single-use plastic straws in July 2018, many cities and companies have followed suit in recent months.

### *Plastic Pollution*

The effects of plastic pollution are well documented. Plastic has been found in some of the most remote places on earth - from the Mariana Trench to Mount Everest (Environmental

Investigation Agency, 2018). Plastic material makes up 65 - 90% of the debris found in marine environments around the world and nearly 80% of this marine debris comes from land-based sources (United States Environmental Protection Agency, 2018). Of this debris, nearly half is documented as single-use plastics, including plastic utensils and straws (Schnurr, 2018). Plastic pollution poses both physical and chemical threats to the marine environment: it does not biodegrade but instead decomposes into smaller pieces of microplastics. Microplastics are ingested by marine wildlife, who mistake them for food sources; however, these microplastics may greatly impact their health (Eagle, 2016). In addition to containing harmful chemicals incorporated during formulation, microplastics can also absorb other additional toxic chemicals from the environment, such as polychlorinated biphenyls (PCBs); these chemicals can bioaccumulate in the tissues of marine wildlife and then travel up the food chain where humans consume them (United States Environmental Protection Agency, 2018).

### ***Private Sector Response***

In 2018, several companies in the private sector announced plans to eliminate the use of single-use plastic straws and/or utensils from their businesses. Shortly after Seattle’s ban went into effect, Starbucks announced they would phase out the use of all single-use plastic straws by 2020. The company reports this will eliminate 1 billion plastic straws from circulation every year (Starbucks, 2018). Alaska Airlines and American Airlines announced their intention to stop using single-use plastic straws, instead opting for “marine friendly” and biodegradable options (Alaska Airlines, 2018; American Airlines, 2018). Hotel chains Hyatt and Hilton also announced a commitment to change their approach to straw usage through either an “available by request” approach or by providing biodegradable or paper alternatives (Hilton, 2018; Hyatt, 2018).

### **3. Comparison of the Seattle Ordinance with those of other West Coast Cities**

In order to make recommendations to SPU on ways to increase understanding and compliance with its ordinance restricting the use of single-use plastic serviceware, we compared this ordinance to similar ordinances in other cities within Washington State and along the West Coast. We selected these locations as comparisons based on their geographic location and their similar population size to Seattle (approximately 725,000 residents). Although not yet fully enacted at the time of this report, we also included the plastic straw and utensil ordinance in Berkeley, California, due to its progressive policies limiting single-use food serviceware.

In researching the ordinances, we focused on the policy tools that cities choose to reduce plastic straw and utensil use, and what type of, if any, enforcement occurs. Many city ordinances have education listed as the primary focus to increase FSB compliance, with enforcement reserved for unspecified future dates. Generally, there are five public policy tools available to reduce consumer use of single-use plastics: bans, taxes/fees, education, default choice modification (DCM), and voluntary action (Wagner and Toews, 2018). Each tool has its own advantages and disadvantages in meeting policy goals (Table 2).



Table 2. Policy Tools to Reduce Consumer Use of Single-Use Plastics. Adapted from Wagner and Toews, 2018.

Policy Instrument	Summary	Advantages	Disadvantages
<i>Ban</i>	Establishments prohibited from providing plastic straws	Eliminates consumption, easy to enforce	Eliminates customer choice, alternatives cost more and borne by establishment unless fee charged
<i>Default Choice Architecture Modification</i>	Straws provided to customer only when requested	Reduces consumption, retains consumer choice, cost decrease to establishment	Difficult to enforce, could increase establishment involvement in providing straws
<i>Tax/Fee</i>	Visible and separate tax or fee on straws at point of purchase	Reduces consumption, easy to enforce, retains consumer choice	Increased cost to customer, increased administrative cost to establishment
<i>Education</i>	Education establishments and customers on need to reduce straw consumption	Low or no cost to consumers, no restrictions on consumers	Not likely to have appreciable impact on straw consumption, may impose cost to establishment
<i>Voluntary Actions</i>	Adopting resolutions to encourage establishments to voluntarily reduce straw usage	No cost to consumers, no restrictions on consumers or establishments	Impact on straw consumption uncertain and variable depending on breadth and duration of adoption

We identified Washington State cities with food serviceware ordinances by broadly searching online and looking on the city’s government website for specific information. When information from government websites was scarce, we expanded our search to local news media articles that detailed information about the city’s food serviceware ordinances.

***Single-use Food Serviceware Ordinances in Washington State***

In addition to Seattle, single-use food serviceware ordinances that include plastic straw and utensil requirements have been passed in Lake Forest Park, Edmonds, and Gig Harbor (Sowersby, 2019; City of Lake Forest Park, 2018). Table 3 compares the policy and enforcement approach of these cities.

Table 3. Food Serviceware Policy and Enforcement Tools Inside Washington State.

City	Date Enacted or To Be Enacted	Policy	Enforcement
Seattle (Seattle Public Utilities, 2018)	July 1, 2010 (Plastic straw/utensil exemption expired July 1, 2018)	<i>Ban</i> : plastic straws/utensils. <i>Recommend Default Choice Modification (DCM)</i> : compostable straws and utensils by request only.	Complaint-based and inspections. Warnings followed by fines for repeated violations.
Edmonds (City of Edmonds, 2018)	Early 2020	<i>Ban</i> : plastic straws/utensils. <i>Recommend DCM</i> : compostable straws and utensils by request only.	Fine. Details on enforcement (complaint-based or inspections) not found.
Lake Forest Park (City of Lake Forest Park, 2018)	January 23, 2019	<i>Ban</i> : plastic straws/utensils.	Warnings followed by fines for repeated violations. Details on enforcement (complaint-based or inspections) not found.
Gig Harbor (City of Gig Harbor, 2018)	November 26, 2019	<i>Ban</i> : plastic straws and utensils. <i>Recommend DCM</i> : compostable straws/utensils by request or self-serve dispensers only.	Warnings followed by fines for repeated violations. Complaint-based.

Detailed information on enforcement type was not found for the City of Lake Forest Park and the City of Edmonds. Bans are used in all four cities to reduce single-use plastic straws and utensils. All cities but Lake Forest Park encourage FSBs to provide compostable straws and utensils to customers by request only.

### ***Single-use Food Serviceware Ordinances on West Coast***

In Oregon and California, large cities that have passed ordinances include Portland, San Francisco, Oakland, Los Angeles, and San Diego. Table 4 compares the policy and enforcement for these major cities on the West Coast, as well as the not-yet fully enacted ordinance in Berkeley, California.

Table 4. Food Serveware Policy and Enforcement Tools Outside Washington State.

City	Date Enacted or to be Enacted	Policy	Enforcement
Oakland (City of Oakland, 2018)	July 1, 2018	<i>Ban</i> : plastic straws and utensils. <i>DCM</i> : Dine-in: Biodegradable or compostable straws by request only. Take-out: exempt.	Warnings followed by fines for repeated violations. Details on enforcement (complaint-based or inspections) not found.
Portland (City of Portland, 2019)	July 1, 2019	<i>DCM</i> : Dine-in: plastic straws/utensils by request only. Take-out: Employee must ask if plastic straws/utensils are wanted.	Warnings followed by fines for repeated violations. Details on enforcement (complaint-based or inspections) not found.
San Francisco (City of San Francisco, 2018)	July 1, 2019	<i>Ban</i> : plastic straws. <i>DCM</i> : compostable straws available on request. <i>DCM</i> : plastic utensils available by request or self-serve.	Warnings followed by fines for repeated violations. Details on enforcement (complaint-based or inspections) not found.
Los Angeles (Austin, 2018)	October 1, 2019	<i>DCM</i> : plastic straws by request only.	Warnings followed by fines for repeated violations. Details on enforcement (complaint-based or inspections) not found.
San Diego (City of San Diego, 2019)	February 23, 2019	<i>DCM</i> : plastic straws and utensils by request only.	Warnings followed by fines for repeated violations. Details on enforcement (complaint-based or inspections) not found.
Berkeley (City of Berkeley, 2018)	Phase 1: March 27, 2019 Phase 2: January 1, 2020 Phase 3: July 1, 2020	<i>Ban</i> : disposable utensils (of any material) for dine-in food. Plastic straws/utensils for take-out food. <i>DCM</i> : compostable straws and utensils by request or at self-serve stations.	Warnings followed by fines for repeated violations. Enforcement.

Major cities on the West Coast have varied approaches to reduce plastic straw and utensil use. While all cities attempt to change the default choice of a plastic straw and/or utensil for the consumer, Washington cities and Berkeley are the only locations that have ordinances to both ban plastic straws and utensils and encourage FSBs to limit use of the compostable options. Of all these cities, Berkeley goes furthest in limiting the use of single-use utensils made of any material, by both prohibiting their use for dine-in eating and stipulating that compostable options for take-out only be provided on request or as self-serve.

#### 4. Outreach Materials

Another objective of our report is to inform SPU on future methods and strategies for conveying information to customers to help increase awareness and compliance with the ordinance. Since other cities in the United States have also introduced policy to regulation single-use plastics, we reviewed several of the outreach materials outlining the social regulation policy tools used by other cities, which are typically found in the form of a flier and/or page on local government website. These tools are used to promote and clarify the ordinances to FSBs and are available to the general public. Here, we assess Seattle’s outreach materials in the context of several other West Coast cities.

##### *Seattle*

SPU’s one-page, March 2018 *NEW Straw & Utensil Requirements* flier was sent in tangent with an explanatory letter mailed to all FSBs in Seattle; this document informed the business owner of the ordinance and provided an explanation of the exemption expiration, steps to take to use remaining non-compliant inventory, contact information, and a website link for more information (Image 3). As of May 2019, the flier is available on the City of Seattle website in English, Amharic, Arabic, Chinese, Hindi, Indonesian, Japanese, Korean, Khmer, Lao, Oromo, Russian, Somali, Spanish, Tagalog, Thai, Tigrinya, and Vietnamese. The flier explains that the temporary exemption was set to expire and shows photos of examples labeled “banned” and “allowed” and a URL to *Green Your Business*, a City of Seattle webpage for businesses pertaining to environment and sustainability. The *Green Your Business* site provides a contact phone number in ten languages. Each version of the flier contains a notice at the bottom, stating: “Plastic utensils and plastic straws are banned in Seattle, effective July 1, 2018. Serviceware allowed for use includes durables or approved compostable utensils and straws.” This message is conveyed in the flier’s main language and then repeated in four other languages (Spanish, Chinese, Vietnamese, and Korean) in the spaces to the right of the message. This does not vary by flier version; meaning, for example, the Spanish version contains the same message in Spanish twice, followed by the other three languages.

Image 3. Seattle outreach material (Seattle Public Utilities, 2019).

**Seattle Public Utilities**  
**Straws & Utensils**

Dear Customer,

This letter is to inform food service businesses that the use of plastic utensils, plastic straws, and plastic cocktail picks will be prohibited in Seattle effective July 1, 2018. Compliant options include durable or compostable utensils, straws, and cocktail picks. Compliant straws include those made of compostable paper or compostable plastic. Utensils banned include disposable plastic forks, plastic spoons, plastic knives, and plastic cocktail picks.

**Timeline:** In 2008, the City of Seattle put in place an ordinance to require that one-time-use food service items, including packaging and utensils, be recyclable or compostable. Seattle Public Utilities has provided a year-by-year exemption for a handful of items, including plastic utensils and straws. Plastic utensils and straws are not recyclable. There are now multiple manufacturers of approved compostable utensils and straws, these food service items will no longer be exempt from the existing requirements.

**Enforcement:** SPU staff continue to perform inspections of all food service businesses to verify compliance with Seattle Municipal Code Section 21.36.084 and 21.36.086 which require that:

- Food service businesses are required to use compostable or recyclable food serviceware (effective 7/1/2010).
- Use of collection bins and collection service for compostables and recyclables is required (effective 7/1/2010).
- Use of expanded polystyrene foam food service packaging is prohibited (effective 1/1/2009).
- Use of plastic utensils and plastic straw food serviceware is prohibited (effective 7/1/2018).
- Failure to comply with the food service ware ordinance may result in a \$250 fine.

**Take Action:**

- ✓ Use up your existing inventory of plastic utensils and straws before July 1, 2018. If you are unable to do so, please contact us at the number below to establish a compliance schedule.
- ✓ Choose compliant food serviceware to meet packaging, utensil, and straw requirements.
- ✓ Provide utensils and straws only on request, and use dispensers for customers to select their own utensils and straws, if not already a current practice.
- ✓ Designate clearly marked collection containers for recyclables and compostables in employee and customer areas.
- ✓ Arrange for commercial collection service of compostable and recyclable materials.

**Free Assistance:**  
Contact SPU via [GreenBusiness@Seattle.Gov](mailto:GreenBusiness@Seattle.Gov) or 206-343-8505 or visit the SPU website at [seattle.gov/util/GreenYourBusiness](http://seattle.gov/util/GreenYourBusiness) for additional information. At the website, you can order a variety of free materials, including posters and stickers, to help you communicate to your employees and customers about what is compostable and recyclable and what is required in Seattle. Thank you for your cooperation and commitment to helping Seattle save resources and reduce waste.

Sincerely,  
Seattle Public Utilities  
Green Business Program

For information services please call 206-684-3000.  
전화 (고객지원) 206-684-3000  
Wahlungsservice 206-684-3000  
For service restrictions see [seattle.gov/util](http://seattle.gov/util)  
전화 서비스 제한 사항에 관하여 206-684-3000  
Mời ý kiến của bạn về thông tin gọi số 206-684-3000.

Seattle Public Utilities | 700 5th Avenue, P.O. Box 34018, Seattle, WA 98124-0118  
SPU Green Business Program | Phone: (206) 343-8505 | Email: [greenbusiness@seattle.gov](mailto:greenbusiness@seattle.gov)  
SPU Customer Service | TTY: (206) 313-2245 | Fax: (206) 346-8006 | Internet: [www.seattle.gov/util](http://www.seattle.gov/util)  
An equal employment opportunity, affirmative action employer. Accommodations for people with disabilities provided upon request.

**Seattle Public Utilities**  
**NEW Straw & Utensil Requirements**

**Summary of Seattle's Food Serviceware Requirements: (SMC 21.36.086)**

**! Ban of plastic straws and plastic utensils is effective July 1, 2018.**  
Food service businesses are prohibited from using plastic straws and plastic utensils in Seattle. The temporary exemption for plastic straws and plastic utensils will expire, and the use of compostable straws and compostable utensils will be required, effective July 1, 2018.

**NEW**

<b>BANNED</b> Disposable Plastic Straws	<b>ALLOWED</b> Compostable* Paper Straws and Compostable* Plastic Straws	<b>BANNED</b> Disposable Plastic Utensils	<b>ALLOWED</b> Compostable* Utensils
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- ✓ Effective July 1, 2010, food service businesses are prohibited from selling or providing food for consumption on or off the premises with disposable food serviceware. Food packaging used for dine-in service must be compostable and take-out packaging can be compostable or recyclable.
- ✕ Approved compostable indicates packaging and serviceware that has been tested and approved at a local commercial compost facility.

**Plastic utensils and plastic straws are banned in Seattle, effective July 1, 2018.**  
Serviceware allowed for use includes durables or approved compostable utensils and straws.

<b>Spanish</b>	Los utensilios de plástico y los popotes de plástico están prohibidos en Seattle a partir del 1ero de julio de 2018. Los únicos utensilios y popotes desechables que están permitidos para uso comercial son aquellos que tienen la etiqueta "compostable", los cuales están hechos de materiales que se pueden convertir en compost. Los utensilios y popotes reusables están permitidos.
<b>Español</b>	
<b>Chinese</b>	2018年7月1日開始，西雅圖禁止使用塑料餐具和飲料吸管。允許使用的餐具包括認可的可堆肥餐具和吸管。
<b>Vietnamese</b>	Dùng cụ ăn (thìa, dĩa, đũa) và ống hút dùng một lần bằng nhựa sẽ bị cấm ở Seattle kể từ ngày 1 tháng 7 năm 2018. Các dụng cụ ăn dùng một lần được phép sử dụng bao gồm thìa, đĩa, đũa và ống hút được công nhận là có thể phân hủy được gọi là compostable.
<b>Tiếng Việt</b>	
<b>Korean</b>	플라스틱 식기와 플라스틱 빨대는 2018년 7월 서비스를 위해 사용이 허용된 식기는 아직 분해 가능한 것으로 승인된 식기와 빨대만 포함됩니다.
<b>한국어</b>	

**FOR DETAILS ABOUT APPROVED COMPOSTABLE PRODUCTS, GO TO:**  
[seattle.gov/util/GreenYourBusiness](http://seattle.gov/util/GreenYourBusiness)

GreenBusiness@Seattle.Gov | 206-343-8505 | [seattle.gov/util/GreenYourBusiness](http://seattle.gov/util/GreenYourBusiness)

The March 2018 flier and letter were followed in August 2018 by an English-only direct mailer stating that the ordinance was now in full effect. This direct mailer has the same allowed/banned graphics as the previous flier, with the additional clarification that people with medical or physical conditions could receive a bendable plastic drinking straw upon request (see Appendix 1).

After receiving feedback from the bubble tea business community, in August 2018 SPU sent an English-only second direct-mailer to 88 businesses it identified as selling bubble tea. This mailer addressed concerns about the availability of a compliant bubble tea straw and emphasized the focus for the first year of the ordinance would be on education and outreach, instead of enforcement. The flier also included a list of compostable straw suppliers, though it did not specify the companies that also made compostable bubble tea straws (see Appendix 2).

### San Jose, CA

The *Restaurant Rules* fact sheet produced by the City of San Jose, which banned expanded polystyrene food packaging in 2013, is double-sided and written in three languages (Image 4). While this ordinance does not deal directly with plastic straws and utensils, we felt it was important to include as an example of a bilingual outreach approach. On the English side, an image depicting expanded polystyrene food packaging is marked “NO” in red, and underneath, alternative packaging marked “YES” in green. The fact sheet, which also includes a section for information regarding cooking oil disposal, clarifies who must follow the ordinances (for example, any business that sells food or drinks), and when (both dine-in or take-out restaurants). The text is repeated on the other side in both Spanish and Vietnamese, on either side of a smaller

copy of the expanded polystyrene vs alternative packaging graphic. Included on their website is a 2015 non-foam packaging buyers guide with vendors and pricing (City of San Jose, 2019).

Image 4. San Jose outreach material (City of San Jose, 2019).

**City of San José Restaurant Rules**

Help protect the Bay and keep our City clean.  
Avoid citations and fines by following these simple rules.

**Foam Food Service Ware (Styrofoam™)\***

**NO**

**YES**

**Foam Food Container Ordinance**

- Use non-foam containers for both dine-in and takeout. This includes:
  - Cups
  - Boxes
  - Bowls
  - Clamshells
  - Plates
  - Trays
- Choose the best alternative that meets your business needs.

