



TO BAN OR NOT TO BAN?

A GUIDE TO REGULATING PLASTIC BAGS

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Introduction

A Wave of Regulations

Governments across the USA are considering a variety of regulations to control the use of plastic bags. The cause for this wave of regulations is the financial pressure that plastic bag management places on local governments. Additionally, plastic bags are hazardous to public and environmental health. Thus, environmentally conscious municipalities are intensely working towards their zero waste goals by imposing regulations on plastic bags. Supportive state laws can play a crucial role in forwarding these goals. However, local plastic bag regulations are often met with stringent and restrictive state laws. In some cases, these laws prevent municipalities from banning plastic bags and in other cases they restrict local regulations of any kind. Such a restrictive law is known as preemption, which occurs when state laws overrule or nullify a municipal ordinance.

While preemptive laws can stifle local innovation in some cases, in other cases they can create a level playing field for all local governments. For example, in 2014, California passed a statewide ban on single-use plastic bags and a fee on paper bags and other reusable alternatives. This statewide legislation made the implementation of regulations more effective. Following California's footsteps, in 2018, the NYS Task Force on Plastic Bags gave a range of recommendations on different legislative actions. In April 2019, New York passed a statewide ban on plastic bags effective by March 2020, thereby making it the second state to regulate plastic bags at the state level. This study analyzes different regulatory tools to reduce the consumption of single-use plastic bags and the state actions that aid or impede this process. A comparative analysis of these tools will help local governments identify the most effective regulatory tool to further their zero waste goals. Additionally, our case-study based analysis will identify roadblocks to municipality's regulatory actions, creative circumvention of these roadblocks, and a comprehensive legislative solution.

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Plastic Bags Are Not Free

All the plastics that were ever made still exist, as it takes 100 to 400 years for them to decompose at the landfill (EPA, 2016). According to EPA (2016), the USA consumes 380 billion plastic bags and wraps each year. This amounts to 38% of all the plastic bags consumed annually across the world (EPA, 2016). In the USA, merely 12.8% of plastic bags, wraps and sacks got recycled in 2015 (EPA, n.d.). Local governments across the US are facing the challenge of managing plastic bag waste, especially single-use plastic bags.

Cost to You, Cost to Your City

The plastic bags handed out for free at the grocery stores cost heavily to you and your city. These costs are hidden and go unnoticed by us. There are four types of costs identified below:

Windblown Litter - Plastic bags are often found littered in roadside ditches and parks or stuck in trees. Local governments spend a significant sum of money on cleaning this windblown litter that chokes the sewers and may lead to floods. Out of 100 billion plastic bags, 50 million end up as litter every year (Equinox Center, 2013).

Public Health: Plastic bags are a cost to public health. The water that gets trapped in plastic litter causes pest problems, leading to public health issues (EPA, 2016). Additionally, the litter leads to contamination of water and soil, causing serious health hazards.

Environment: Local governments spend a significant sum of money on marine and river cleanup as 4 to 12 million metric tons of plastic end up in water bodies (NYS Plastic Bag Task Force Report, 2018).

Waste Management: Collection-disposal, landfill and litter cleanup costs add to local government's financial burden in tackling plastic bag waste. It costs \$12.5 million/year for NYC to dispose its bag waste outside the city (The City of New York Department of Sanitation, 2014).



Figure 2. 1: Windblown Litterⁱ, Turtle Ingesting Plastic Bagⁱⁱ, Potomac River Cleanupⁱⁱⁱ

Any cost to the city is borne by the taxpayers. Thus, the cost to the city is an indirect cost to the public. Single-use plastic bags pose an additional challenge to the city's recycling facilities, as they cause machinery jams and lead to expensive fixing costs. The City of San Jose spent \$1 million annually on fixing machinery jams (San Jose Staff Report, 2009). Moreover, unclean plastic bags are refused by recycling facilities due to fear of contaminating the rest of the recyclables. As there is no feasible recycling market for contaminated plastic bags, single-use plastic bags are a burden to the city's waste management function.

ARE PLASTIC BAGS FREE?

Case of San Francisco, CA:

In 2004, San Francisco spent approximately 8.49 million dollars per year on dealing with the contamination of recycling stream, collection and disposal expenses, litter cleanup, and landfill management. This amounts to 17 cents per bag. Clearly those plastic bags are not free.

Source: ([1bagatime](#))

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Methodology

This report analyzes how local governments can use different regulatory tools to reduce the consumption of single-use plastic bags.

