CITIZENS CAMPAIGN FOR THE ENVIRONMENT

2020 Carryout Bag Survey Report

How Effective are Bring Your Own Bag Laws?

An evaluation of consumer carryout bag use in six Connecticut municipalities

The Problem with

The Plastic Pollution Crisis

Disposable plastic checkout bags significantly contribute to the plastic pollution problem choking our environment. Plastic bags are used for only a few minutes on average, but when disposed of improperly, they leave a legacy of destruction that lasts a lifetime.

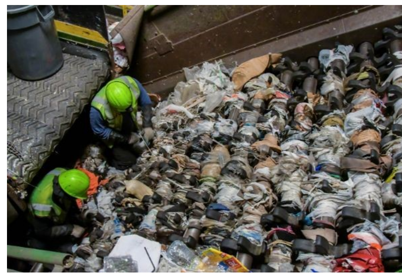
Plastic bags released into our environment quickly become unsightly litter blowing around communities but the problem does not end there. Plastic bags that escape into the environment inevitably pollute open spaces or are washed out to sea, where they are often mistaken for food by sea turtles, dolphins and other marine species.

Once ingested, plastic bags create blockages in the digestive tract, leading to a slow, painful death. According to marine science researchers, roughly 34% of dead leatherback sea turtles[1] and 80% of dead sea birds studied are found with plastic in their bellies[2].

Plastics are ubiquitous in our waterways and do not biodegrade–instead, they break apart into tiny particles called *microplastics*. These microplastics persist in our waters, where they can absorb toxins and enter the food chain through fish, seabirds, and other aquatic wildlife. University of California, Davis researchers detected microplastics in ¼ of all the fish they tested, with plastics present in about 67% of all fish species sold at market in the U.S.[3]

Economic Impacts of Plastic Bag Use

The problems related to plastic bags are not confined to marine ecosystem impacts. Plastics littering our communities cost taxpayers millions to collect and dispose of every year. They also contaminate the municipal recycling stream, causing damage to sorting infrastructure. These impairments cost cities and towns money at a time when municipalities across Connecticut find themselves struggling to manage the growing cost of municipal solid waste management and recycling[4].



Plastic films that end up in the single-stream recycling system easily become entangled in recycling equipment, forcing municipal recovery facilities (MRFs) to shut down operations for several hours a day to remove plastic blockages by hand. According to the Materials Innovation and Recovery Authority (MIRA), blockages in the system caused by improperly discarded plastic bags can force a single facility to shut down for upwards of 10 hours/week (more than 2,080 staff hours annually, for a crew of 4 technicians)[5].

Paper or Plastic? Just Say “I Brought My Own!”

Single-use plastic bags are a leading contributor to plastic ocean pollution, but it is not enough to simply prohibit plastic bags or replace them with wasteful paper bags. Paper bags are highly resource intensive to produce, and they carry environmental impacts of their own. An estimated 10 billion paper bags are produced in the U.S. each year, consuming approximately 14 million trees annually[6].

Paper bags are also heavier and take up more space than plastic, and they may be more costly and fuel intensive to transport than their plastic counterparts[7]. To conserve resources and reduce the community’s overall environmental impact, across-the-board source reduction of paper *and* plastic bags is needed.

"BYOBag"

Municipalities Fight Back Against Plastic Pollution

In response to the growing plastic pollution crisis, municipalities across the globe are implementing strategies aimed at reducing single-use plastic bags. The approach varies from place to place but the end goal is the same –to encourage a shift in consumer behavior *away* from single-use plastics. As communities become better educated about the impacts of plastic pollution on our environment, the movement to "skip the plastic bag" has grown by leaps and bounds. As of the publication date of this report, 360 municipalities in 25 states passed local ordinances prohibiting or establishing a fee on plastic checkout bags.

> *Bans and fees on single use plastic bags are successful when they encourage consumers to switch to reusable bags. Educating consumers to bring your own bag helps shoppers eliminate the need for plastic and paper bags and adopt more sustainable shopping habits.*

Reusable Bag Education

The key to a successful BYOBag policy is public education. CCE works with organizations serving families in need across Connecticut to distribute reusable bags, focusing on food pantries and free meal programs at schools. We formed partnerships with organizations like BYO CT, the CT Food Bank, and local community services organizations to distribute reusable bags to Connecticut families in need.