**Fats, Oils, & Grease**

- Use a state-licensed grease hauler to clean your grease interceptor.
- Self-clean or professionally service grease traps.
- Keep cleaning records on site.
- Collect used cooking oil and store it in your grease waste bin for recycling.
- Wipe clean all dishes and utensils before washing them.

**Who must follow these rules?**

Any business that sells food or drinks, including:

- Mobile Food Vendors
- Food Kiosks
- Caterers
- Bars & Pubs
- Coffee Shops
- Convenience Stores
- Liquor Stores
- Delis & Cafes
- Grocery Stores
- Supermarket Delis
- Restaurants
- Cafeterias

**Questions?**  
Visit: [www.sanjoseca.gov/restaurants](http://www.sanjoseca.gov/restaurants)  
Call: (408) 945-3000  
Email: [watershedprotection@sanjoseca.gov](mailto:watershedprotection@sanjoseca.gov)

**Reglas Para Restaurantes de La Ciudad de San José**

Contribuya a proteger la bahía y a mantener limpia la ciudad. Para evitar notificaciones y multas, siga las siguientes reglas simples.

¿Cuáles deben cumplir con estas reglas? Toda empresa que se dedique a la venta de alimentos o bebidas, incluidos los siguientes:

- Puestos de alimentos móviles y callejeros
- Servicios de banquetes
- bares y lavernas
- Cafeterías
- tiendas y licorerías
- Delicatessen y cafeterías
- Almacenes
- Delicatessen dentro de supermercados
- Restaurantes
- Cafeterías
- Puestos de comida

**Ordenanza Sobre Contenedores de Comida de Poliestireno Extendido**

Utilice envases de alimentos que no sean de poliestireno extendido tanto para comer en el lugar como para llevar. Estos incluyen lo siguiente:

- Tazas
- Recipientes
- Platos
- Cajas
- Envases tipo conchas de almeja
- Bandejas

Ello la mejor alternativa para satisfacer las necesidades de su negocio.

**Lípidos, Aceites y Grasas**

- Utilice un transportista de artículos de grasa con autorización estatal para limpiar su interceptor de grasa.
- Limpie y mantenga adecuadamente los colectores de grasa.
- Mantenga registros de limpieza en las instalaciones.
- Recoja el aceite de cocina utilizado y guárdelo en el cubo de residuos de grasa para el reciclado.
- Limpie grasa y residuos de los platos y utensilios antes de lavarlos.

**¿Alguna pregunta?**  
Visit: [www.sanjoseca.gov/restaurants](http://www.sanjoseca.gov/restaurants)  
Llame al: (408) 945-3000  
Correo electrónico: [watershedprotection@sanjoseca.gov](mailto:watershedprotection@sanjoseca.gov)

**Quy Tắc Nhà Hàng của Thành Phố San José**

Giúp bảo vệ Khu Vịnh và giữ cho Thành Phố được sạch sẽ. Tránh bị nhắc nhở và các khoản phạt bằng cách tuân thủ những quy tắc đơn giản sau đây.

Ai là người phải tuân thủ những quy tắc này? Bất kỳ doanh nghiệp nào bán đồ ăn hay nước uống, bao gồm:

- Người bán hàng rong, người bán đồ ăn trên phố
- Người cung cấp thực phẩm
- Quầy bar, quán rượu
- Tiệm cà phê
- Cửa hàng tiện lợi, cửa hàng bán rượu
- Cửa hàng đồ ăn nhanh, quán cà phê
- Cửa hàng tạp hóa
- Cửa hàng đồ ăn nhanh trong siêu thị
- Nhà hàng
- Căng-teen
- Ki-ốt thực phẩm

**Pháp Lệnh Về Sản Phẩm Dựng Đồ Ăn Bằng Xốp**

Sử dụng sản phẩm đựng đồ ăn không phải bằng xốp cả khi ăn ở nhà hay ăn ngoài. Sản phẩm này bao gồm:

- Tách
- Bát
- Đĩa
- Hộp
- Hộp cơm vò số
- Khay

Chọn phương án thay thế tốt nhất đáp ứng nhu cầu công việc của quý vị.

**Có thắc mắc?**  
Truy cập: [www.sanjoseca.gov/restaurants](http://www.sanjoseca.gov/restaurants)  
Gọi: (408) 945-3000  
Email: [watershedprotection@sanjoseca.gov](mailto:watershedprotection@sanjoseca.gov)

**Oakland, CA**

The 2007 *Greenware Ordinance* double-sided/two-page flier produced by the City of Oakland uses approximately one-fourth of both the front and back of the flier on “City of Oakland Greenware Ordinance” title (Image 5). It depicts photos of banned and allowed items and the City of Oakland Recycling hotline for questions, as well as phone numbers for information in Chinese, Spanish, and Vietnamese. The first page also contains information in small print regarding the consequences of plastic litter. The back page of the flier is entirely made up of frequently-asked questions, including the exemption for businesses that can prove they cannot find a same-or lower cost compostable alternative. The same two-page flier is translated into Spanish and Vietnamese; both are easily accessible on the City of Oakland website (City of Oakland, 2019).

Image 5. Oakland outreach material (City of Oakland, 2019).

**Disposable Food Service Ware To-go containers** **WHAT YOU NEED TO KNOW**  
**CITY OF OAKLAND**  
**Greenware Ordinance**  
 STARTS JANUARY 1, 2007  
 Oakland Municipal Code Section 8.07

**1**  
 Oakland food vendors/restaurants may no longer use polystyrene foam (Styrofoam®) disposable food service ware. Violations may result in fines. (See back.)

**2**  
 Oakland food vendors and restaurants must change to biodegradable/compostable disposable food service ware such as paper or "bio-plastic", as it becomes affordable (same or less cost).  
**Resources to Help You Meet City Requirements:**  
 ✓ Ask your current supplier about products that meet the City's new requirements for food service ware.  
 ✓ Call the **City of Oakland Recycling Hotline at 238-SAVE (7283)** for a list of biodegradable food service ware suppliers, or for any questions related to this ordinance.  
 ✓ Visit [oaklandgreenware.com](http://oaklandgreenware.com) for more suppliers and information.

Food service ware is a large contributor to litter, blight and waste throughout Oakland. In addition, many food service ware products made from plastic may be hazardous to our health. To make our city cleaner and healthier and help our community achieve zero waste, Oakland has passed a disposable food packaging ordinance. Similar ordinances are now being adopted across California.

Para recibir más información en español llame al 238-6812.  
 自行事項請與環保局查詢。如有需要更多中文資料，請在任何時間。  
 電話：238-6812。  
 Tải bất thêm chi tiết bằng tiếng Việt và số nhận xét góp ý, xin gọi số 238-6812.

**See reverse for exceptions and more information.**

**Disposable Food Service Ware To-go containers** **Frequently Asked Questions**  
**CITY OF OAKLAND**  
**Greenware Ordinance**  
 STARTS JANUARY 1, 2007  
 Oakland Municipal Code Section 8.07

**Who has to follow the Ordinance?**  
 All Oakland food vendors selling prepared food including **restaurants, delis, fast-food establishments, vendors at fairs, and food trucks. All City Facilities.**

**What are alternatives to polystyrene foam?**  
 Uncoated paper, coated paper, cardboard, other plastics, aluminum foil food service ware, and "bio-plastics" are all permitted by this ordinance.

**What are biodegradable and compostable food ware products?**  
 Uncoated paper products, coated paper products, and some "bio-plastics" (made from corn, potato, and other plant materials).

**What is wrong with polystyrene foam?**  
 Polystyrene foam is non-renewable, non-biodegradable, and virtually non-recyclable. It ends up in landfills, waterways or the ocean. It breaks down into smaller and smaller pieces which are often mistaken for food and ingested by marine mammals, birds, and fish. Medical evidence, according to the FDA, EPA, and OSHA, suggests that chemicals in polystyrene foam are carcinogenic and may leach into food or drink.

**Are there exceptions to these requirements?**  
 There is no exception to the prohibition of polystyrene foam. Non-compostable and non-biodegradable products may be used if vendor can show that no alternative exists at the same or lower cost.

**What are the penalties for non-compliance?**  
 Violations will result in fines: 1st = warning, 2nd = \$100, 3rd = \$200, 4th = \$500  
 Enforcement is by the City of Oakland, not the County Health Inspector. Enforcement is complaint-driven, meaning *your customers* may notify the City of violations.

**What else can my business do to reduce food service ware waste?**  
 You can allow customers to bring their own mugs to buy drinks. In instances that food vendors wish to use a biodegradable or compostable product that is not the same or less cost than the non-biodegradable or compostable alternative, a food vendor may charge a "take out fee" to cover the cost difference. You can use reusable dishes and cups instead of disposable ones for "eat-in" customers. You can use organics recycling service at your business to turn food packaging waste into compost.

**How can my business get food scraps recycling?**  
 Call the **City of Oakland Recycling Hotline at 238-SAVE (7283)** for assistance with any of your business recycling needs.

**Portland, OR**

Though Ordinance No. 189271 went into partial effect January 4, 2019 and will go into full effect July 1, 2019, as of May 2019, there is no handout or other educational literature found on the City of Portland website beyond the ordinance text itself (City of Portland, 2019).

**Lake Forest Park, WA**

The City of Lake Forest Park's single-use plastics ban went into effect January 23, 2019. As of May 2019, the website featured a one-page, English-only *Single Use Plastics Ban* handout directed towards all Lake Forest Park businesses (Image 6). The handout leads with details about the regulation, including fee for paper bags, and which businesses must comply. Exemptions for straws for people with medical and physical conditions and certain types of plastic bags such as produce bags, are noted. The lower third of the flier is dedicated to graphics with "banned" and "allowed" items. Business owners are directed to call the main line of City Hall with questions (City of Lake Forest Park, 2019).

Image 6. Lake Forest Park outreach material (City of Lake Forest Park, 2019).

**Single-Use Plastics Ban**

**All businesses/organizations inside Lake Forest Park are prohibited from selling, providing or using single-use carry-out bags, food service containers, straws, lids, and utensils, as of January 23, 2019.**

**EFFECTIVE 1/23/2019**

**What does this mean?**

- All businesses, schools, and other organizations inside the city limits may no longer provide single-use plastic carryout bags or non-compostable food service containers, straws, lids, or utensils to their customers after January 23, 2019.
- Recyclable paper bags may be provided to a customer upon request; there is a required pass-through charge of not less than ten (10) cents per bag provided, and retail establishments must indicate on the customer transaction receipt the number of recyclable paper bags provided and the amount of the pass-through charge.
- All bags, food service containers, straws, lids, and utensils provided to customers must be compostable.

**Exemptions and Implementation**

- Disposable flexible plastic drinking straws can be made available when needed by customers due to medical or physical conditions.
- Other types of plastic bags such as, bags without handles for produce, bulk foods (meat, nuts, grains, candy, small hardware items, etc.); bags provided to contain or wrap flowers/potted plants; laundry dry-cleaning bags; newspaper bags; bags sold in packages containing multiple bags intended for garbage, pet waste, yard waste.
- The regulations allow granting of an extension for businesses that can show sufficient information the regulations would cause undue hardship. Requests for extension need to be submitted to the City in writing by February 22, 2019.

**Banned and Allowed Items**

<b>BANNED</b> Plastic Carryout Shopping Bags	<b>10 cents</b> Large Paper Shopping Bags (Minimum charge required)	<b>FREE</b> Smaller Paper Bags (Charge optional)	<b>ALLOWED</b> Clear Plastic Produce Bulk Food Bags
<b>BANNED</b> Disposable Plastic Straws	<b>ALLOWED</b> Compostable Paper Straws and Compostable Plastic Straws	<b>BANNED</b> Disposable Plastic Utensils	<b>ALLOWED</b> Compostable Utensils

**Questions?**

Call City Hall at 206-368-5440

To read the complete text of the single-use plastic bag Ordinance 1181 (LFP Municipal Code Chapter 5.24) or find more information go to [www.cityofflp.com](http://www.cityofflp.com)

### Edmonds, WA

In 2018, the City of Edmonds passed a ban on all non-compostable single-use food service containers, in addition to plastic straws and utensils, to be enacted in phases. Though the ordinance will not go into full effect until January 1, 2020, as of January 2019, vendors at city-sponsored events are prohibited from using non-compostable single-use items (Whippel, 2018). However, there is limited information and no educational literature found on the City of Edmonds website. The website directs “affected businesses” to the Cedar Grove municipal composting site for information on acceptable types of food service items, but does not define affected businesses or describe the gradual phase-in schedule outside of the text of the ordinance (City of Edmonds, 2019).

### San Diego, CA

The bilingual San Diego *Polystyrene Foam and Single Use Plastics Ordinance* handout (see Appendix 3), available on the government website, features a full page in English and the same information repeated on the second page in Spanish. Both pages have a yes/no graphic with photos of allowed and prohibited items as well as a chart of different types of containers and recyclability (City of San Diego, 2019).







### Los Angeles, CA

The two-page/ double-sided, *Single Use Plastic Straws/Stirrers* flier, found on the Los Angeles County’s government website, details both California-wide Assembly Bill 1884 and the Los



Angeles County Plastic Straws and Stirrers Upon Request Ordinance (Image 7). The flier explains the differences between the two regulations and how they apply to different types of food service businesses, as well as defining terms such as “single-use plastic straw” and “full-service restaurant.” The flier features no graphics or photos and is written entirely in English. No translation in any other language was found on the website (Los Angeles County, 2019).

Image 7. Los Angeles outreach material (Los Angeles County, 2019).

SINGLE-USE PLASTIC STRAWS/STIRRERS	SINGLE-USE PLASTIC STRAWS/STIRRERS
<p><b>WHAT ARE THE NEW LAWS REGARDING PLASTIC STRAWS/STIRRERS?</b></p> <p>The following regulations were passed to reduce single-use items that contribute to marine debris and other litter:</p> <p>Assembly Bill (AB) 1884</p> <ul style="list-style-type: none"> <li>- This regulation is applicable throughout the State of California including the 88 incorporated cities and the unincorporated areas of the County of Los Angeles.</li> <li>• The Los Angeles County Plastic Straws and Stirrers Upon Request Ordinance           <ul style="list-style-type: none"> <li>- This regulation is applicable <b>only</b> in the unincorporated areas of the County of Los Angeles.</li> </ul> </li> </ul>	<p><b>WHO ENFORCES THE PROVISIONS OF THE NEW REGULATIONS?</b></p> <p>The provisions of both regulations are enforced by the County of Los Angeles Department of Public Health, Environmental Health Division (DPH-EH) as part of the routine inspection and complaint investigation of food service businesses.</p>
<p><b>WHAT ARE THE PROVISIONS OF THE CALIFORNIA ASSEMBLY BILL 1884?</b></p> <p>AB 1884 prohibits <b>full-service restaurants in California</b> from providing single-use plastic straws to consumers unless requested by the consumer.</p> <ul style="list-style-type: none"> <li>• The provisions of AB 1884 do not ban or prohibit the use of single-use plastic straws.</li> <li>• The provisions simply prohibit food service businesses from automatically providing single-use plastic straws to consumers.</li> </ul>	<p><b>WHAT IS THE DIFFERENCE BETWEEN A FOOD SERVICE BUSINESS AND A FULL-SERVICE RESTAURANT?</b></p> <p><b>A food service business</b> means any business in a permanent or mobile location that sells food and/or beverages. Examples include, but not limited to the following:</p> <ul style="list-style-type: none"> <li>• Restaurants (such as fast-food, coffee shops and juice bars)</li> <li>• Bars</li> <li>• Convenience stores</li> <li>• Food carts and food trucks</li> <li>• Temporary food facilities (such as those participating in fairs or events)</li> </ul> <p><b>A full-service restaurant</b> means a food service business where all the following actions are taken by an employee of the establishment:</p> <ul style="list-style-type: none"> <li>• The consumer is escorted or assigned to an assigned eating area.</li> <li>• The consumer's food and beverage orders are taken after the consumer has been seated at the assigned seating area.</li> <li>• The food and beverage orders are delivered directly to the consumer.</li> <li>• Any requested items associated with the consumer's food or beverage order are brought to the consumer.</li> <li>• The check is delivered directly to the consumer at the assigned eating area.</li> </ul>
<p><b>WHAT ARE THE PROVISIONS OF THE LOS ANGELES COUNTY PLASTIC STRAWS AND STIRRERS ORDINANCE?</b></p> <p>The Los Angeles County Plastic Straws and Stirrers Upon Request Ordinance prohibits <b>all food service businesses within the County unincorporated areas</b> from providing single-use plastic straws or stirrers to consumers unless requested by the consumer.</p> <ul style="list-style-type: none"> <li>• Per the County Ordinance, food service businesses may ask consumers if they want plastic straws/stirrers.</li> <li>• Food service businesses that previously provided plastic straws or stirrers to consumers automatically are now required to ask consumers if they want a straw or a stirrer and only provide it if the consumer responds in the affirmative.</li> <li>• The Los Angeles County regulation also prohibits food service businesses from making single-use plastic straws/stirrers available to consumers from a self-serve dispenser.</li> </ul>	<p><b>WHEN ARE FOOD OPERATORS REQUIRED TO COMPLY WITH THE NEW REGULATIONS?</b></p> <p>Effective January 1, 2019, food service business operators are required to comply with the provisions of AB 1884 and effective January 3, 2019 for the provisions of the Los Angeles County Plastic Straws and Stirrers Upon Request Ordinance.</p> <p>Effective January 1, 2019 through December 31, 2019, the DPH-EH will provide education and training on the requirements of the new regulations to food service business operators during inspection.</p> <p>Effective January 1, 2020, non-compliance may result in notices of violation and \$25 fines for each day the business is in violation, not to exceed \$300 annually.</p> <ul style="list-style-type: none"> <li>• Violations observed during routine inspections will not result in point deductions on the DPH-EH official inspection reports.</li> </ul>
<p><b>WHAT ARE SINGLE-USE PLASTIC STRAWS / SINGLE-USE PLASTIC STIRRERS?</b></p> <p><b>Single-use plastic straw</b> means a single-use, disposable tube made predominantly of plastic derived from either petroleum or a biologically based polymer, such as corn or other plant sources, used to transfer a beverage from a container to the mouth of the person drinking the beverage.</p> <p><b>Single-use plastic stirrer</b> means a device that is used to mix beverages, intended for only single-use, and made predominantly of plastic derived from either petroleum or a biologically based polymer, such as corn or other plant sources.</p>	<p><b>WHERE CAN I FIND MORE INFORMATION?</b></p> <p>Contact the DPH-EH Consultative Services Program at (626) 430-5320 for additional information.</p>
<p>County of Los Angeles Department of Public Health • Environmental Health 5050 Commerce Drive, Baldwin Park, CA 91706 • (888) 700-9995 www.publichealth.lacounty.gov/eh</p>   	<p>County of Los Angeles Department of Public Health • Environmental Health 5050 Commerce Drive, Baldwin Park, CA 91706 • (888) 700-9995 www.publichealth.lacounty.gov/eh</p>   

### Berkeley, CA

Phase One of Berkeley’s Single Use Foodware and Litter Reduction Ordinance went into effect on March 27, 2019. The final phase, Phase Three, which mandates that FSBs may only offer reusable serviceware to serve customers eating onsite, with some exceptions for compostable goods and recyclable aluminium foil, will go into full effect July 1, 2020.