Our goal is to help local governments,

1. Identify a range of regulatory tools for curbing plastic bag consumption.
2. Identify the most effective regulatory tool by providing a comparative analysis.
3. Identify roadblocks to their regulatory action, creative circumvention of these roadblocks, and a comprehensive legislative solution.

This report is a product of three methodological approaches:

1. Creating a database of state and local laws on plastic bag consumption.
 - a. At the local level, we compiled plastic bag regulations from three data sources; baglaws.com, bagtheban.com, and government websites. This data was aggregated to analyze the regulatory preferences of local governments — Ban, Fee, Tax, and Hybrid Ban-Fee.
 - b. At the state level, primary information on state legislation was obtained from their official websites. Here, our analysis focused on how state legislation is used to curb local innovation in regulating plastic bags, the trends in state legislation, and the crucial role of state and local collaboration in achieving zero-waste goals at the local level.

2. Primary data collection through semi-structured interviews.

We conducted interviews to gain an applied understanding of plastic bag regulations and the barriers faced in their implementation. The interviewees were selected to include a variety of actors that play a role in plastic bag regulation including, government officials, representatives from waste management services, and legal experts. These include:

- a. Lillian Power — Environmental Protection Specialist, Department of Energy & Environment, Government of the District of Columbia
- b. Richard Coupland — Vice President, Municipal Sales, Republic Services
- c. Jordan Lesser — Legal Counsel to New York State Assembly

3. Literature review

A variety of secondary data were used to develop a framework for analyzing the state and local laws. These include official reports commissioned by governments, research papers on impact of plastic bags on the environment and the municipal expenditure, websites of advocacy agencies, bills and policy documents, and newspaper articles. The NYS Plastic Bag Task force report (2018) was pivotal in understanding the challenges faced by New York's local governments.

4

Regulatory Response

A Rush to Ban

Why are plastic bags the target of local legislative actions?

It is one of the most problematic materials in a city's waste stream (plasticbaglaws.org)

Communities and local governments across the country are striving to reach their zero waste goals. The motivations propelling such goal setting exercises range from environmental conservation, carbon footprint reduction, clean energy production, creating local jobs, creating recycling markets to boost local businesses, and curbing the expenditure on cleanup and litter management (Zero Waste Associates, 2013). However, plastic bags — the most problematic material in a city's waste stream - are posing a hurdle in achieving the zero-waste goal (plasticbaglaws.org, 2016). As a result, plastic bags are the most obvious 'target of local legislative actions' (Romer, 2016). Primarily, there are four regulatory tools used in these local legislations. They are: 1. Ban on single-use plastic bags (based on thickness and material specifications or a complete ban); 2. Fee imposed on single-use plastic bags and/or other reusable bags made of plastic or paper; 3. Tax on single-use plastic bags; and 4. Hybrid Ban-Fee (Romer, 2016), which is a ban on single-use plastic bags and a fee or a tax imposed on other reusable bags made of plastic or paper. The figure below illustrates the regulatory tools that are most preferred by local governments (cities, towns, villages, boroughs and counties). Bans are the most popular regulatory response adopted by local governments to regulate plastic bags. As of 2019, out of 248 municipalities regulating plastic bags, 194 imposed bans.

194

Ban

6

Fee

5

Tax

43

Hybrid

Figure 4. 1: Local Government Regulatory Response

Note: Local governments with a statewide legislation on plastic bags have not been included in this figure. Source: database aggregated from baglaws.com, bagtheban.com and government website.

Which Regulatory Tools are Effective?

While the figure above shows a strong preference for bans, it is not the most effective regulatory tool. San Francisco and Honolulu (Bill 59, 2016) are examples of cities that revised their legislation to move from a ban on single-use plastic bags to a hybrid ban-fee, while Chicago shifted to a tax option (Chicago Checkout Bag Tax, 2017).

Fee or Tax Works Better than Ban

Case of Chicago, IL: In 2016, the city of Chicago revoked its plastic bag ban after a period of 16 months. The earlier legislation banned bags of a specific thickness. Consequently, retailers shifted to thicker plastic bags. Thus, the legislation failed to reduce the consumption of plastic bags. The introduction of a 7-cent tax on the bags led to a 42% reduction in bag consumption, which was consistent with the predictions of a study commissioned by the city (NYS Task Force Report, 2018). The Checkout Bag Tax earmarked 2 cents for the retailers and 5 cents for the city (Chicago Checkout Bag Tax, 2017) with a prediction of generating \$9.2 million for the city in 2017 (NYS Task Force Report, 2018).

