



PLASTIC POLLUTION FAQs

Plastic Pollution is a problem that many communities face. There are different approaches to solving the problem – some vastly more effective than others. This is a list of Frequently Asked Questions to help inform decision makers so that they can make the best choice for their communities.

Q: Do voluntary efforts effectively reduce plastic pollution?

A: NO

Educational campaigns designed to encourage businesses to reduce their reliance on plastic bags are known as **voluntary reduction efforts**. These efforts are generally unsuccessful and expensive as a result of advertisements, outreach, education, signs, workshops and merchandise.

Local governments must weigh the costs against the minimal effects that voluntary measures produce. Oftentimes, jurisdictions abandon voluntary programs in favor of plastic bag ban or fee ordinances.

The Surfrider Foundation, an organization dedicated to protecting the world's oceans and beaches, compiled [a list of several cities](#) that used educational methods to curb plastic bag pollution. Each city's educational campaign differs slightly. Some campaigns were government-led and focused on consumer education. In other locations, businesses took the lead. Still other jurisdictions focused on plastic bag recycling initiatives. But each jurisdiction fell short of its goal to significantly reduce plastic pollution. Below is a summary of the results:

Los Angeles County, California (2008-2010): County-led program adopted by the Los Angeles Board of Supervisors¹

- The program launched in 2008 and focused on consumer education and training.
- Goal: 30% reduction in plastic bag disposal within two years.
- Outcome: After two years, the County determined the program “was not successful in achieving its goals.”²
 - A Public Works Department report found the campaign “raised awareness of the impacts of single-use bags and the benefits of reusable bags [but] it could

¹ See Program Resource Packet, *County of Los Angeles Single Use Bag Reduction and Recycling Program* (2008) available at http://dpw.lacounty.gov/epd/aboutthebag/PDF/ResourcePacket_100108.pdf

² County of Los Angeles. Department of Public Works, *Single Use Plastic and Paper Carryout Bags, Certify the Final Environmental Impact Report, Adopt Ordinance*. Prepared by Gail Farber (Nov. 16, 2010). Available at http://ladpw.org/epd/aboutthebag/PDF/BoardLetters/BoardLetter_nov2010.pdf

not be determined if this awareness translated into a shift in consumer behavior[.]”³

- Next Step: In 2011, Los Angeles County passed a ban on single use plastic bags and a 10-cent charge on paper bags.⁴ In 2016, the entire state of California voted to ban the use of single use plastic bags.⁵ The statewide ban applies to large retail establishments but exempts the restaurants. Local jurisdictions are free to pass more restrictive ordinances.

San Francisco, California (2005-2006): Coordinated effort between the city and grocer’s association to reduce plastic bag usage

- Goal: Working with grocers, the City set the goal to reduce plastic bag use by 10 million annually. The City and participating grocery stores signed a letter of agreement.⁶
- Outcome: Reporting was an ongoing challenge. Stores failed to report data in a timely fashion (even with the reporting deadline extended three times). With no data, available to assess the program, the voluntary reduction was deemed a failure.⁷
- Next step: In 2007, San Francisco passed a ban on plastic bags in large supermarkets and pharmacies. The ordinance was amended in 2012 to include all retail and food establishments. The ordinance also requires all businesses to charge at least 10-cents for compostable, paper or reusable bags.⁸ In 2016, the entire state of California voted to ban the use of plastic bags, but San Francisco’s more restrictive ban includes a greater number of businesses.⁹

Santa Clara County, California (2009): County-led consumer education campaign to increase customer use of reusable bags

- Goal: Santa Clara County’s educational program aimed to increase reusable bag use. The county placed informational articles in garbage hauler newsletters, conducted an eight-week television and radio campaign encouraging the use of reusable bags, advertised locations where citizens could receive free reusable bags, and distributed 19,500 reusable bags throughout the county (the purchase of these bags was funded by the cities of Milpitas, Santa Clara and San Jose, as well as Santa Clara County and various media partners).