Among other requirements, Phase One requires FSBs that allow self-bussing must also provide color-coded recycling, compost, and landfill bins with appropriate signage. The City of Berkeley provides printable sorting signage to meet this requirement on its website (City of Berkeley, 2019). It also provides a link to the full ordinance, as well as links to certified compostable products. However, it does not provide outreach materials on the different requirements of the phase-in, such as a letter or printable flier.

## **Conclusion**

It is clear from our review of other West Coast cities that Seattle is not only progressive in its ban on single-use plastic straws and utensils, but in the number of available translations of its outreach fliers. However, the English-only, August 2018 direct mailer may have added to confusion for business owners with limited English, especially in regards to the exemption of bendable plastic straws for those with physical or medical needs, which was not mentioned in the previous materials.

## Chapter 3: Research Design and Methods

### Overview

Our research was designed to inform SPU on how FSBs in Seattle are adapting to the ban on single-use disposable plastic straws and utensils and to guide future outreach and policymaking. For reference, our research questions are:

1. What is the rate of food service businesses' compliance with the straw and utensil ordinance among businesses surveyed?
2. What are barriers to, and incentives and opportunities for, increasing compliance with the ban on single-use disposable plastic straws and utensils in Seattle?

A previous Evans School Consulting Team collected data from 35 FSBs in the spring of 2018, before the ban on single-use straws and utensils was enacted. On the recommendation of SPU, we used a similar methodological approach derived from the 2018 team to establish a new baseline rate of compliance of surveyed businesses following the ordinance's enactment. Through this fieldwork, we identified barriers to compliance and related incentives and opportunities that could increase compliance.

There were two components of our data collection approach. Over the course of our research, we conducted in-person interviews at 90 FSBs in Seattle (see Table 5). 70 FSBs were selected using a geographic approach; this allowed our team to include 10 FSBs from each of the seven council districts. A map of Seattle's seven council districts is available in Appendix 4. For the remaining 20 FSBs, we sampled bubble tea businesses in the University District and International District neighborhoods because of the high concentration of businesses in these neighborhoods. A map highlighting these two neighborhoods can be found in Appendix 5. Using this type of sampling method instead of a geographic approach (i.e. visiting a bubble tea business in each of the seven council districts) provided a more robust sample and allowed us to gain a better understanding of the barriers and perceived barriers faced by bubble tea businesses with the new straw requirements.

*Table 5. Survey Sample Size, Sampling Strategy, and Survey Goals.*

	<b>Survey 1: FSBs</b>	<b>Survey 2: Bubble Tea FSBs</b>
<b>Sample Size</b>	70 FSBs	20 FSBs
<b>Sampling Strategy</b>	Quota (10 from each of the 7 council districts)	Convenience (10 from University District, 10 from International District)
<b>Survey Goals</b>	<ul style="list-style-type: none"> <li>● Establish compliance rate among businesses surveyed</li> <li>● Gather information on actual and perceived barriers to compliance</li> <li>● Collect feedback on policies and outreach strategies</li> </ul>	<ul style="list-style-type: none"> <li>● Establish compliance rate among businesses surveyed</li> <li>● Gather information on actual and perceived barriers to compliance specific to Bubble Tea businesses</li> <li>● Collect feedback on policies and outreach strategies</li> </ul>

We collected both quantitative and qualitative data during the 90 in-person interviews. Following the data collection process, our research team entered and coded all of the information we recorded during our site visits in Excel. We used the quantitative data to make assessments about compliance and qualitative data to identify common themes relevant to how FSBs are reacting and adapting to the ordinance.

## **Sampling Strategy and Survey Method**

To select the 70 FSBs to visit through our geographic approach, we began by identifying all of the FSBs within Seattle using data provided by the King County Health Department, which listed all FSBs by food permit types for the City of Seattle. Because we were interested in assessing the compliance and concerns of businesses that serve food to customers for immediate consumption (through either dine-in or take-out establishments), we eliminated categories of permits that did not fit these requirements. We excluded the following permit categories:

- School lunch programs
- Non-profit Institutions (such as community centers)
- Bed & breakfasts
- Meat and seafood stores and departments of grocery stores

We then assigned random numbers between 1111-9999 to the remaining 4,298 FSBs using the Microsoft Excel randomization function. From this sample, we used an Excel randomization function to randomly select 10 FSBs from each council district. This sampling method is called quota sampling, which is a sampling strategy often used when researchers require that a specific number of units be selected in each of several specific groups. We chose this method in order to visit an equal number of businesses in each of the seven council districts in Seattle. This methodology allowed our team to determine and include sub-populations of interest, such as FSBs from different areas of the city, and control the proportions of those sub-populations in our sample. Because the ban on single-use plastic straws and utensils applies to all FSBs, we decided to include many types of businesses in our sample, including both chains and independent restaurants, as well as restaurants that primarily serve dine-in orders and restaurants with primarily take-out ordering. At each site, we recorded whether the business reported doing more of its service as dine-in or take-out.

As mentioned before, FSBs that sell bubble tea were a subpopulation of interest. The data set we were provided did not identify the specific types of food and beverages sold by FSBs (e.g. bubble tea), so these businesses were identified manually through internet research and word of mouth. SPU provided our team with a list of 93 bubble tea FSBs they identified during the summer of 2018 using search tools like Yelp and Google. With this manually identified list, we mapped each store to determine the neighborhood location of each. In the University District, 22 businesses were identified as selling bubble tea and in the International District, 23 businesses were identified as selling bubble tea. From each of these districts, we randomly selected 10 businesses using the same random-selection process discussed previously. We recognize this identification method may have drawbacks: there may be bubble tea FSBs that were not listed on these websites, or ones that opened since the list was created that will not be part of these 93 identified. Our sampling strategies for both FSBs and bubble tea FSBs were described to and approved by SPU.

## Survey Design

We designed a 15-question structured interview to be conducted in-person in pairs of two researchers. One researcher would ask the interview questions while the other researcher recorded the answers on the interview survey form. The interview contained a mix of open-ended questions, in which people responded in their own words, and close-ended questions, in which the interviewee responded using a predefined set of categories.

Questions were created in consultation with SPU and designed to elicit information from interviewees relevant to the research questions and sub-areas of interest. This interview method was pre-tested with our colleagues to improve the clarity of each question and to ensure that questions were asked in a logical order.

Each interview was conducted using a consistent protocol (see Appendix 6) with no additional questions being asked. Each interview began with the following opening statement:

*“Hi, my name is \_\_\_\_\_ and this is \_\_\_\_\_; we are graduate students at the University of Washington conducting a confidential survey for Seattle Public Utilities about the plastic straw and utensil ban. Do you have a few minutes to talk with us?”*

*“Anything you share will be confidential; the business will not be fined and any information you give us cannot be linked back to this store.”*

Our interview questions and rationale for using the inquiry or observation method for each question can be found in Appendix 7.

Our interviews included four sections of questions. The first section was used to identify the compliance status of both straws and utensils and gather characteristic information of the restaurant in question (i.e. type of employee are we talking to, if the business does more dine-in or take-out service, etc.)

Our next section of questions was used to identify perceptions and knowledge of the ban. These includes questions about employee perceptions of the city’s motivation for creating and implementing the ban, opinions about the ban, and how employees learned about the ban.

The third section of questions was used to understand how the process of becoming compliant had been for FSBs and how likely they might be to change if not in compliance. Since SPU had shared their concerns that many businesses may not know about the exemption for FSBs to provide bendable plastic drinking straws upon request to customers with medical or physical conditions, we asked questions to gauge employee knowledge and awareness about this exemption.

Our final category of questions was only asked at businesses serving bubble tea, as these questions were directly focused on collecting information on the population’s unique experiences understanding and complying with the ordinance.

We felt it was worthwhile to interact with employees spanning the restaurant hierarchy at FSBs. For example, if a manager was unable to talk with our team when we visited, we spoke to another employee (e.g. supervisor or cashier) and recorded this information in our survey forms.

We felt information collected from all levels of employment was valuable because it can inform SPU on future outreach opportunities and assess overall knowledge of the ban by service employees. This method provided our team with a diverse set of perspectives on the ban and how it is being implemented within these businesses.

Some employees or employers were reluctant to be interviewed due to the sensitivity of discussing a city ordinance and fear of enforcement penalties. As a result, it was very important that we anonymized all data and reported about our results in aggregate only, to avoid imposing any risk to sampled businesses. Stressing the confidential nature of the information collected at the beginning of our interview was an important way to encourage business participation.

After our introduction, some of the businesses we randomly selected did not want to participate in an interview. When this instance occurred, we would resample and make visits to additional randomly selected businesses in the council district until we reached 10 interviews from FSBs in each council district; SPU approved this strategy.

### **Data Collection & Analysis**

In most cases, we limited our surveying time to between 1:30pm and 4:30pm in the afternoon to maximize employee availability: this window between lunch and dinner was recommended as being the most considerate to businesses, and the time they would most likely be able to speak with our team. Due to team availability, we conducted our site visits on both weekdays and weekends.

To answer the first research question about compliance with the ordinance, we relied on visual and tactile observations during the visit to each FSB. When we were unable to identify the compliance status of an item, we inquired verbally and noted the response in our records.

Data about compliance was collected for each item type (straws and/or utensils) and coded with an indication of whether a product was composed of compostable or non-compostable material. For compostable products, we recorded whether they were made of paper or compostable plastic.

We assessed whether FSBs were compliant, partially compliant (for example, compostable straws but not compostable utensils) or non-compliant and calculated the overall percentage of businesses in each category. For close-ended questions, we used simple codes, as the answers we received were easily categorized (for example, yes or no). For open-ended questions, our research team would record the answer as verbatim as possible. During the data entry process, we tracked a list of general themes based on all responses collected during interviews and coded the responses by theme. For example, when asked what they thought about the ordinance, if respondents expressed concerns about the high price or about the increased cost of a compliant product, these comments would both be coded under price as a theme, with expensive being the code within that theme. When responses did not fit into predetermined themes, we created new themes and codes for classifying their responses. This iterative process allowed for comprehensive theme identification. We tallied the responses by theme and identified patterns and trends. This gave our team an understanding of the recurring perspectives about the ban, and what barriers to compliance may exist. Ultimately, the survey results informed our recommendations to SPU on how to improve education, outreach, and compliance.

## **Survey Limitations**

### ***Sample Size***

We surveyed 90 FSBs for this project. Each survey required between 5 and 10 minutes to administer. The metrics and sample statistics we report are based on these observations; however, our findings are not necessarily generalizable to the larger population due to the limited sample size.

While findings from these 90 visits cannot be generalized to the full population of FSBs within Seattle, our team, advisor, and client are confident that our sample size provides ample findings to inform future SPU work.

### ***Participation***

We were clear when introducing our survey that participation was entirely optional and some businesses' employees or owners chose not to participate. When a business opted not to participate, we randomly selected another business from the same council district, but we recognize that an opt-in format naturally skews the compliance rate and qualitative data towards businesses that choose to participate. Though fear of enforcement was not stated explicitly, we did witness an employee removing self-serve boba straws while we interviewed another employee. Fear of enforcement thus may have contributed to non-participation in some cases.

In several instances, we were unable to conduct our survey at a randomized FSB due to the business being closed. Due to time constraints, we conducted a convenience sample of a nearby FSB.

### ***Survey Question Inconsistencies***

When employees provided short or minimal answers, we could not always record a fully formed answer into our data sheet. There were also times where FSB employees were not asked one or more specific questions, due to survey administration error or time limitations within the survey.

### ***Visual Observation & Convenience Sampling***

Due to time constraints, there were instances in which we were unable to gather qualitative data. For these businesses, we collected visual and tactile observations of the straws and utensil types available, as well as distribution methods, in order to assess compliance.

## Chapter 4: Findings and Analysis

### Overview

In this chapter we summarize findings from our survey of 70 FSBs and 20 bubble tea FSBs. First, we present findings for the 70 FSBs, including information on compliance rates, how single-use straws and utensils are provided to customers and details on these single-use items, including composition, brand, and suppliers. We also summarize these businesses' experience with the ban and what knowledge they have about the ban. Next, we present findings on compliance rates and experience with the ban for the 20 bubble tea FSBs. Finally, we summarize results of our survey questions about the exemption allowing bendable plastic straws for people with medical or physical conditions.

It is important to note that this data represents what was observed by and/or verbalized to the interviewers. At some FSBs, information was collected only through observation and not all questions could be answered. At others, some survey questions were omitted in accordance with expressed preference of individual interviewees. Additionally, not all questions were applicable to all sampled businesses. For example, some businesses did not have straws. Others did not have utensils. As a result, our response numbers (n=) vary throughout this section and percentages are based on total respondents to each question. These response numbers may vary from the total number of surveyed businesses.

### Summary of FSB Survey Data

This section summarizes survey data collected at 70 FSBs in the seven council districts.

#### Straw and Utensil Compliance

Table 6 shows the compliance level of single-use straws and utensils.

- Compliant: Single-use straws or all single-use utensils are compostable.
- Partially Compliant: Single-use straws or some single-use utensil types are compostable, but not all of these items are compostable.
- Non-Compliant: No single-use straws or single-use utensils are compostable.



Table 6: FSB survey results by council district.

Council District	Straw			Utensil			
	n	Compliant	Non-Compliant	n	Compliant	Partially Compliant	Non-Compliant
1	9	6	3	9	6	0	3
2	8	3	5	9	6	0	3
3	9	7	2	9	3	1	5
4	10	8	2	9	5	1	3
5	9	8	1	8	6	0	2
6	10	9	1	10	9	1	0
7	10	10	0	8	7	1	0
Total	65	51	14	62	42	4	16

**Key Findings<sup>2</sup>**

- 78% of FSBs used compliant single-use straws.
- 68% of FSBs used all compliant single-use utensils.
- Of the observations where the material of compliant straws could be confirmed, 86% were made of compostable plastic. The remaining 14% were made of compostable paper. (n=49)
- Figure 2 shows straw and utensil compliance across council districts, while Figure 3 shows straw and utensil compliance within each council district.

<sup>2</sup> All percentages are rounded to nearest whole number.

Figure 2: Single-use straw and utensil compliance across council districts.

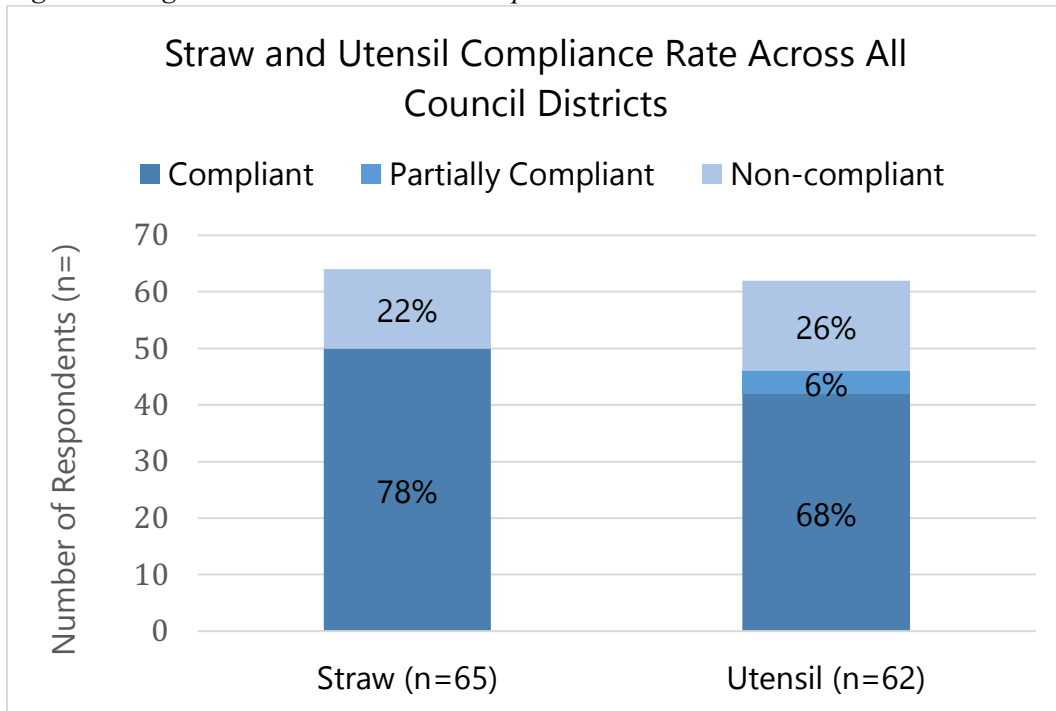
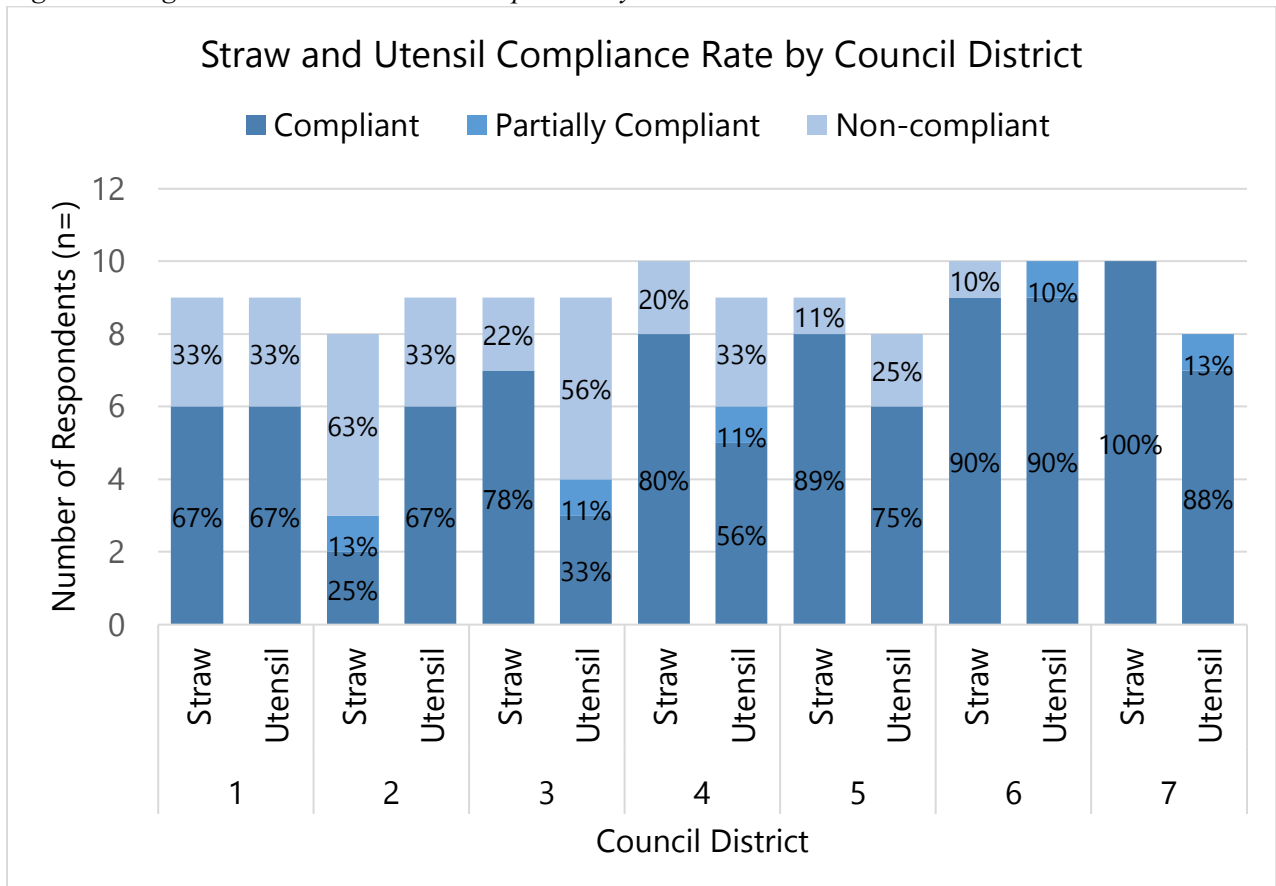


Figure 3: Single-use straw and utensil compliance by council district.