Hybrid Ban-Fee Model Works Best

Case of Los Angeles County, CA: In 2010, Los Angeles County's hybrid ban-fee imposed a 10-cent fee on recyclable paper bags with a ban on single-use plastic bags (NYS Task Force Report, 2018). This led to a 94% reduction in consumption of single-use plastic bags and a 25% reduction in paper bag usage. The legislation amounted to an economic impact of less than \$4 per person per year (LA County Implementation Report, 2012). Apart from the effectiveness of the hybrid ban-fee, other factors such as quarterly compliance reports submitted by stores, customer assistance provided by LA County, and continuing public education contributed to the success of the legislation.

Why is Hybrid Ban-Fee More Effective?

Bans increase the use of alternatives such as disposable paper bags. Thus, a new problematic material arises in the waste stream. NYS Task Force Report (2018) states that paper bag

production is water intensive and is voluminous compared to single-use plastic bags. As a result, it is bad for the environment and it takes more space during shipping (ibid). Hence, to discourage a shift to paper bags, a hybrid ban-fee is useful. In this regulatory tool, the local government bans single-use plastic bags and specifies the reusables that can be used. Additionally, the fee collected from the consumption of alternatives or allowable reusables is a steady stream of revenue that can be used for city waste management and clean-up efforts.

Benefits and Drawbacks

There is no absolute solution, as each regulatory response presents certain benefits and drawbacks for the different stakeholders. The tradeoffs for each regulatory tool are discussed in the table below:

Tool	Benefits	Drawbacks
Ban	<ul style="list-style-type: none"> - Few customer complaints - Easy to implement 	<ul style="list-style-type: none"> - Less reduction in use - Increased use of reusable bags - Manufacturer / retailer pushback
Fee/Tax	<ul style="list-style-type: none"> - Revenue for waste management/ litter clean-up - Reduction in use - Sharing revenue incentivizes retailer 	<ul style="list-style-type: none"> - Impacts poor communities
Hybrid	<ul style="list-style-type: none"> - Creates market for recycling and reusables - Alternative bags are discouraged 	<ul style="list-style-type: none"> - Manufacturer / retailer pushback - Job loss in plastic bag manufacturing units

Table 4. 1: Benefits and Drawbacks of Regulatory Tools

Case of Long Beach, NY:

In 2015, the Food Industry Alliance (FIA) filed a lawsuit against the Village of Hastings-on-Hudson for banning plastic bags. Patchogue Village in New York state also faced opposition from FIA. However, in an interview with the New York Task Force Report, Ryan McTiernan of Long Beach city government stated that FIA 'are okay with the charge [but] don't like the ban' (p.74)

Strategies to Overcome Drawbacks

Local governments have undertaken actions to address these drawbacks for the various stakeholders. Some of these are discussed below:

Consumers

The increased cost of a fee or tax could lead to additional financial burden for poor communities. In order to address this issue, local governments could provide free reusable bags to low income consumers. This has been done in the Village of New Paltz, NY and Washington, D.C. for example.

Retailers

Retailers oppose bans due to the stock of plastic bags they have bought before the regulation was passed. Local governments could provide them time to adapt to the bag regulations. In doing so, buy-in time between passing a law and implementing it could give retailers time to use their stock. For example, Washington, D.C. had a buy-in time of 10 months.

Manufacturers

One of the key reasons for the pushback from plastic bag manufacturers is the direct impact of bans on their businesses. It could further result in job losses in the manufacturing industry. Governments can provide financial incentives to local plastic bag manufacturers, conditional on retaining their workforce as they adapt their businesses to manufacture alternative bags.



Figure 4. 2: Strategies to Overcome Impacts of Regulatory Responses on the Stakeholders

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Landscape of State Action

City Responds, City Regulates

Local governments across the USA are facing roadblocks in achieving their zero waste goals. Since 2008, many states have imposed legislation that prohibits local governments from regulating plastic bags. This straightjackets local governments by compromising their ability to implement a comprehensive waste management program. As of 2019, there are 16 states with such laws, of which 4 were passed recently (CO, OK, PA, TN). In Alabama, Georgia, Ohio and Utah, such legislation has been introduced and is currently pending.

There are many actors driving such regulations from states. A prominent driver is the American Legislative Exchange Council (ALEC), which has created model legislation that can be adopted by states in restricting local government action to regulate plastic bags. Its assertion that such "confusing regulations will lead to increased costs to consumers and businesses" ([Regulating Containers to Protect Businesses and Consumer's Choice Resolution](#), 2015) has been cited in several state ordinances. In Idaho, Act [HB 372](#) (2016) makes a similar claim. Other actors include the American Progressive Bag Alliance (ABPA), American Chemistry Council (ACC), Petrochemical Corporations like Koch Companies Public Sector LLC, Exxon and larger plastic bag manufacturers like Novolex.