³ *Id.*

⁴ Los Angeles Department of Public Works, *L.A. County Carryout Bag Ordinance*. Retrieved from <http://dpw.lacounty.gov/epd/aboutthebag/>

⁵ See, Smith, Joshua Emerson. *Nation’s first statewide plastic-bag ban now in effect across California* (Nov. 16, 2013) San Diego Union-Tribune, available at <http://www.sandiegouniontribune.com/news/environment/sd-me-plastic-bags-20161111-story.html>

⁶ For an excellent history of the fight against plastic bags in San Francisco, see, Jennie Reilly Romer, *The Evolution of San Francisco’s Plastic-Bag Ban*, 1 Golden Gate U. Env’tl. L.J. (2010)

⁷ *Id.*

⁸ SF Environment, *Checkout Bag Ordinance* (2016) available at <https://sfenvironment.org/plastic-checkout-bag>

⁹ See, Smith. *Nation’s first statewide plastic-bag ban now in effect across California*

- Outcome: Unfortunately, the campaign resulted in a mere 2% increase in reusable bag use.
- Next step: In April of 2011, Santa Clara County passed a single use plastic bag ban ordinance. The ban took effect on January 1, 2012. In 2016, the entire state of California voted to ban the use of plastic bags.¹⁰

Q: Do incentive based-programs reduce plastic pollution?

A: NO

Some businesses offer small credits to customers who bring reusable bags. These credits are often called “incentives.” They are typically small (10 cents, for example) and the reduced grocery bill oftentimes goes unnoticed by the customer. By contrast, plastic bag fees are more apparent to consumers.¹¹

In Beaufort County, Whole Foods and BI-LO currently offer incentive-based programs. However, they have not reduced plastic pollution by any measureable metric.

Case Study: Cornell University

- Cornell University professor Tatiana Homonoff¹² conducted a study in Montgomery County, Maryland. The County was in the process of implementing a fee on plastic bag usage. Baseline data showed 82% of customers used disposable bags, 12% brought reusable bags. Homonoff studied businesses that provided a 5-cent incentive for customers using reusable bags; she also studied consumer habits after the County implemented the 5-cent fee for customers’ single use bags. There was only a 2% increase in reusable bag use when provided an incentive; however, when businesses charged a fee, 49% of customers brought reusable bags.¹³
- Montgomery County enacted its bag fee ordinance. Retailers, of course, are free to offer incentives for reusable bag use as well.

Behavioral economics anticipates this outcome. Most people perceive losses more strongly than gains, making a fee for using a plastic bag more impactful than a bonus for using a reusable bag.

Q: Why do municipalities fail to institute a bag ban or fee?

A: FEAR AND UNCERTAINTY

Municipalities reject bag bans or fees for several reasons, including:

¹⁰ See, Smith. *Nation’s first statewide plastic-bag ban now in effect across California*

¹¹ Homonoff, Tatiana (2013), *Can Small Incentives Have Large Impacts? The Impact of Taxes versus Bonuses on Disposable Bag Use*, Working Paper 575, March 2013, Princeton University Industrial Relations Section available online at <http://arks.princeton.edu/ark:/88435/dsp014q77fr47j> showing that while 98% of customers were aware of a 5-cent fee for plastic bag use, only 52% were aware of a 5-cent bonus for using reusable bags.

¹² Ms. Homonoff is now an assistant professor of economics and public policy at New York University.

¹³ Homonoff, Tatiana (2013)

1. **Direct lobbying** from plastic companies like Novolex, Formosa Plastics, Superbag Operating Ltd., The Intoplast Group and Advance Polybag influences decisions. These companies contest bag bans throughout the United States. In South Carolina, representatives from Novolex attended council meetings on Isle of Palms and Folly Beach to contest their proposed ordinances. They argue their facility in Hartsville, SC would cut jobs if municipalities pass local bag ban. However, a FOIA request revealed South Carolina Novolex jobs are exclusively administrative. Because Novolex produces many types of bags (including reusable and paper bags) and does not manufacture plastic bags at its South Carolina facility, no South Carolina jobs would be lost due to a plastic bag ban or fee.
2. **Lawsuits** are a looming threat to some decision makers. Hilex Poly, Superbag Operating Ltd., The Intoplast Group, and Advance Polybag filed a lawsuit contesting the legality of plastic bag fees in Dallas, Texas. In Brownsville, Texas the Attorney General filed suit against the city, contesting the validity of the town's fee ordinance.¹⁴ In both cases, the plaintiffs contended that plastic bag fees are an illegal environmental tax under Texas state law. Because the Texas Health and Safety Code includes a provision that prevents local municipalities from "prohibit[ing] or restrict[ing] the sale or use of a container or package" and "assess[ing] a fee or deposit on the sale or use of a container or package" the local ordinance likely ran afoul of state law. These two lawsuits successfully pressured both Dallas and Brownsville into revoking existing plastic bag fees. However, South Carolina law does not conflict with plastic bag bans or fees. Isle of Palms and Folly Beach both enacted plastic bag bans without facing legal challenges.
3. Perceived **expense** can act as a deterrent. Some grocery stores argue a ban would be expensive for business operations. Typically, a plastic bag costs approximately two cents, whereas a paper bag costs five cents. However, a direct cost comparison does not account for the fact that a single paper bag can typically hold between one and a half and four times more products than a plastic bag. Furthermore, customers bringing reusable bags saves businesses money by eliminating the need to purchase single-use bags. Jurisdictions interested in a plastic bag ban or fee can work with local business associations to mitigate the burden associated with transitioning from plastic to paper and reusable bags.
4. Advocates for continued plastic bag use occasionally encourage **opting for alternatives**. Citizens and grocers sometimes suggest that communities should simply enforce local litter laws. Even in a perfect world, litter laws cannot be enforced 100% of the time. Even properly disposed of bags can end up on our roads and in our waterways when plastic bags "balloon out" or fly out of trash cans or waste trucks.