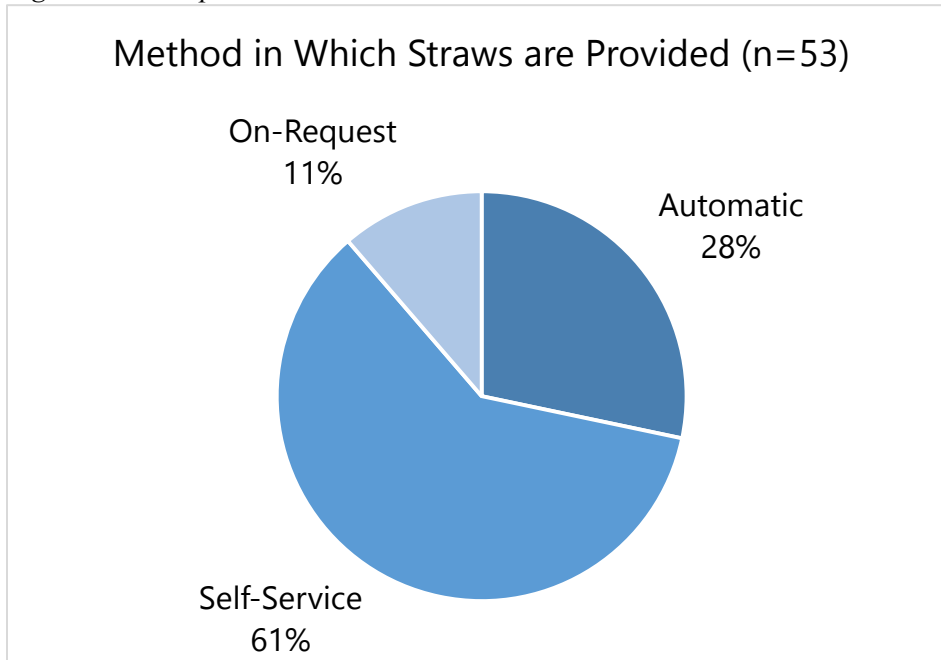


### Single-Use Straw Provision Method

Figure 4 shows the method in which a straw is provided to the customer at FSBs across the seven council districts (n=53).

- Automatic: A straw is provided by default.
- Self-Service: A straw is openly available to the customer in the FSB.
- On-Request: A straw is provided upon customer request.

Figure 4: Straw provision method.



### Key Findings

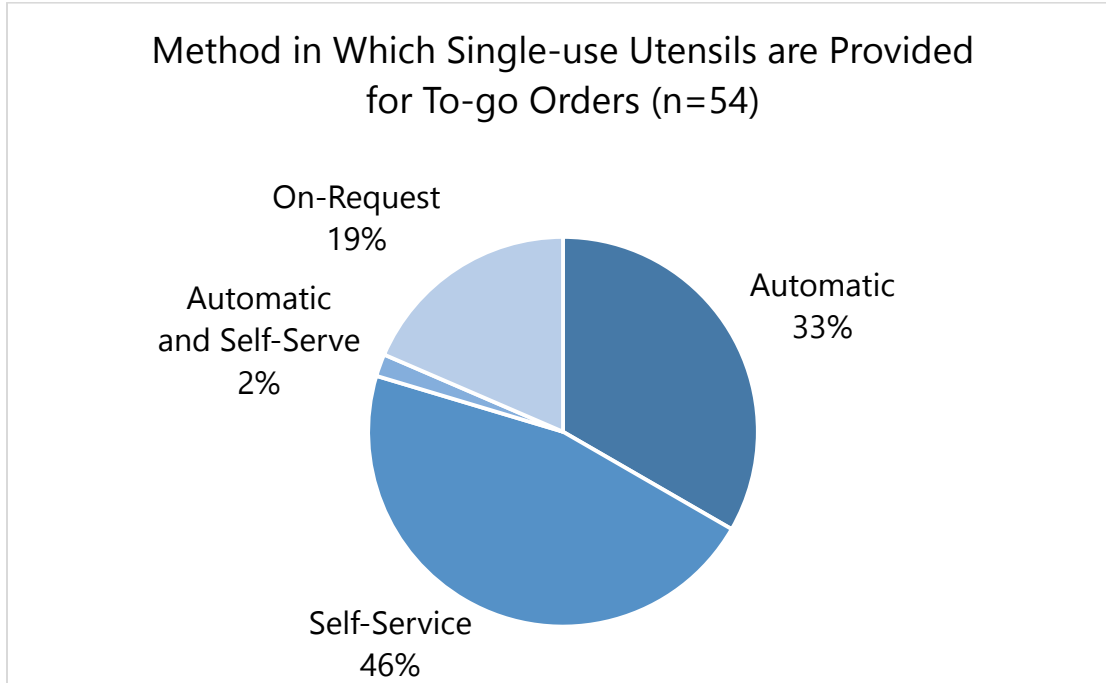
- 28% of FSBs provided straws automatically.
- 61% of FSBs provided straws through a self-service method.
- 11% of FSBs provided straws on-request.

### Single-Use Utensil Provision Method

Figure 5 shows the method in which single-use utensils are provided to customers for to-go orders at FSBs across the seven council districts (n=54).

- Automatic: Single-use utensils are provided by default.
- Self-Service: Single-use utensils are openly available to the customer in the FSB.
- Automatic and Self-Service: Both methods are used.
- On-Request: Single-use utensils are provided upon customer request.

Figure 5: Utensil provision method.



### Key Findings

- 33% of FSBs provided single-use utensils automatically for to-go orders.
- 46% of FSBs provided single-use utensils through self-service for to-go orders.
- 2% of FSBs provided single-use utensils both automatically and through self-service for to-go orders.
- 19% of FSBs provided single-use utensils on-request for to-go orders.

### Overall Compliance

Table 7 shows the overall compliance of FSBs by council district.

- Compliant: Single-use straws and all single-use utensils are compostable.
- Partially Compliant: Some single-use straw types or some single-use utensil types are compostable, but not all of these items are compostable.
- Non-Compliant: Single-use straws and no type of single-use utensil is compostable.

Table 7: FSB compliance level by council district.

Council District	n	Compliant	Partially Compliant	Non-Compliant	Compliance Rate
1	10	6	0	4	60%
2	10	4	2	4	40%
3	10	4	3	3	40%
4	10	6	3	1	60%
5	10	8	0	2	80%
6	10	8	2	0	80%
7	10	9	1	0	90%
Total	70	45	11	14	64%

**Key Findings**

- Across council districts, 64% are compliant, 16% are partially compliant, and 20% are non-compliant (See Figure 6). For a breakdown by council district, see Figure 7.

Figure 6: Across council districts.

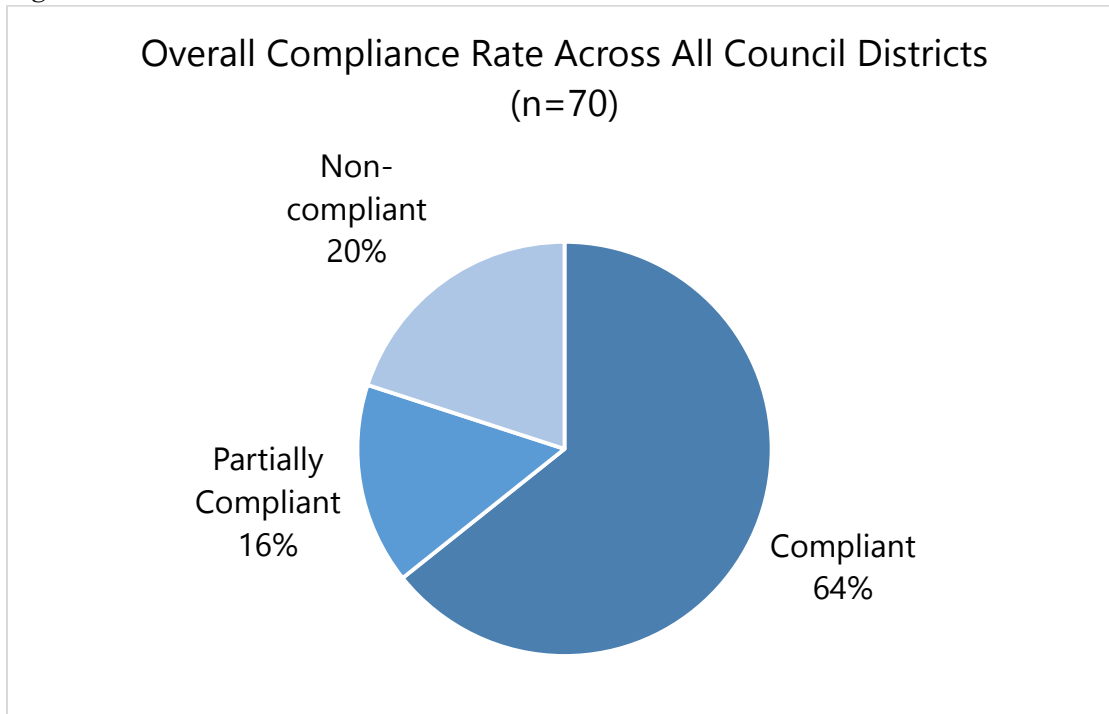
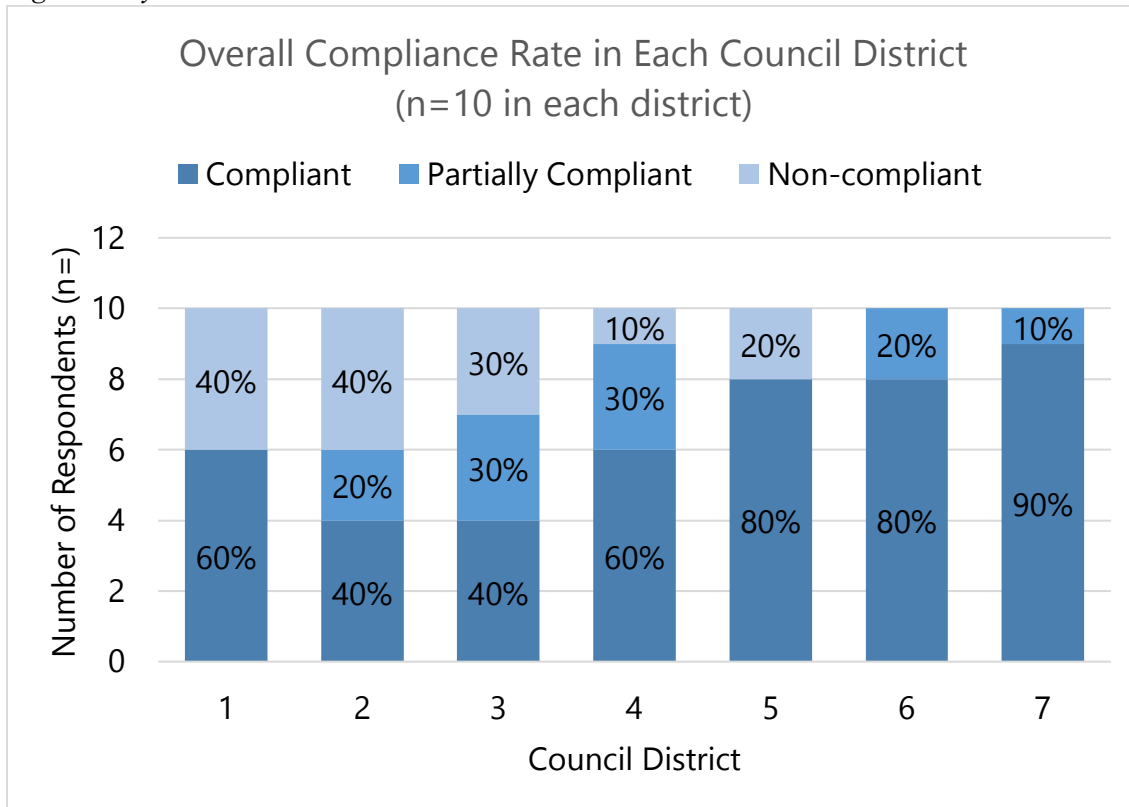


Figure 7: By council district.

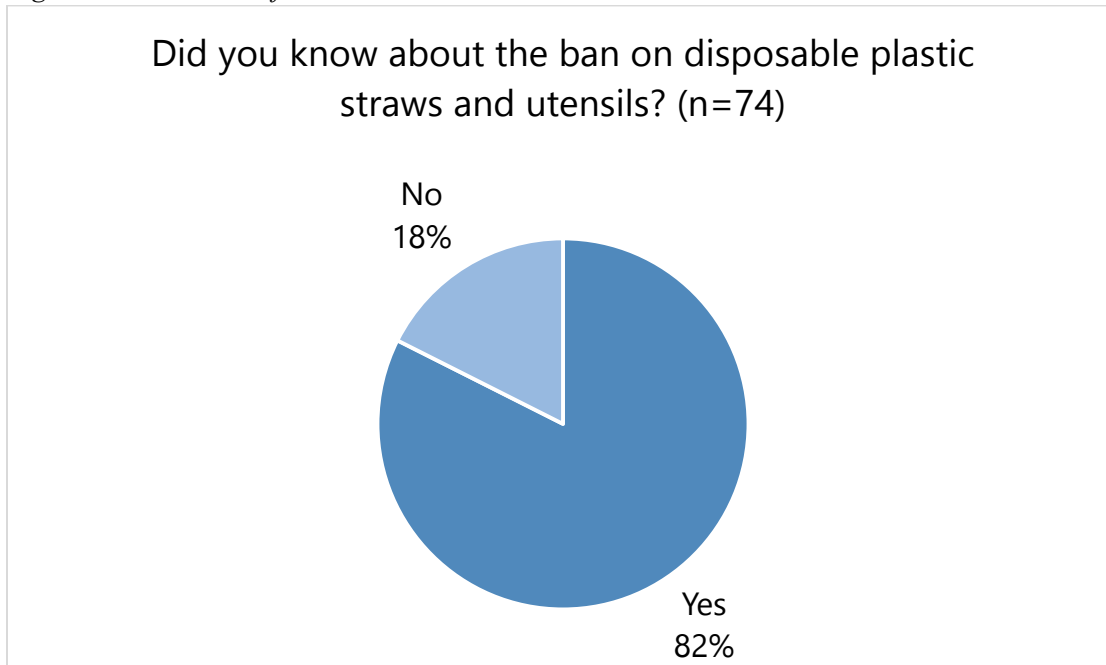


## FSB Perceptions, Knowledge and Communication Related to the Straw and Utensil Ban

### Do FSB representatives know about the ordinance?

At all sites, we asked if the person we were interviewing knew about the ordinance banning the use of single-use plastic straws and utensils effective July 1, 2018 (Figure 8).

Figure 8: Awareness of ban.



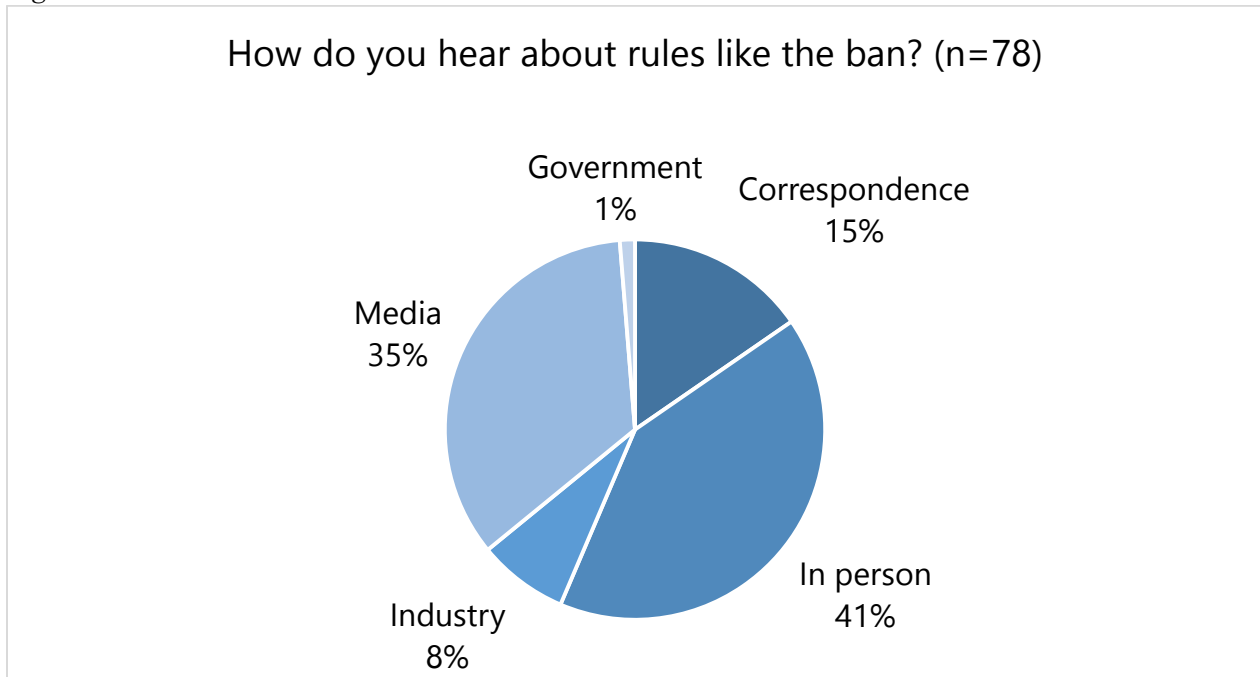
Rates of representatives reporting knowing about the ban were fairly consistent between bubble tea businesses and non-bubble tea businesses.