Connecticut

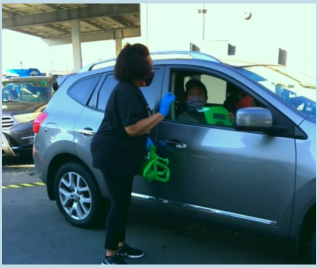
Communities Taking Action Across Connecticut

Connecticut has long been a national leader on reducing pollution from single-use checkout bags. Westport, CT was the first town on the East Coast to prohibit the distribution of single-use plastic bags in 2007. Since then, the movement to ban plastic bags in Connecticut has substantially grown. Since 2018, at least 15 additional CT municipalities adopted ordinances addressing the use of single-use checkout bags[8].

In August 2019, Connecticut passed a budget measure establishing a mandatory 10 cent fee on plastic bags. The law did not establish a fee on paper bags –instead, it included language enabling municipalities to establish new fees or keep their existing fees on paper bags.

The measure further allows municipalities to pass and/or keep local ordinances in place that prohibit plastic bags outright, assuming those policies are at least as restrictive as the state law. Under the State law, local bag ordinances can remain in effect until the statewide bag fee sunsets in August ’21.

As of August 2021, all Connecticut municipalities will be subject to a complete, statewide ban on plastic checkout bags.



Bring Your Own Bag

The recent wave of cities and towns adopting ordinances to reduce disposable bag use has led to some debate among sustainability and recycling advocates over which strategies are most effective at reducing plastic bag pollution. Solid waste and recycling data from municipalities that implemented bag policies indicate that bag bans and fees are effective at reducing disposable bag use, but no comprehensive studies exist to determine the impact these policies have on consumer behavior.

CCE's survey was designed to evaluate various bag ordinances across a variety of Connecticut towns and assess the effectiveness of these policies in reducing single-use bag use and promoting reusable bag use, as well as to identify areas or gaps where continued public education is needed.

We conducted a survey of cities and towns in Connecticut with local bag ordinances in place across a range of socioeconomic and population demographics. In total, we surveyed bag use in 6 Connecticut municipalities: Bridgeport, Greenwich, Hamden, New Haven, Norwalk, and Stamford.

- **Fee on Plastic/No Fee on Paper—Bridgeport and New Haven**
  Subject to the statewide bag fee, with no local ordinances. Retailers are required to collect a fee on plastic, with no policy on paper bags.
- **Ban on Plastic/ No Fee on Paper— Greenwich and Hamden**
  Municipalities that have a local ban on plastic with no fee on paper.
- **Ban on Plastic/Fee on Paper—Norwalk and Stamford**
  Municipalities that have a ban on plastic with a fee on paper.

COVID-19 and Reusable Bag Use

In March of 2020, CT Governor Ned Lamont signed an Executive Order declaring a state of emergency as part of Connecticut's COVID-19 response plan. This order included a provision suspending the 10-cent fee on plastic checkout bags. According to the CT Dept. of Energy and Environmental Protection (DEEP), this was done to ease the financial burden on low income shoppers who may be without employment or are otherwise effected by the health crisis.

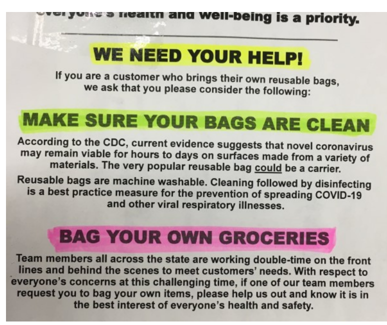
Survey Methodology

Within a few days, most CT municipalities with local bag laws in place suspended their bag ordinances.

During the shutdown, many retailers posted misleading signage indicating that reusable bags may contribute to the spread of COVID-19.

Almost overnight, Connecticut consumers' use of single-use plastic bags skyrocketed, virtually undoing any progress made through recent state and local efforts to reduce disposable bag use. The fee on plastic bags went back into effect in early July 2020.

CCE conducted its consumer bag use surveys after state and local bag laws were reinstated. *Despite this, it is reasonable to expect that the results of the survey may be significantly different than they would have been without COVID-19 restrictions.* During the first wave of the pandemic, there was a deluge of press citing plastics industry representatives discouraging the public from bringing their own bags and propagating the myth that plastic bags were the safest, most sanitary option for shoppers[9,10].



Many retailers, including major grocery store chains, were also discouraging consumers from bringing their own bags, with some stores barring customers from even bringing reusable bags into the store citing concerns of spreading COVID-19.

There is no science-based evidence that reusable bags increase the risk of COVID-19 transmission. Conversely, here is scientific evidence that plastic bags can transmit viruses and bacteria to users[11]. The anti-reusable bag press and store policies likely impacted consumer behavior during the period we were conducting these surveys.