¹⁴ Hilex Poly Co. et al v. Dallas and Texas v. City of Brownsville et al.

5. Municipalities sometimes resist a ban or fee in favor of educational efforts. These efforts do not reduce plastic bag pollution and are expensive to implement. (*See above*)

Q: How costly are plastic bag bans for local businesses?

A: NOT VERY

Those who oppose plastic bag bans frequently argue that bans hurt local businesses, but research indicates otherwise. While there may be an initial cost to local businesses, research shows that bag bans have little to no impact on local businesses long term.

In 2014, the Equinox Center studied the economic impacts of plastic bag bans on San Jose and San Francisco. While there is an initial increase in cost due to retailers due to increased demand for paper bags and their cost differential, that impact decreases over time. The study found "no sustained negative (economic) impact to retailers" in the jurisdictions studied.

San Francisco's Office of Economic Analysis also predicts that plastic bag bans will have a "slight positive impact on the local economy."¹⁵ This prediction is due to the overall decrease in bag costs for local businesses and a projected increase in reusable bag purchases at local businesses. Similar effects could be expected throughout Beaufort County, particularly during the tourist season. Visitors may be willing to invest in attractive bags bearing the name of their chosen vacation destination.

Q: How common are plastic bags in Lowcountry waterways?

A: VERY

Plastic pollution is pervasive throughout the Lowcountry and along the coast of South Carolina.

MyCoast is an individual reporting tool for beach cleanups. This portal allows local citizens to self-report data. Due to self-reporting limitations, the data is not indicative of the full breadth of beach cleanup efforts; however, we can draw some conclusions from the data collected. According to MyCoast, 103 volunteers have collected 940 plastic bags from South Carolina beaches since January 1, 2017. That's over five bags per day. As of July 1, plastic bags were the eighth most commonly reported litter item in South Carolina.

According to the Ocean Conservancy, plastic grocery bags were the fifth most common item found on beaches worldwide during their September 2016 international cleanup.¹⁶ As part of

¹⁵ For more information on the economic impacts of plastic bag bans and fee, see The Equinox Center, *Plastic Bag Bans: Analysis of Economic and Environmental Impacts* (Oct. 23, 2013) available at <https://energycenter.org/sites/default/files/Plastic-Bag-Ban-Web-Version-10-22-13-CK.pdf>

¹⁶ MyCoast, *Beach Cleanup Reports*, <https://mycoast.org/beach-cleanup/reportlist?stateLong=South+Carolina> (note: this data is constantly updated with new cleanup reports and may change over time). For worldwide data and data from past cleanups, see Ocean Conservancy, *Fighting for Trash Free Seas*, <https://oceanconservancy.org/trash-free-seas/international-coastal-cleanup/>

that same cleanup effort, South Carolina Sea Grant Consortium organized a beach sweep and 558 Beaufort County volunteers spent three hours cleaning up litter. Calculated at SC's average hourly wage, that's \$26,000 worth of time. If we invested that much time cleaning up litter every day, we would spend over \$9 million.

Local groups also help to reduce plastic pollution in our environment. Outside Foundation organizes regular kayak-based cleanups. In November of 2016, 49 volunteers collected over 500 pounds of trash in the Broad Creek.