- Overall, 82% of FSBs reported knowing about the ban.

### How do FSB representatives hear about ordinances?

In order to assess current outreach related to this and other ordinances, we asked all FSB representatives how they typically heard about regulations such as this ban (Figure 9).

Figure 9: How the ban is communicated.



Although all FSBs were mailed information, the largest category of responses (41%) reported that they learn about ordinances “in person”. The types of in-person sources mentioned by respondents were: directly from employer (12), from someone at another FSB (9), from the City of Seattle (5), from customers (3), a friend or at school (3), other “word-of-mouth” or unclear (2).

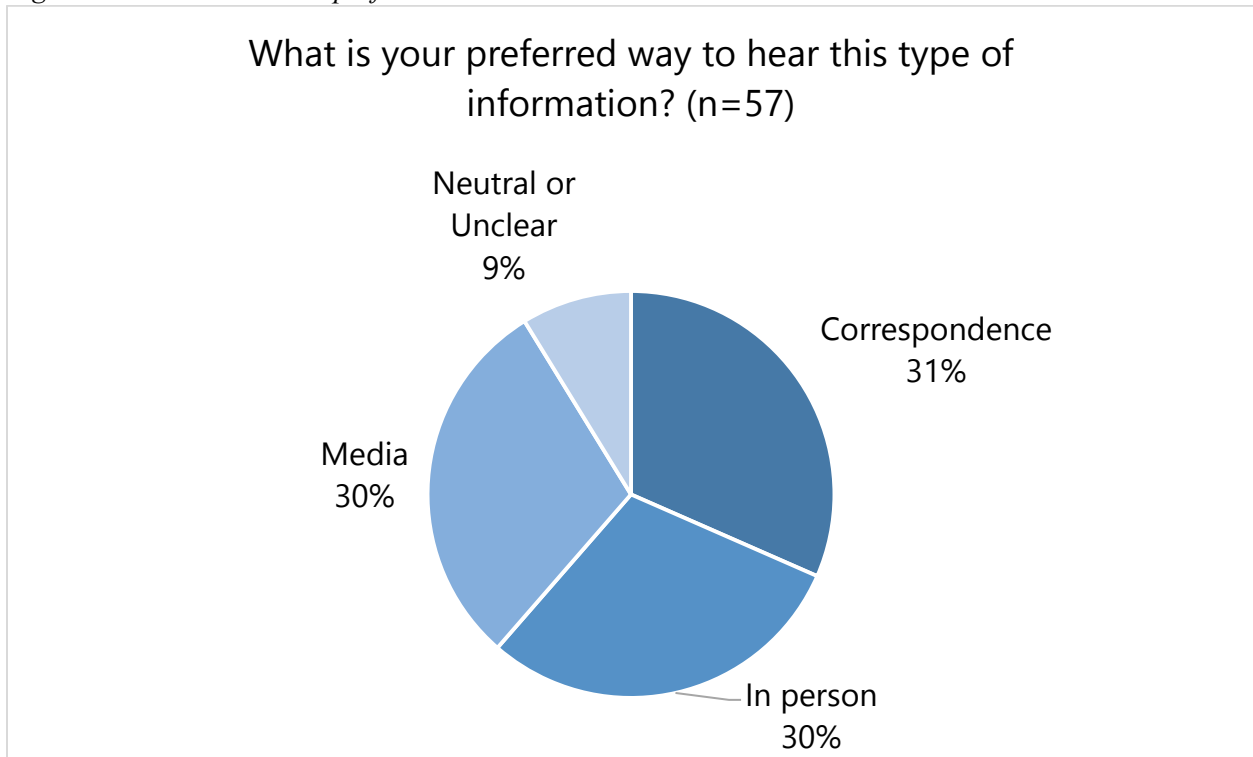
Of the 15 responses that reported correspondence, the channels referenced were: mail (10), email (4), and phone call (1). Of the 28 that cited media, news (8), online research (6), and social media (5) were referenced most frequently. Of those that cited industry (7), two referenced other FSBs, two referenced their product supplier, and three others stated “the industry.” One response cited hearing about rules like this ban from “the government” and did not elaborate.

#### **How do FSB representatives prefer to hear about regulations?**

We asked each interviewee if they had a preferred way to hear about regulations such as the straw and utensil ordinance. A slight majority preferred the current mode of correspondence from the city (Figure 10).



Figure 10: Communication preference.



- 31% preferred correspondence such as mail (13), email (4), or gave a vague response (1).
- 30% preferred media such as news (5), newspaper (3), ads (2), internet (4) or social media (3).
- 30% preferred to hear in person, from their employer (6), from a visit from a City employee (7), at a community meeting (1), or gave a vague response (3).
- 9% had no preference or gave an unclear response.

### **Sourcing of compliant products**

At restaurants that were fully compliant (using both a compostable straw and compostable utensils), we asked if the restaurant was able to find the compliant products at their regular supplier or if they had to go to a different source to find a compliant product.

- 68% (21) reported being able to find compliant products at their regular suppliers.
- 32% (10) reported not being able to find the compliant products they were using at their regular respondents.

### **FSBs that reported being able to find compliant products at their regular suppliers reported the following companies:**

- Restaurant Depot (7)
- Cash and Carry (5)
- Cisco (2)
- Bar Green (1)
- Bunzi (1)
- Cedar Grove (1)
- FSA (1)

- Karat Earth (online) (1)

**FSBs that reported not being able to find compliant products at their regular suppliers instead reported finding compliant products via:**

- Online unspecified (3)
- EcoProducts (1)
- Lollicup (1)
- US Food Service (1)
- World Centric (1)

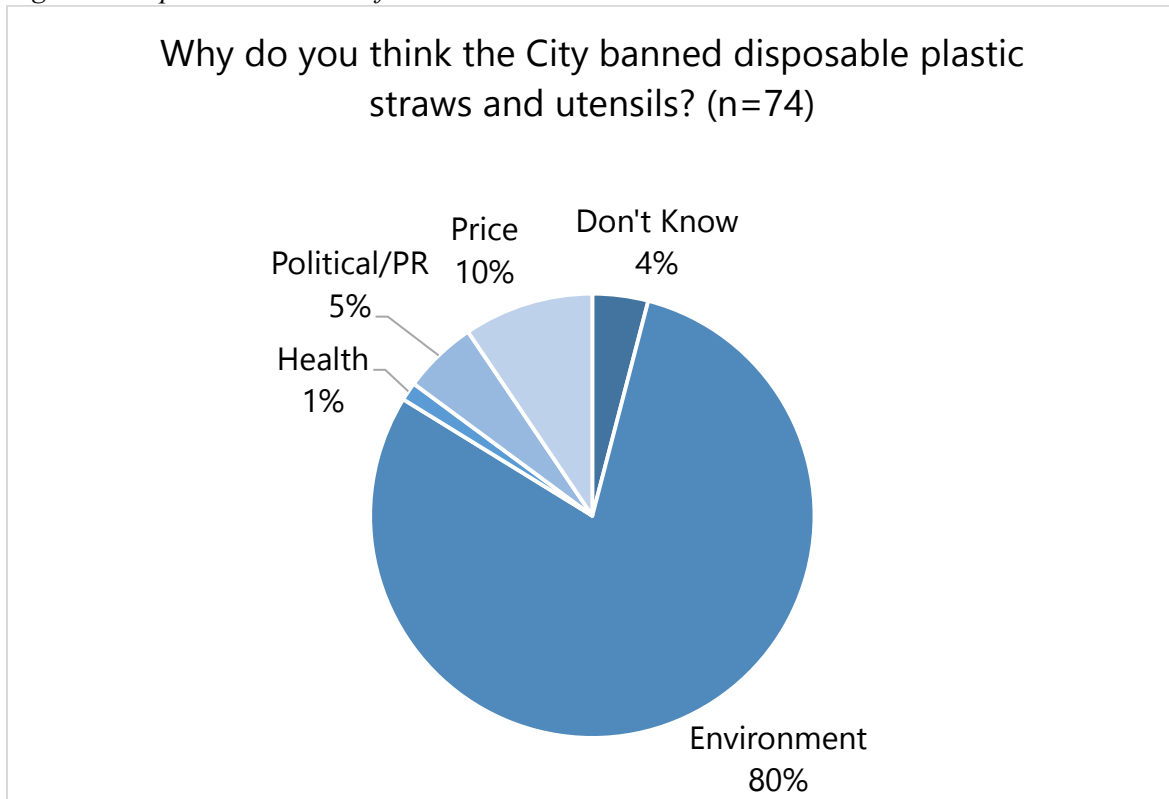
**Perceptions towards ban**

Within our qualitative data, sometimes an interviewee would respond to a question with an answer that included more than one theme. We wanted to capture all aspects of responses; in these cases, we included all of the themes mentioned in our analysis. As a result, n represents the number of responses, not the number of FSBs.

For the question asking respondents why they thought the City of Seattle had banned single-use plastic straws and utensils (n=74):

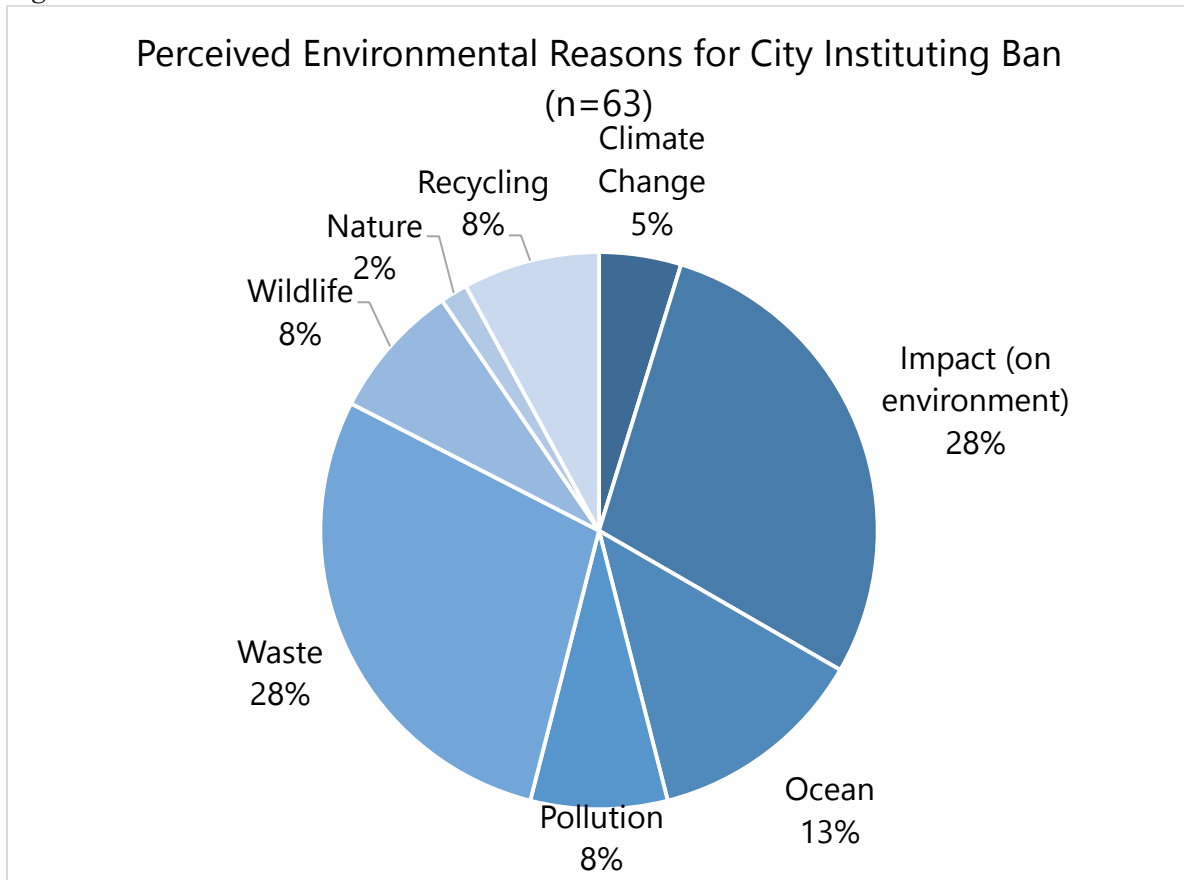
- 80% responded that it was for environmental reasons.
- 10% reported that the City has instituted the ban for price reasons (including one person who responded they believed the City was receiving a portion of the money spent on compostable products, or “a cut”).
- 5% responded that the City had instituted the ban for political reasons or as a public relations move.
- 4% of respondents reported not knowing why the City implemented the ban .
- 1% of respondents reported it was for health reasons (Figure 11).

Figure 11: Opinion on reasons for ban.



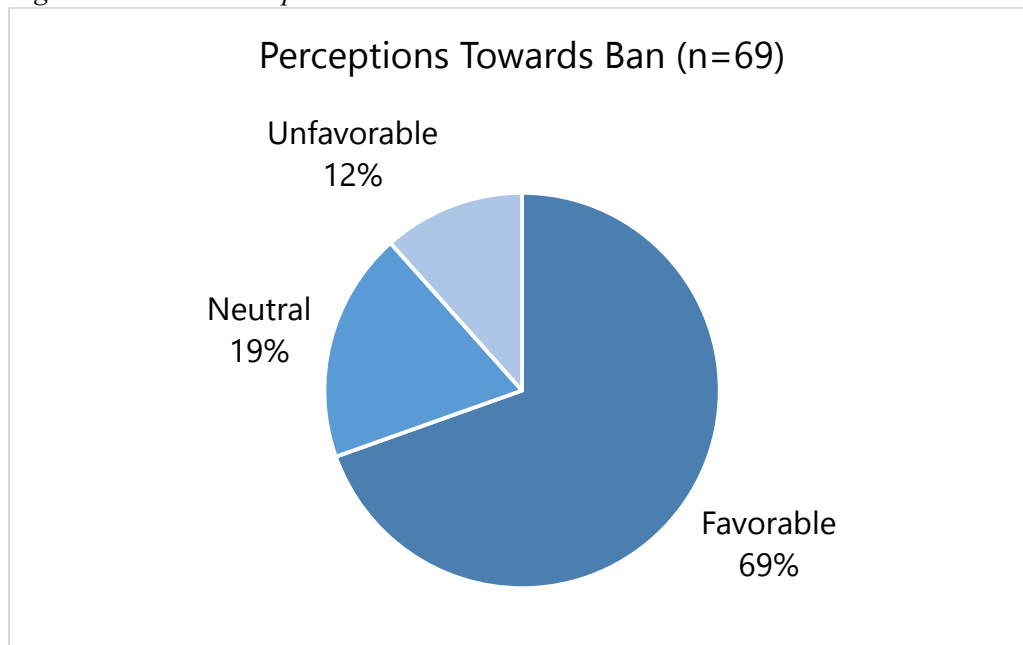
Within the 80% of respondents who reported the ban being implemented for environmental reasons, the majority expressed a belief that the ban would have a future impact on the environment. Other responses under our environment theme were given related to oceans, climate change, pollution recycling, nature, and wildlife. Several respondents brought up the image of the sea turtle with the straw in its nostril that went viral (Lee, 2018). One respondent reported this image as the driving motivation for the City of Seattle to implement the ban (Figure 12).

Figure 12: Environmental reasons that were cited.



We also asked respondents what they thought about the ban. We first gauged whether their opinions characterized the ban as favorable, neutral, or unfavorable (Figure 13).

Figure 13: How ban is perceived.



Of those who responded favorably to the ban, many respondents simply stated they were in favor of it, they thought it was good, or they just generally agreed with the ban. Some respondents gave additional answers. Of these:

- 25% (12) stated that it was good because it was good for the environment
- 8% (4) noted that it was good but the cost and expense of compliant products was bad (for businesses)
- 8% (4) thought it was ineffective and unenforced
- 4% (2) reported that it was well-intentioned

Of those who responded unfavorably, 50% brought up cost and the increased expense of buying a compliant product. 14% brought up the difficulty and inconvenience of finding a compliant product.

### Perceptions toward Durable Straw and Utensil Options

Within the survey, our team noted when an FSB had a durable option for straws or utensils (n=70).

- 35 FSBs were confirmed to have a durable utensil option.
- 1 FSB was confirmed to have a durable straw option.

Our team was able to record five interactions with FSBs on incorporating more durable straw and utensil options into their businesses. Three interviewees said they would consider adding durable options for the following reasons:

- If there were cheaper options (1)
- By corporate direction (1)
- They plan on having glass straws in the future (1)

Two of the five would not consider having more durable options because of their lack of storage space or limited access to a dishwasher to clean these products.

## Summary of Bubble Tea FSB Survey Data

This section summarizes survey data collected at 20 bubble tea FSBs in the University and International District neighborhoods.

### Straw and Utensil Compliance

Table 8 summarizes compliance rates of single-use bubble straws, single-use regular straws, and single-use utensils at bubble tea FSBs in both neighborhoods.

- **Compliant:** Single-use straw type is compostable. All single-use utensils are compostable.
- **Partially Compliant:** Some single-use utensil types are compostable, but not all of these items are compostable.
- **Non-Compliant:** Single-use straw type is not compostable. No single-use utensils are compostable.