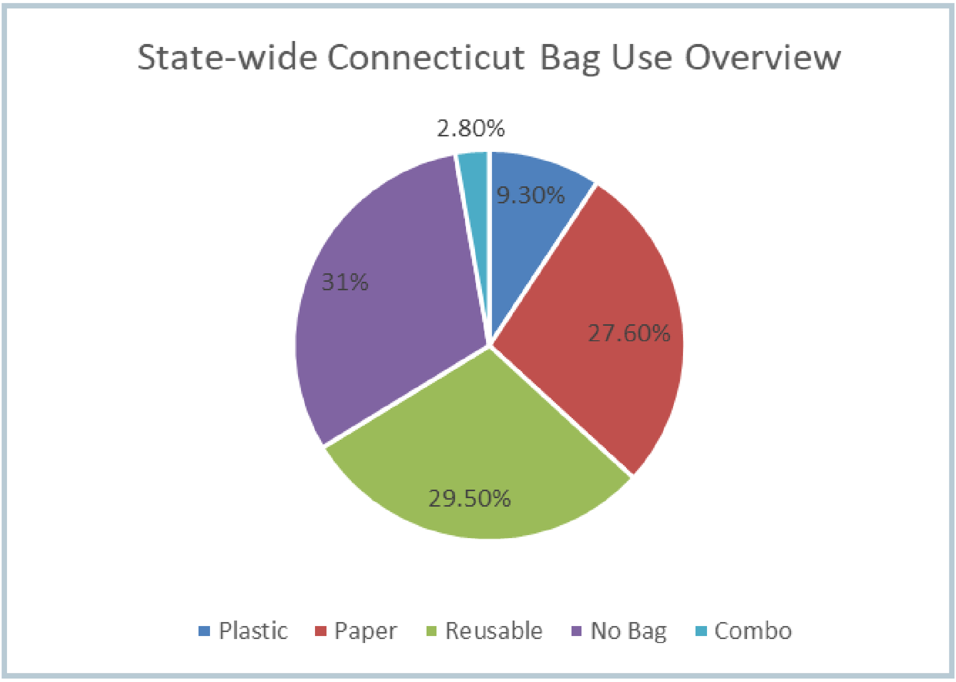
Tallying the Results

Staff and volunteers observed shoppers at a total of 14 retail establishments throughout 6 different CT municipalities (at least 2 retail establishments in each municipalities).

- **Fee on Plastic/No Fee on Paper—Bridgeport and New Haven**
- **Ban on Plastic/ No Fee on Paper— Greenwich and Hamden**
- **Ban on Plastic/Fee on Faper—Norwalk and Stamford**

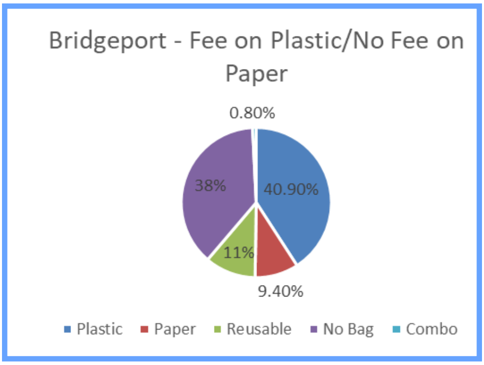
For each shopper we observed, we recorded what type of bag(s) were used to transport their groceries as they left the store.

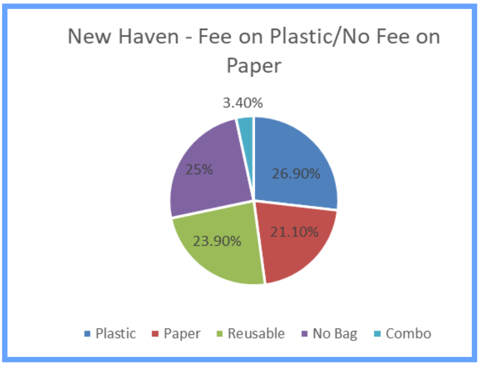
We used 5 categories: plastic, paper, reusable, combination, and no bag.