In short, plastic pollution is both a local and global problem: bags litter Beaufort County and South Carolina shores at a rate similar to that found around the world.

More local information is accessible online.

- MyCoast at <https://mycoast.org/sc>
- Sea Grant Beach Sweep at <http://www.scseagrant.org>
- Ocean Conservancy at <https://oceanconservancy.org>

Q: Why are some states trying to ban local bag bans?

A: THE FIGHT IS DRIVEN BY THE INDUSTRIES THAT MAKE BAGS.

The plastic industry is pushing preemption legislation, or a “ban on bans”, around the country. To date Michigan, Missouri, Idaho, Arizona, Wisconsin, Indiana and Florida passed this type of law. With the exception of Florida, these bans are in states without ocean coastline.

The industry argues that plastic bags are a small portion of the pollution problem. The statistics used by the plastic industry are deceiving because they account for either (1) the number of plastic bags collected as a percentage of the total number of items collected or (2) a percentage of the total weight of litter collected. In either case, the plastic bag will show up as a relatively small percentage of waste collected. As a percentage of the total number of items collected, it pales in comparison to smaller items. In fact, even the most commonly found item, the cigarette butt, only makes up 13% of the litter collected during the Ocean Conservancy's 2016 cleanup. As a percentage of the total weight of litter collected, the lightweight bag hardly registers.

In other words, percentages are not indicative of the harm caused by the fifth most common trash item found in our world's oceans. These items can and do cause the death of sea and shore birds as well as sea turtles. In fact, the Ocean Conservancy calls plastic bags “the second most impactful item to marine wildlife due to the tendency of animals...to mistake them for food.”¹⁷

The industry also argues that plastic bag bans or fees will kill local jobs. As discussed above, this is not the case in South Carolina. Additionally, bag companies like Novolex produce many

¹⁷ Plastic bags are second only to fishing gear such as nets, lines, traps and buoys that entangle marine life.

different types of bags, including paper and reusable bags. Decreased demand for plastic bags would likely produce an increased demand for paper and reusable bags. As a result, manufacturing could shift to paper and reusable bags.

Q: What about compostable plastic?

A: THEY NEED INDUSTRIAL COMPOSTING FACILITIES TO DECOMPOSE.

Compostable plastic bags need high temperatures and very specific conditions to break down and, therefore, must be disposed of in an industrial composting facility. Within an industrial composting facility, the bags take about six months to breakdown. There are only a handful of industrial composting facilities in South Carolina and the nearest facility is in Charleston County.

Compostable plastic bags are not shown to breakdown in saltwater or outside of an industrial composting facility. In fact, these products will not even breakdown in backyard composting operations.

Further, compostable bags are generally not recyclable.

While compostable bags are preferable options for bags that are exempted from a plastic bag ban (pet waste bags, etc.), if they end up in our saltmarshes, they are no less harmful than a traditional plastic bag.¹⁸

Q: Can I pass a ban with plastic exemptions?

A: YES!

Here are examples of common exemptions. These exemptions are incorporated into Folly Beach and Isle of Palms' ordinances:

- Laundry dry cleaning bags
- Door hanger bags
- Newspaper bags
- Garbage bags
- Pet waste bags
- Yard waste bags
- Bags provided by pharmacists or veterinarians to contain prescription drugs or other medical necessities
- Bags used by a customer inside a business establishment to contain bulk items such as produce, nuts, grains, candy or small hardware items
- Bags used by a customer inside a business establishment to contain or wrap frozen foods, meat or fish, whether or not prepackaged
- Bags used by a customer inside a business establishment to contain or wrap flowers, potted plants or other items to prevent moisture damage to other purchases

¹⁸ See, Eco Products, *FAQs – Composting and Recycling* available at https://www.ecoproducts.com/faqs-composting_and_recycling.html

- Bags used by a customer inside a business establishment to contain unwrapped prepared foods or bakery goods
- Bags used by non-profit organizations or other hunger relief charity to distribute food, grocery products, clothing, or other household items
- Bags of any type that the customer brings to the store for their own use for carrying away from the store goods that are not placed in a bag provided by the store.

In addition, some jurisdictions with fee ordinances in place exempt SNAP and WIC eligible customers from the fee. In many jurisdictions, these customers are also eligible to receive free reusable bags.