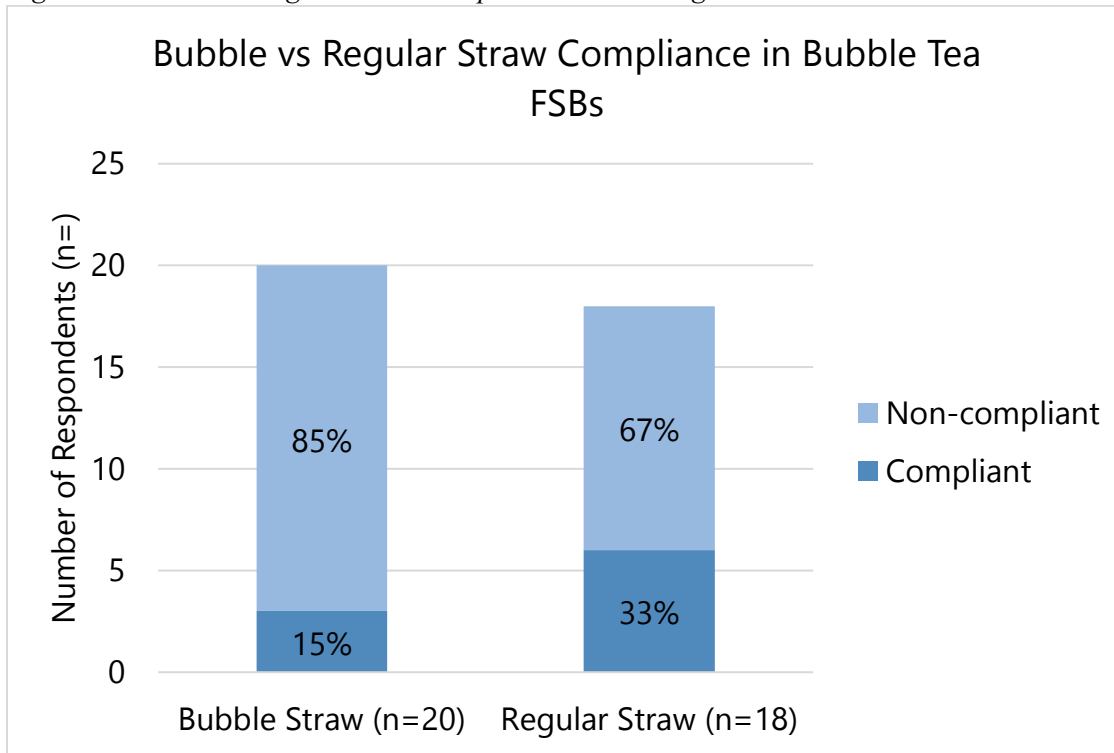
*Table 8: Bubble Tea FSB breakdown of bubble straw type, regular straw type, and utensil type by neighborhood.*

Neighborhood	Bubble Straw			Regular Straw			Utensil			
	n	Compliant	Non-Compliant	n	Compliant	Non-Compliant	n	Compliant	Partially Compliant	Non-compliant
University District	10	2	8	8	2	6	6	0	1	5
International District	10	1	9	10	4	6	8	5	0	3
Total	20	3	17	18	6	12	14	5	1	8

### Key Findings

- 15% of bubble tea FSBs used compliant bubble straws.
  - Of the compliant bubble straws, all were made of compostable plastic.
- 33% of bubble tea FSBs used compliant regular straws.
- 36% had single-use utensils that were all compliant.
- 0% of bubble tea FSBs in the University District used all compliant single-use utensils.
- Figure 14 compares bubble tea straw vs regular straw compliance across the neighborhoods.

Figure 14: Bubble vs regular straw compliance across neighborhoods.



### Overall Compliance

Table 9 summarizes the overall compliance rate of all single-use straws and utensils in those bubble tea FSBs responding.

- Compliant: All single-use straw types and all single-use utensil types are compostable.
- Partially Compliant: Some single-use straw types or some single-use utensil types are compostable, but not all of these items are compostable.
- Non-Compliant: No single-use straws or single-use utensils are compostable.

Table 9. Bubble Tea FSB compliance level by neighborhood.

Neighborhood	n	Compliant	Partially Compliant	Non-Compliant	Compliance Rate
University District	10	1	3	6	10%
International District	10	1	6	3	10%
Total	20	2	9	9	10%

### Key Findings

- 10% of bubble tea FSBs were compliant in their single-use straws and utensils.
- 45% were partially compliant.
- 45% were non-compliant in their single-use straws and utensils (Figure 15). See Figure 16 for a breakdown by neighborhood.

Figure 15: Overall compliance across neighborhoods.

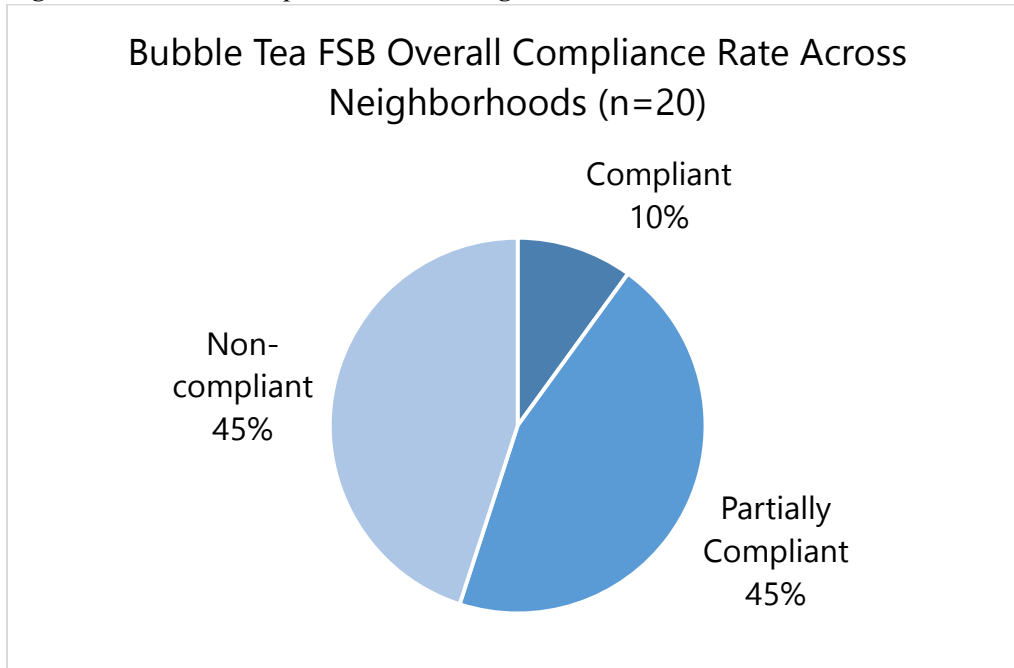
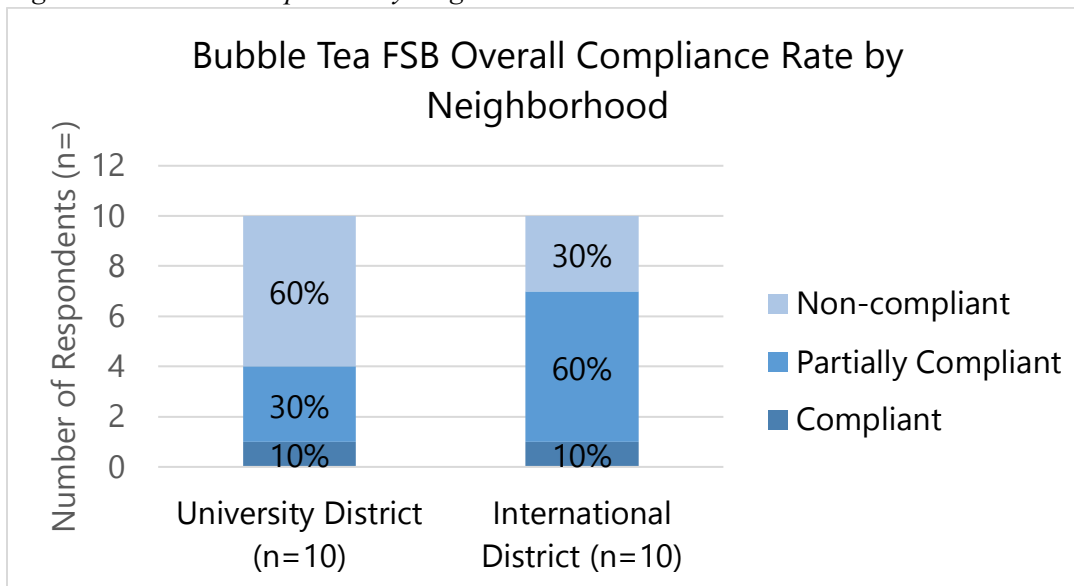


Figure 16: Overall compliance by neighborhoods.



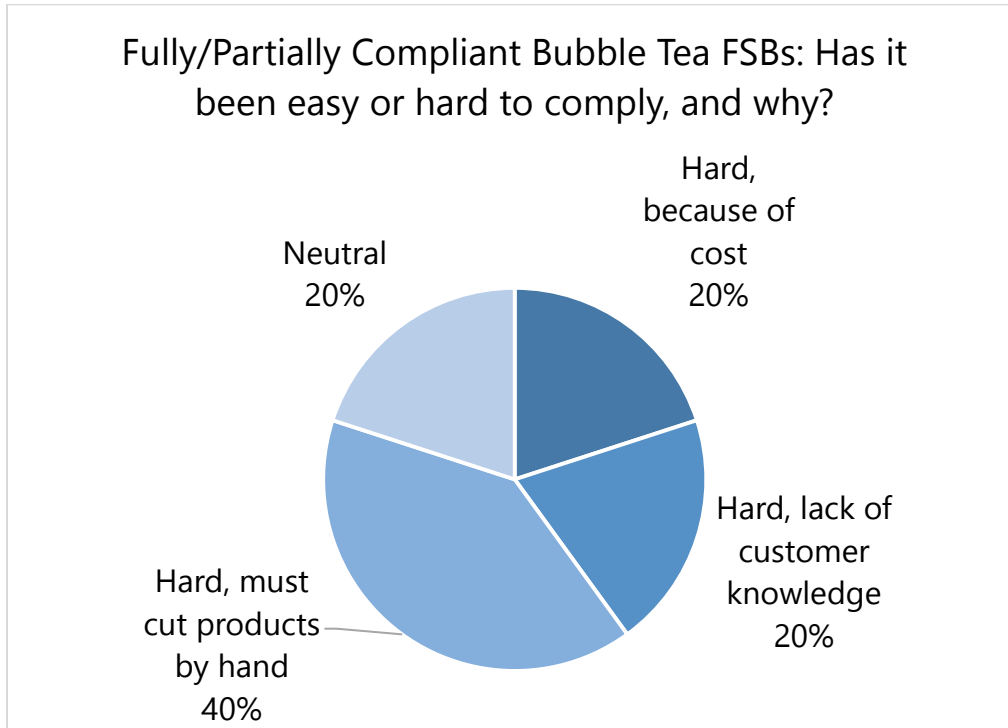
We were able to interview people at four of the fully or partially compliant bubble tea businesses. We asked if compliance had been easy or difficult, and why.

- 80% of respondents answered that it had been difficult to comply.
- 20% had neutral feelings on their ease of compliance.



Of those that found it difficult, two cited the inconvenience of cutting the compliant compostable straws at an angle by hand (to puncture the thin plastic film sealing the bubble tea cup), one cited cost, and one stated they had to teach customers how to use the differently-sized compostable straw with their bubble tea (Figure 17).

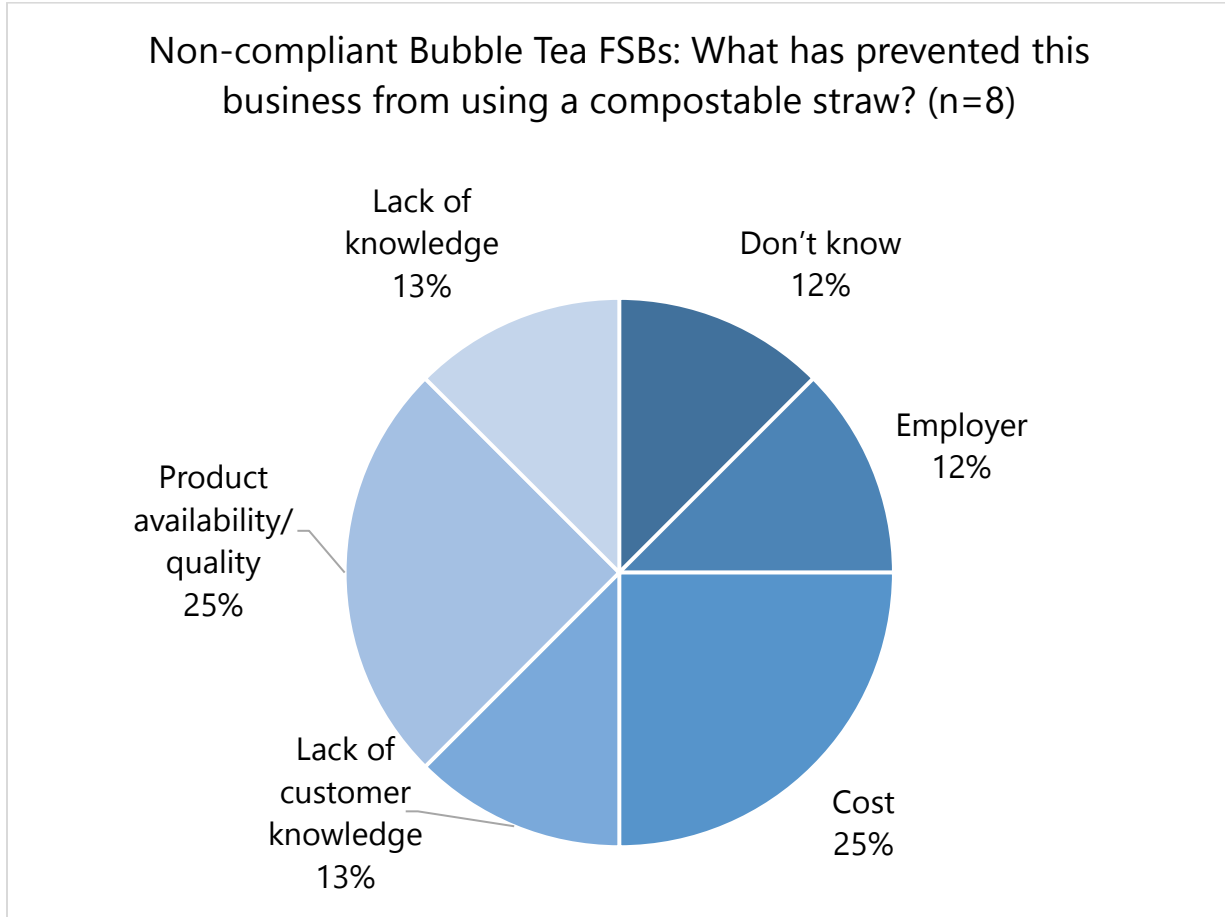
Figure 17: Difficulty level of complying and why.



At six bubble tea businesses where we conducted interviews and did not find any compliance, answers varied as to what has prevented the business from complying with the straw requirement (Figure 18). Of eight reasons given for non-compliance:

- 2 responses cited availability problems with appropriate products, particularly with hot beverages. One person complained of paper straws melting, suggesting compliance was attempted.
- 2 responses cited the expense of compliant straws.
- 1 cited a lack of customer knowledge of the ban.
- 1 cited a lack of knowledge at the FSB.
- 1 said their employer made purchasing decisions and would not comply.
- 1 didn't know why the FSB was not in compliance.

Figure 18: Reported challenges to compliance (bubble tea straws).



## Summary of Bendable Plastic Straw Exemption Findings

### Supplies of Bendable Plastic Straws

This section presents findings on the number of bubble tea and non-bubble tea FSBs that had a supply of bendable plastic straws (n=62).

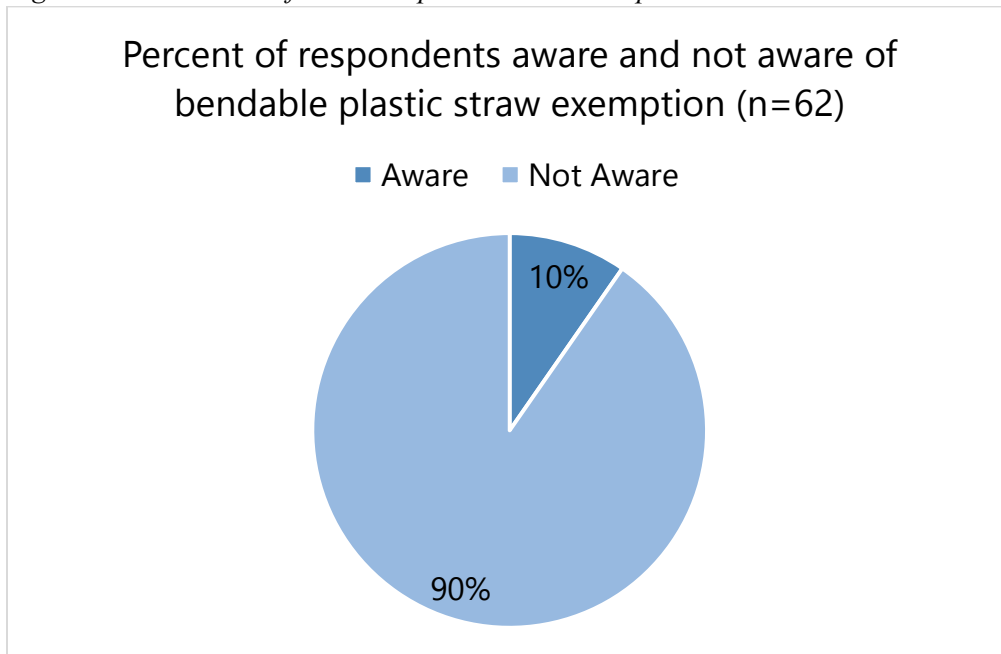
#### **Key Findings**

- 5% of FSBs reported that they had a supply of bendable plastic straws.
- 95% of FSBs reported that they did not have supply of bendable plastic straws.
- No bubble tea FSBs had a supply of bendable plastic straws.
- Three FSBs reported having a supply of bendable plastic straws. Two specifically mentioned the supply was old stock from before the ordinance went into effect or were being used because they had run out of regular straws for customers.

## Knowledge about the Exemption

Figure 19 shows the total number of employees interviewed at bubble tea FSBs and non-bubble tea FSBs that knew about the exemption allowing for bendable plastic straws for those who require them for medical or physical reasons.

Figure 19: Awareness of bendable plastic straw exemption.