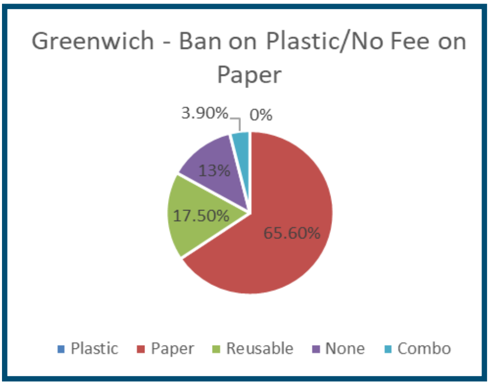


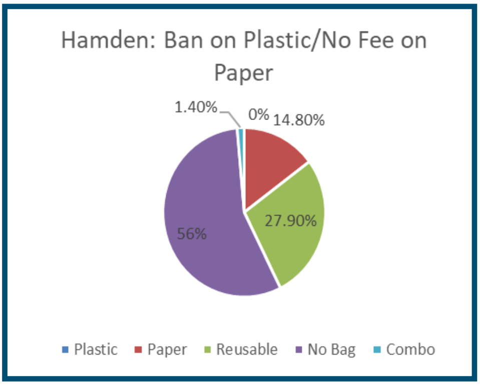
Survey Conducted Summer and Fall 2020.

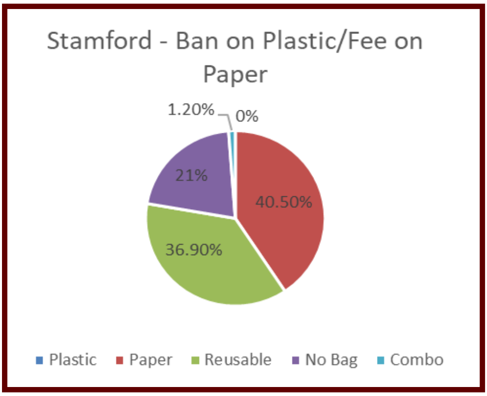
Survey Results

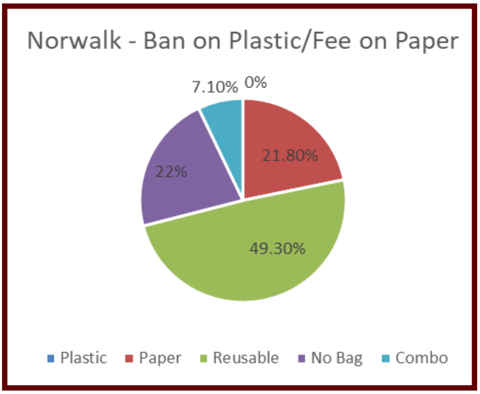












Report Published February 2021.

Top Survey Insights

Results from each of the 6 target municipalities varied slightly from town to town, but some important trends emerged:

- Approximately half of all shoppers in municipalities with a fee on plastic bags switched to reusable bags or chose not to use a bag at all.
- Shoppers in municipalities with a ban on plastic bags bring their own bags at higher rates.
- A ban on plastic bags is the most effective approach to reduce their use. Shoppers in communities with a ban on plastic bags adjust to not using plastic bags.

Policy and Education Recommendations

Several observations made during our survey analysis could aid in future BYOBag policy making and public education efforts.

- In municipalities with a ban on plastic bags, most shoppers switched to reusable bags.

- In municipalities with a ban on plastic bags and a fee on paper, most shoppers chose to forgo bags altogether. We observed several shoppers carrying armloads of groceries out of stores with no bags, indicating these shoppers likely forgot a reusable bag and did not want to pay for paper.

  The good news is that the fee is deterring shoppers from using single-use bags. However, these results indicate that more education is needed to ensure that shoppers remember their reusable bags.

Survey Results Analysis

- Low paper bag use was documented at some stores (C-Town, Shoprite, Grade A Market) however, customers at the Stop & Shops in both Stamford and Norwalk took paper bags at rates of nearly 50%. A higher percentage of customers chose to pay for paper bags at Stop & Shops than took free paper bags in other municipalities!

  Although higher paper bag use may be a result of COVID-19 restriction policies at Stop & Shop, it also indicates that more education and signage is needed at stores.

- There has been an ongoing debate about whether bans or fees on carryout bags disproportionately impact customers on a budget. *However, we did not find a correlation between levels of reusable bag use at high end stores vs budget stores.*

  Shoppers at stores with plastic bags bans, such as Whole Foods in Greenwich, chose paper bags 69% of the time while 21% brought reusable bags.

  In Hamden, shoppers at the Walmart and Dollar Tree brought their own bags at higher rates (29% and 24%) and fewer customers chose to take free paper bags (14% and 27%).

- *Most people at budget retail stores (Walmart, The Dollar Tree, C Town) chose no bag, indicating that additional reusable bag giveaways and education efforts would be beneficial at these and other stores with more affordable options.*

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