### Key Findings

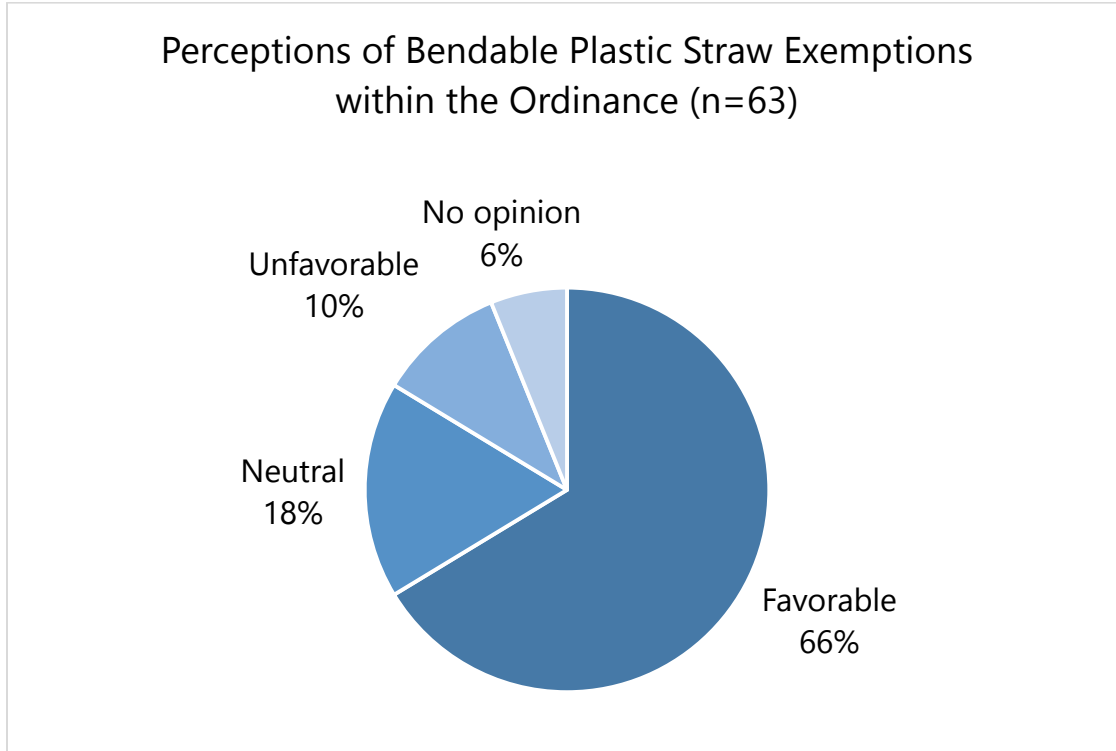
- 10% of employees reported they were aware of the exemption that allows for bendable plastic straws.
- 90% of employees reported they were not aware of this exemption.
- No businesses in which employees were aware of the exemption had a supply of bendable plastic straws.

## Perceptions toward Bendable Plastic Straw Exemption

63 of the 90 FSBs surveyed responded about their perceptions to the exemption of bendable plastic straws if required for medical and physical conditions (Figure 20).

- 66% (41) expressed a favorable reaction to the exemption.
- 18% (11) expressed a neutral reaction to the exemption.
- 10% (6) expressed an unfavorable reaction to the exemption.
- 8% (5) did not have an opinion on this exemption.

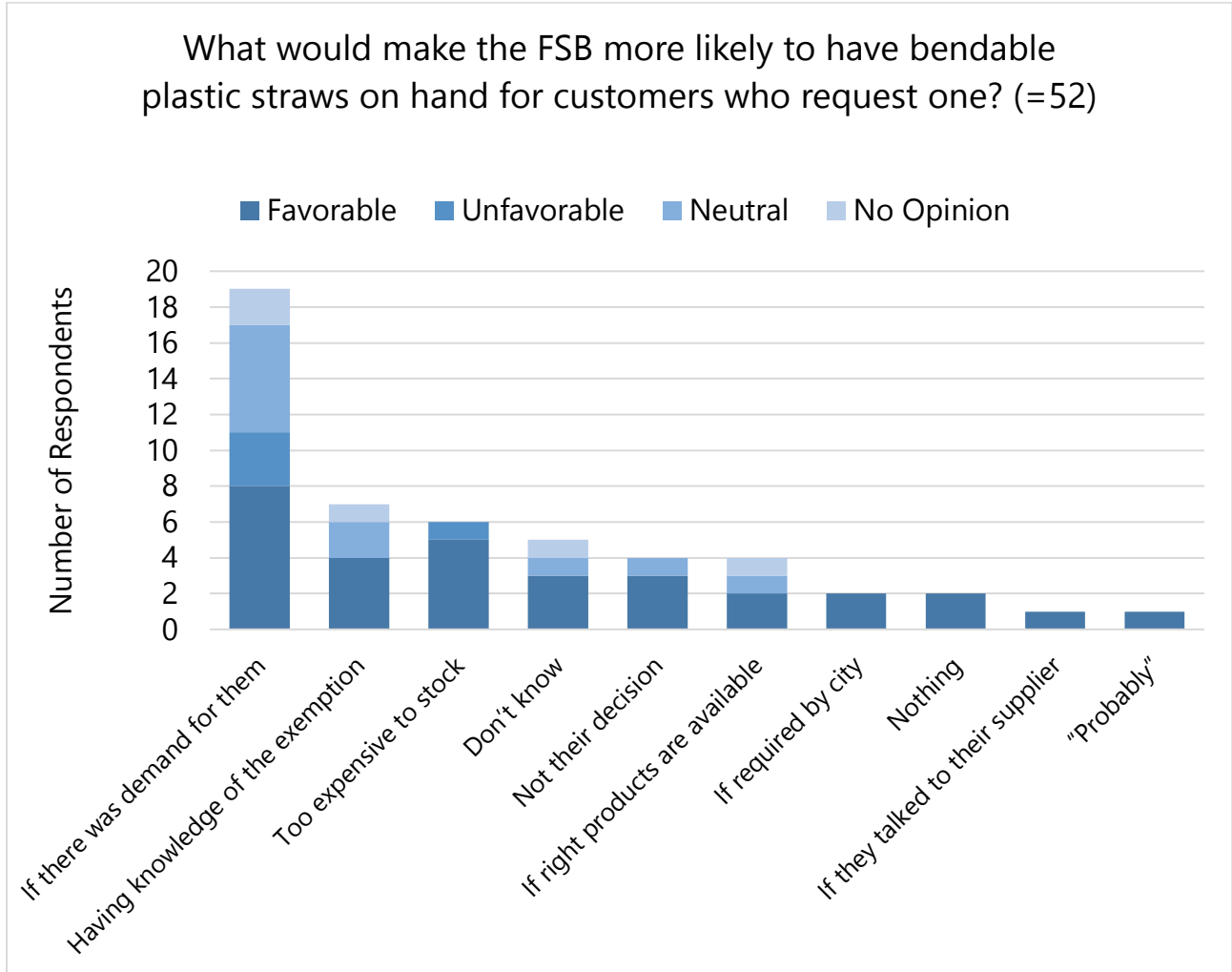
Figure 20: Perceptions of bendable plastic straw exemption.



Employees who had a favorable response to the exemption spoke about accessibility and the need to accommodate people’s needs, and their hope for the development of compostable bendable straws. Employees who had a neutral response spoke about their hope for compostable bendable straws, the lack of demand for bendable plastic straws, and how they believe people should bring their own straws. Employees with an unfavorable response to the exemption spoke about bringing your own straw, a concern that people would exploit the exemption loophole, confusion for customers, and did not believe it was the business’s responsibility.

52 of 90 FSBs surveyed provided answers to what would make the FSB more likely to have bendable straws on hand for customers who request a straw (Figure 21).

Figure 21: Reasons businesses would supply bendable plastic straws.



Answers varied considerably for this question:

- If customers asked for them (19)
- Having knowledge about the exemption (7)
- If they were cheaper to supply (6)
- Don't know (5)
- Decision is up to boss or management (4)
- If the right product was available (4)
- If the City requires them (2)
- Nothing (2)
- Would need to talk to their supplier (1)
- "Probably" (1)

## **Additional Comments from FSBs Around Plastic Straw and Utensil Ban**

After the completion of each survey, we recorded additional observations from our team as well as comments respondents expressed during the interview.

We observed:

- Employees removing boba straws from the counter halfway through an interview.
- Straws being kept behind the counter, with a sign explaining customers would need to request a straw.
- Customers received a complimentary straw with their purchase but any additional straws would cost an extra \$0.50.
- Eco-Product spoons that were not compostable.
- Plastic straws that an employee thought were compostable.

We received comments from employees about the following issues:

- Asking for vendor recommendations for bubble tea straws.
- Reiterating the expensive cost of compostable straws and utensils.
- Remarking that UberEats has an option for customers to request straws and utensils, while other food delivery apps do not offer this option.

## Chapter 5: Recommendations

In this chapter, we offer an assortment of recommendations for SPU, intended to advise future SPU communication relating to regulations restricting the use of single-use disposable plastic serviceware. Our recommendations are informed by our conversations and observations at the 90 FSBs we visited during our primary research collection fieldwork. These recommendations are supplemented by our analysis of ordinances and outreach materials of other West Coast cities implementing similar policies. Our recommendations fall into three categories:

- Outreach opportunities to FSB owners and decision-makers
- Opportunities for external partnerships
- Opportunities specific to bubble tea businesses

Since the requirement for compostable single-use straws and utensils is still fairly recent, it is possible that compliance will increase over time as the availability of these items increase and costs decrease due to manufacturers adapting to this new market demand. Nevertheless, there are some proactive steps SPU can take to accelerate the compliance rate in FSBs.

Based on our experiences, our recommendations are focused on strategies and components of SPU outreach work to both FSBs and product suppliers. Our overall intent is to increase trust, understanding, and cooperation between SPU and the business community in Seattle.

### Outreach Recommendations

#### *Overview*

The following outreach recommendations can apply to further correspondence regarding this ordinance as well as subsequent FSB-related ordinances: 1) increase language accessibility 2) increase messaging regarding exemptions and 3) address “greenwashing” confusion.

#### *Increase Language Accessibility*

In 10 of the 90 FSBs we surveyed, we experienced communication issues due to language barriers, suggesting that a significant proportion of workers at Seattle FSBs may not have fully comprehended SPU’s two August 2018 English-only fliers. One flier explained that the single-use plastic straw and utensils ban was now in full effect and was sent to all FSBs. The other, sent only to bubble tea FSBs, addressed concerns about the availability of compliant bubble tea straws and emphasized the focus on education and outreach for the first year of the ban. These English-only fliers may have contributed to lower rates of compliance at bubble tea FSBs and a lower rate of knowledge about the exemption for bendable plastic straws. We recommend all future outreach materials, include important details in at least four common languages (such as the Spanish, Chinese, Vietnamese, and Korean that was featured on the March 2018 SPU flier). Additionally, we recommend all outreach materials, including follow-up materials such as the August 2018 fliers, include a link to the SPU website, where the owner can find thorough translations of all materials in several languages.

#### *Increase Messaging around Exemption for Bendable Plastic Straws*

In August 2018, SPU mailed an English-only flier to all FSBs that stated the ordinance was in full effect and clarified the exemption for bendable plastic straws and the other exempt products.

However, our findings show that only six out of 62 employees interviewed knew about the exemption allowing for bendable plastic straws for those who require them for medical or physical reasons. This exemption was omitted in SPU’s original outreach to FSBs about the ban; this may have caused confusion for FSBs in Seattle. SPU should continue including information about the bendable plastic straws exemption in all of its future outreach material to FSBs.

### ***Address ‘Greenwashing’ Confusion***

While conducting our research, representatives from FSBs told our team they believed they were using a compliant compostable product on multiple occasions. However when they showed our team the original product box, the product turned out not to be compostable but instead had wording the purchaser associated with being environmentally-friendly; the product had therefore been interpreted as compliant. Words such as “biodegradable,” “sustainable” or “made from plant starch” were all phrases present on products consumers incorrectly believed to be compliant. This type of greenwashing is misleading and difficult to navigate if a consumer is not well versed in product labeling.

*Image 8. Example of greenwashing.*



The May 2019 signing of Washington ESHB 1569 “An act concerning marketing the degradability of products” is a critical step in addressing the problem of products labeled confusingly for consumers in Washington. This bill requires that labeling on compostable products sold in Washington be clear and easy to understand. It also gives authority to local governments and the Attorney General of Washington to pursue misleading or incorrect environmental claims and “greenwashing” for plastic products claiming to be “biodegradable” (State of Washington, 2019; Zero Waste Washington, 2019). Though this legislation will help clarify what is compostable by requiring clear labeling on packaging, public information to help consumers avoid greenwashed products remains critical.

In order to address this type of “greenwashing” and confusion about non-compliant products, we recommend SPU tailor outreach materials to include content dispelling misinformation in order increase understanding and compliance. We recommend SPU include guidelines for avoiding non-compliant products on outreach materials. Outreach materials should warn customers to be aware of incorrect labeling and provide customers with the specific distinctions of compliant products. SPU should consider including the following language to outreach materials:



- Look for the “certified compostable” or “commercially compostable” label. If the product doesn’t have this wording, don’t buy it!

## External Partnerships Recommendations

The following recommendations are suggestions for SPU to increase dialogue and partnerships with suppliers and other interested parties: 1) Partnerships with Product Suppliers and 2) Lowering Costs for FSBs.

### *Further Developing Partnerships with Product Suppliers*

During our research, survey respondents reported in-person and correspondence outreach as being a preferred method to hear about laws and ordinances such as the single-use plastic straw and utensil requirements. Respondents also expressed frustrating experiences having to search for compliant products with their supplier.

In the past, SPU has provided outreach and education to brick-and-mortar store suppliers and connected with other suppliers and manufacturers to communicate Seattle’s specific packaging regulations. We recommend SPU deepen partnerships with the most commonly cited product suppliers, Cash & Carry and Restaurant Depot, to create co-branded outreach materials. Suppliers would use these materials within their stores to clarify the Seattle-specific regulations; we see this as an additional channel for reaching FSBs. Materials would address several components:

- **Highlight compliant compostable products available by individual suppliers**  
Suppliers could choose to label products they sell that are compliant with Seattle’s ordinance. Image 9 is an example of a supplier labeling a product that is compostable. Labels could be co-branded by the store and SPU for approved compliant products.

*Image 9. Example of compostable labeling*



- **Include information clarifying the bendable plastic straw exemption**  
As very few of the sites we visited during our fieldwork knew about the exemption allowing them to provide bendable plastic straws for customers with physical or medical needs, these co-branded outreach materials could be another touch-point communicating this exemption.

Developing these partnerships would increase understanding of these requirements among suppliers, enabling them to better assist customers with buying compliant products. In turn, this will increase awareness among customers and improve compliance.

### ***Lowering Costs***

In our findings we reported that several survey respondents stated that the cost of compostable straws and utensils was a challenge to complying with the ordinance. SPU should focus on strategies to help alleviate this critical compliance challenge.

### ***Cost-Lowering Strategies***

- Provide FSBs with a cost comparison of available compliant products at Restaurant Depot and Cash and Carry, the two most often cited food service business supply stores, to assist them in choosing the most affordable option. This could be an information flier or an updated online database that provides price comparisons.
- Suggest FSBs charge customers a small fee for straws and utensils to compensate for the increased cost of purchasing compostable single-use items.
- Require FSBs to provide single-use straws and utensils by request-only in order to encourage them to use less product and save on costs. Our findings show that only 11% of FSBs interviewed provided straws by request-only and only 19% provided utensils by request-only. A requirement may make more FSBs distribute single-use straws and utensils in this way.
- Identify if other cities with single-use straw and utensil requirements have used policies that have lowered costs. A specific area to research is if Berkeley's requirement that all dine-in options be served with durable utensils has demonstrated to FSBs that they will save money in the long-run by purchasing less compostable utensils, or if this requirement has increased costs for them.

These recommendations could also be implemented through a partnership effort with industry organizations such as Seattle Restaurant Alliance or Washington Hospitality Association.

## **Recommendations for Improving Compliance at Bubble Tea Businesses**

As discussed in Chapter 4, 15% of bubble tea FSBs surveyed used a compostable bubble tea straw. The two main reasons provided for why compostable bubble straws were not used were performance and cost. The primary performance challenge, expressed by 40% of survey respondents, was the lack of a sharp end on a bubble straws to puncture the cellophane lid. A second challenge commonly cited was that bubble straws dissolved in hot liquids. This is a difficult obstacle to compliance, as some bubble tea beverages are served hot.

### ***Manufacturer Outreach***

Communicate with Karat Earth, the most often cited bubble straw brand used by Seattle bubble tea FSBs, on the two straw performance challenges:

- Encourage them to produce compostable bubble straws that are pre-cut at an angle and that can withstand hot liquids without melting.
- Incentive manufacturers to make these product improvements by offering to recommend their brands on outreach materials to FSBs and specifying the suppliers that carry these brands.

### ***Product Research and Bubble Tea FSB Outreach***

Identify any compostable bubble straws currently available that meet performance standards and circulate this information to bubble tea FSBs:

- Perform outreach in Seattle and other cities to identify bubble tea FSBs that have found a bubble tea compostable straw option that pierces cellophane lids and does not melt in hot beverages. Review what is currently available from suppliers that may meet performance standards.
- Communicate this information to bubble tea FSBs through information fliers, in-person visits, and online resources.

### ***Information-sharing Platform for Bubble Tea FSBs***

Create an online resource for bubble tea FSB employees to share information on how they comply with the ordinance:

- Encourage bubble tea businesses to provide product recommendations with other bubble tea FSBs. Periodically include these recommendations in SPU outreach materials to all bubble tea FSBs.
- Encourage bubble tea FSBs to communicate the innovative ways they have complied with the ordinance. In our surveys, some respondents reported poking a hole in the cellophane lid before serving the product to customers or manually cutting compostable bubble straws to make them sharp enough to puncture the lid. This type of information would be useful for those bubble tea FSBs that may be hesitant to transition to a compostable option because of the perceived challenges of compostable straws.

### ***Bubble Straw Cost***

Encourage bubble tea FSBs to purchase durable bubble tea straws:

- In our surveys of bubble tea FSBs, we found that 65% of respondents reported that their business was mostly dine-in or at least half dine-in orders. Costs would decrease in the long-term by purchasing fewer compostable bubble straws and instead purchasing durable straws for this customer demographic. To encourage businesses to consider this option, SPU could provide an information flier to these businesses that outlines the long-term cost savings from purchasing durable options.

## **Conclusion**

### **Compliance Rate**

The results of our straw and utensil survey show an overall (both straws and utensils) compliance rate of 64% among non-bubble tea surveyed businesses (n=70). Among surveyed bubble tea FSBs, our surveys show an overall compliance rate of 10% (n=20).

In Spring 2018, several months before the straw and utensil ordinance went into effect on July 1, the 2018 team of Evans Student Consultants reported 18% of surveyed businesses were using compostable straws and utensils. For non-bubble tea FSBs, our survey results show a significant increase in compliance since the ban went into effect. However, compliance at bubble tea FSBs surveyed remains low.

**Knowledge about the Ban**

In their report, the 2018 Evans Consulting team reported 30 out of 83 (36%) surveyed businesses had awareness of the ban going into effect on July 1, 2018. A year later, and (nine months after the ban went into effect), our survey results show 61 out of 74 (82%) surveyed businesses reporting knowledge of the ban being in effect.

After reviewing the research, analysis, and recommendations in this report, SPU should consider which options to pursue and determine next steps for moving forward to increase awareness and compliance with the ordinance.

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## Appendix 1. Seattle Public Utilities Straw & Utensil Requirements



# Straw & Utensil Requirements

**Food service businesses in Seattle are required to use compostable straws and compostable utensils effective July 1, 2018.\***  
Using disposable plastic straws and plastic utensils is prohibited.\*

**EFFECTIVE NOW!**  
7/1/2018

### EXEMPTIONS:

The requirement that all single-use food-serviceware be either compostable or recyclable currently does not apply to:

- \* Disposable flexible plastic drinking straws when needed by customers due to medical or physical conditions and for whom flexible compostable paper straws are unsuitable. Otherwise, straws must be compostable or designed to be reusable.
- Disposable long-handled thick plastic soda spoons when required and used for thick drinks and identified as non-compostable by the food service business to its customers.
- Metal foil, metal foil-faced papers and engineered composite papers used to wrap hot food such as hamburgers and burritos.
- Portion cups (two ounces and under), if used for hot foods or requiring lids and identified as non-compostable by the food service business to its customers.

### TIPS & RECOMMENDATIONS:

- \* **We encourage** food service businesses to keep a supply of flexible plastic straws available for customers with a physical or medical condition. Some people require this for drinking.
- **We encourage** food service businesses to use compostable packaging whenever possible, to provide compostable straws and utensils only upon request, and to utilize dispensers when providing them to customers.
- **We encourage** the use of durable products. One time use packaging is a wasteful practice. Using reusable materials can help save money and cut down on waste!
- **Contact us for assistance.** This year SPU's emphasis is on continuing outreach and providing education to businesses. Have questions or are working towards compliance? Contact the Green Business Program to request a Compliance Reporting Document to detail steps towards compliance.

**Our team is here to help! Please contact SPU Green Business Program for assistance:**

GreenBusiness@Seattle.Gov | 206-343-8505 | [seattle.gov/util/GreenYourBusiness](http://seattle.gov/util/GreenYourBusiness)

## Appendix 2. Seattle Public Utilities Boba Tea Straw Requirements



**As of July 1, 2018, food service businesses in Seattle are required to use compostable straws and compostable utensils. Businesses are prohibited from using disposable plastic straws and utensils.**

Seattle Public Utilities understands Boba and Bubble Tea businesses face unique challenges with this requirement.

**We want to help you find alternative compostable options to be compliant with the law.**

Our efforts are on **education** and **outreach** to businesses affected by these packaging requirements.

### Approved Compostable Straw Brands

Aardvark Precision Products Group  
BioShell Tableware  
Cedar Grove Cascadia™  
Cell-O-Core  
Eco-Products  
Hoffmaster  
Karat Earth™

Nat-UR (Cereplast)  
Spirit Foodservice Inc.  
Vegware  
WNA  
World Centric  
Zegen Paper Straws

\*This lists straws currently approved by local compost facilities, but other manufacturers may exist. All City of Seattle approved packaging items, including utensils, can be found at the websites below:

Lenz Composting: [greenblenz.com/materials](http://greenblenz.com/materials)

Cedar Grove Composting: [cedar-grove.com/compostable/accepted-items](http://cedar-grove.com/compostable/accepted-items)

### We encourage you to:

- Contact your supplier for compostable alternatives.
- CONTACT US! This year we are focused on education and outreach to businesses. If you are concerned about complying with this law or have any questions, we are here to help!

<p><b>ALLOWED</b></p>  <p>Compostable Paper Straws and Compostable Plastic Straws</p>	<p><b>BANNED</b></p>  <p>Disposable Plastic Straws</p>
--	---

### Effective July 1, 2018:

Plastic utensils, straws and cocktail picks are banned in Seattle.

No se permiten desechos de comida en la basura.

垃圾中不允许有食物残渣。

Không được phép cho rác thực phẩm vào thùng rác.

음식 쓰레기는 쓰레기로 배출해서는 안 됩니다.

For interpretation services please call 206-343-8505.  
 台語口譯服務電話 206-343-8505.  
 韓文 서비스를 원하시면 206-343-8505 번으로 전화해 주십시오.  
 Wŕiŕi a dieegyaada turjubaanka fadiin wac 206-343-8505.  
 Para servicios de traducción, por favor llame al 206-343-8505.  
 Para sa serbisyong ng tagapagajalananag, tumawag sa 206-343-8505.  
 Muốn yêu cầu dịch vụ thông dịch xin gọi số 206-343-8505.

**Our team is here to help! Please contact SPU Green Business Program for assistance:  
[GreenBusiness@Seattle.Gov](mailto:GreenBusiness@Seattle.Gov) | 206-343-8505 | [seattle.gov/util/GreenYourBusiness](http://seattle.gov/util/GreenYourBusiness)**

## Appendix 3. City of San Diego Polystyrene Foam and Single Use Plastics Ordinance

### San Diego Polystyrene Foam and Single Use Plastics Ordinance

**Effective February 23, 2019:**

- A food vendor may only distribute plastic (or bio-plastic) straws upon the request of the customer (sit-down or takeout).
- A food vendor may only distribute plastic (or bio-plastic) utensils upon the request of the customer (takeout only).
- Plastic utensils and straws can be offered to customers or provided at self-service stations.

**Effective May 24, 2019:**

- No person may distribute egg cartons, food trays, or food service ware made in whole or in part from polystyrene foam. Food service ware includes: bowls, plates, trays, cups, lids, and other similar items designed for one-time use for prepared foods, including containers for eating in, takeout food, or leftovers.



The City of **SAN DIEGO**

[www.sandiego.gov/pf-ban](http://www.sandiego.gov/pf-ban)  
[sdrecyclingworks@sandiego.gov](mailto:sdrecyclingworks@sandiego.gov) | 858-694-7000

### Reglamento para productos de espuma de poliestireno y plásticos de un solo uso

**Entra en vigor el 23 de febrero de 2019:**

- Un establecimiento de comida solamente puede distribuir popotes de plástico (o bio-plástico) al ser solicitados por el cliente (para comer sentado o para llevar).
- Un establecimiento de comida únicamente puede distribuir utensilios de plástico (o bio-plástico) al ser solicitados por el cliente (solamente para llevar).
- Utensilios y popotes de plástico podrían ser ofrecidos a clientes o proporcionados en estaciones de autoservicio.

**Entra en vigor el 24 de mayo de 2019:**

- Ninguna persona podrá distribuir productos elaborados parcial o completamente de espuma de poliestireno como: cartones de huevos, bandejas de comida, utensilios de comida. Se consideran utensilios de comida: tazones, platos, bandejas, vasos, tazas, tapas u otros artículos similares diseñados para utilizarse solo una vez, esto incluye contenedores para comer en el negocio, para llevar o para sobras.

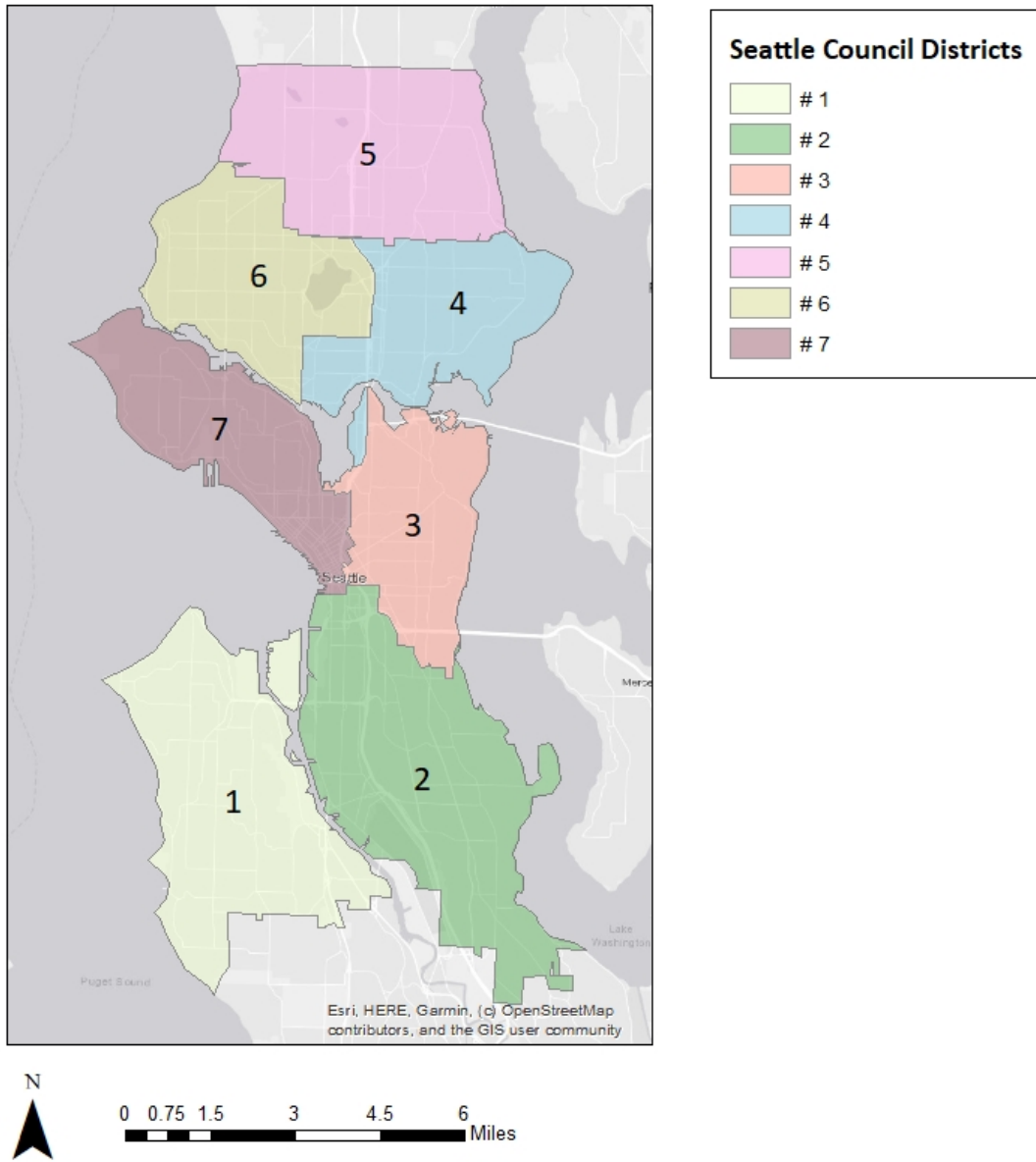


The City of **SAN DIEGO**

[www.sandiego.gov/pf-ban](http://www.sandiego.gov/pf-ban)  
[sdrecyclingworks@sandiego.gov](mailto:sdrecyclingworks@sandiego.gov) | 858-694-7000

**Appendix 4. Map of Seattle Council Districts**

### Seattle Council Districts






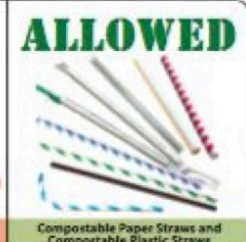

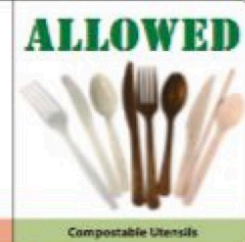

## Appendix 6. Survey Instruments

### CONFIDENTIAL SURVEY

#### 2019 Compostable Straw and Utensil Survey

<b>Unique Store Identifier:</b>	
<b>Interviewer Names:</b>	
<b>Interview Date:</b>	
<p><b>Intro:</b> Hi, my name is ____ and this is ____; we are graduate students at the University of Washington conducting a confidential survey for Seattle Public Utilities about the plastic straw and utensil ban. Do you have a few minutes to talk with us?</p> <p><b>Anything you share will be confidential; the business will not be fined and any information you give us cannot be linked back to this store.</b></p>	

\* Disposable flexible plastic drinking straws allowed when needed by customers due to medical or physical condition.

<b>BANNED</b>	<b>ALLOWED</b>	<b>BANNED</b>	<b>ALLOWED</b>	*
				
Disposable Plastic Straws	Compostable Paper Straws and Compostable Plastic Straws	Disposable Plastic Utensils	Compostable Utensils	
<input type="checkbox"/> Wrapper/Type:	<input type="checkbox"/> Compostable paper <input type="checkbox"/> Compostable plastic <input type="checkbox"/> Durable Option <input type="checkbox"/> Wrapper/Type:	<input type="checkbox"/> Wrapper/Type:	<input type="checkbox"/> Compostable plastic <input type="checkbox"/> Compostable wood/ bamboo <input type="checkbox"/> Durable Option <input type="checkbox"/> Wrapper/Type:	
(Automatic, Request, Self, Dispenser)	(Automatic, Request, Self, Dispenser)	(Automatic, Request, Self, Dispenser)	(Automatic, Request, Self, Dispenser)	
(Brand, Color, Label)	(Brand, Color, Label)	(Brand, Color, Label)	(Brand, Color, Label)	

#### Questions:

1. Which of these describes your position?	A. Business Owner	B. Manager	C. Supervisor	D. Employee	E. Other
2. Does this restaurant do most of its business as: <input type="checkbox"/> Dine-in or <input type="checkbox"/> To-go / Take-out					
3. (If straw and utensil type unobservable) What type of straw does your business use? What type of utensils? *can be used as probe to fill in table above*					
4. Do you know about Seattle's ban on disposable plastic straws and utensils (7/1/2018)?			A. Yes B. No		
5. Why do you think the City has banned disposable plastic straws/utensils?					

**CONFIDENTIAL SURVEY**

6. How do you hear about local laws/rules such as the ban on disposable plastic straws and utensils? What is your preferred way to get this type of information?	
7. What do you think about this requirement?	
<b>8a. If still using plastic products: What do you think would make this business more likely to use compostable straws and utensils?</b>	
<b>8b. If using a compostable product: Did you find a compostable option at your usual product supplier?</b>	A. <b>Yes</b> what is the name of your supplier? B. <b>No</b> If no, where did you find one? _____
9. <i>If applicable:</i> What do you think would make this business more likely to use durable utensils and straws?	
10. Some people with disabilities require a bendable plastic straw in order to drink. There is an exemption that allows for food service businesses to provide these when requested. Did you know about this?	A. <b>Yes</b> B. <b>No</b>
11. What do you think about this exemption?	
12. Does this business have a supply of bendable plastic straws?	A. <b>Yes</b> (for how long? _____) B. <b>No</b> (skip to 13A)
<b>13A. If NO: What would make this business more likely to have a supply of bendable plastic straws on hand?</b>	

<b>Bubble Tea Restaurants</b>	
14. Does this business use a compostable straw to serve Boba/Bubble Tea?	A. <b>Yes</b> (continue to 11A) B. <b>No</b> (skip to 11B)
15A. If <b>YES: Has it been easy or hard to comply and why?</b>	
15B. If <b>NO: What has prevented this business from using a compostable straw?</b> <i>(i.e. specific challenges business faced?)</i>	

Did interviewers experience communication issues with interviewees? Yes / No

Comments:

**Closing:** Thanks for your time. SPU has additional resources about these requirements. Can we leave these with you? It's a free assistance line to provide support to any food service business.

## Appendix 7. Survey Methods

### Draft Survey Question Rationale: Plastic Straw and Utensil Usage and Ban Structured Interviews

**Intro:** "Hi, my name is \_\_\_\_\_ and this is \_\_\_\_\_; we are graduate students at the University of Washington conducting a research project for the City of Seattle gathering information on the plastic straw and utensil ban. Do you have ten minutes to talk with us? Any information you provide will be confidential and cannot be linked back to this store."

Question	Method	Objective
Straw type	Observation	Determine baseline compliance rate
Utensil type	Observation	Determine baseline compliance rate
Provision method for straws and utensils A. Given automatically B. On request C. Self service D. Durable option (e.g. metal)	Observation	Determine baseline compliance rate
Interviewee title/role Q: Which of these describes your position? A. Owner B. Manager C. Supervisor D. Employee	Inquiry	Determine staff level of employee to add context to responsibility/authority level within business
Do you know about Seattle's ban on non-compostable straws and utensils (effective 7/1/2018)? A. Yes B. No	Inquiry	To determine knowledge of ban
What do you think about this requirement?	Inquiry	To determine potential barriers to compliance
How do you hear about local laws/rules such as the ban on non-compostable straws and utensils? What is your preferred way to get this type of information?	Inquiry	To determine potential outreach /education
Why do you think the City has banned non-compostable straws/utensils?	Inquiry	To determine level of knowledge re: environmental impact
If not using compostable products: <i>What do you think would make this business more likely to use compostable straws and utensils?</i>	Inquiry	To determine potential barriers to compliance and potential outreach/education
If using a compostable product: <i>Do you find a compostable option at your usual product supplier?</i> A. Yes B. No	Inquiry	Determine product availability (is it as easy to obtain compostable as plastic product?)
Some people with disabilities require a bendable plastic straw in order to drink. Did you know there is an exemption for food service businesses to provide them when needed? A. Yes B. No	Inquiry	To determine knowledge of exemption for bendable plastic straws
If YES: What do you think about this exemption?	Inquiry	To determine potential barriers to compliance



Does this business have a supply of bendable plastic straws? A. Yes B. No	Inquiry	To determine whether the FSB has a bendable plastic straw supply on hand.
If YES: Has this business always had a supply of bendable plastic straws on hand?	Inquiry	To determine if FSBs had bendable plastic straws before July 1, 2018
If NO: What would make this business more likely to have a supply of bendable plastic straws on hand?	Inquiry	To determine potential barriers to compliance
<b>If Bubble Tea restaurant...</b>		
Does this business use a compostable straw to serve Boba Tea?	Inquiry	To determine perception of ordinance from bubble tea restaurants
If using a compostable Boba Straw: <i>How has this business addressed this requirement?</i>	Inquiry	Determine product availability (is it as easy to obtain compostable as plastic product?)
If not using compostable Boba Straw: <i>What barriers prevent this business from using a compostable straw?</i>	Inquiry	To determine potential barriers to compliance and potential outreach/education

Did interviewers experience communication issues with interviewees? Yes/No