Such legislation is heavily opposed by environmental groups. They highlight that such regulations differently impact cities. For example, the State of Georgia has pending legislation to prohibit cities from regulating plastic bags. Coastal cities like Tybee Island want to ban plastic bags. "Our economy is based on a beachfront community," said Bill Garbett, of Tybee Island council. "We have sea turtles nesting on the beach. They easily confuse plastic bags with jellyfish. It's up close and personal to us" (Guo, J., 2015). Prominent environmental advocates include the Surfrider Foundation, Sierra Club, Natural Resources Defense Council, Riverkeeper etc.

There are also an increasing number of states which are looking to restrict single-use plastic bags at the state level. In 2014, California became the first state in the USA to pass legislation that restricts use of plastic bags at the state level. Hawaii has a de-facto statewide restriction on plastic bags through bans implemented across its four counties. In early 2019, New York State passed a similar statewide law. 16 other states have legislation in the pipeline to restrict plastic bags. Of these, 8 states introduced such bills in the past year (AK, FL, KY, ME, MT, MH, MJ, WV).

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Innovative Solutions to State-jacketing

The number of states restricting local governments from regulating plastic bags is increasing every year. What does it mean for local governments within such states? Is there any way for them to address the problem of plastic bags? Yes, there are still ways to address the problem of plastic bags.

Legal Language Matters

There is considerable variation in terms of restrictions imposed on local governments by states. Some states prevent local governments from banning bags while others prevent local regulations of any kind.

Minnesota, currently, only restricts the implementation of ‘bans on the use of paper, plastic, or reusable bags for packaging of any item or good purchased from a merchant, itinerant vendor, or peddler’ (Consumer Choice Act, 2017). Here local governments are still able to use fees and specifications to regulate plastic use. The recently introduced bill, SF 1195 proposes to extend this restriction to include fee or tax on packaging, as seen in Missouri. In Missouri, prohibitive state action was imposed in 2015 through Bill 722K with amendment, prior to any local action on plastic bag regulations in the state. Here, all political subdivisions of the state were prohibited from imposing a ban, fee or tax on the use of either paper or plastic bags or reusable bags for packaging of any item or good purchased from a merchant, itinerant vendor, or peddler.

However, in both Missouri as well as Minnesota, local governments can use material specifications to reduce the impact of plastic bag use on the environment, as seen in the example of Austin, Texas. When Texas prevented municipalities from ‘banning’ plastic bags, Austin instead imposed a material specification that mandated 80% recyclable content in the bags. Thus, local governments can work around state prohibition by creative interpretation of the law.

You Can Still Change Behavior

Many states like Arizona, Idaho, Iowa, Indiana, Michigan, Texas etc. prevent cities from implementing any regulations regarding the use of single-use plastic bags. In such cases, local governments must instead implement non-legislative mechanisms that target behavior.

Consumer Behavior:

Public education creates awareness about the costs to the environment, public health and local governments. Discounts can encourage consumers to use their own reusable bags. Washington, D.C., conducted workshops on the benefits of reducing plastic bag consumption to the Anacostia River. They also trained staff at stores to provide plastic bags only when asked for by customers. In Illinois, citizen-action propelled the Governor to veto a state bill that prevented local governments from restricting plastic bags.

Retailer Behavior:

Profits made from fees on reusable alternatives make business sense for retailers.

Case of Austin, Texas: In Texas, the City of Austin passed a Single-Use Bag Ordinance to regulate plastic bags, effective since 2013. This ordinance banned single-use bags and regulated alternatives further through fees and specifications. Austin's ordinance was outlawed in 2018, when the Texas Supreme Court ruled that [Laredo's plastic bag ban violates state law](#), thus outlawing Austin's law as well. However, even after this ruling, larger stores like Randall, Fiesta Mart, MT Supermarket, Ranch 88 as well as Trader Joes and Whole Foods have chosen to not re-introduce single-use plastic bags after the State of Texas passed laws restricting local governments from regulating plastic bags in July 2018. This is because their corporate policies have been adapted to comply with the ban (Buchele, M., 2018). Further, the stores were also making adequate profits from the fees on reusable bags, thus making it an economically viable decision to deter consumers from using plastic bags.

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Is there a Comprehensive Solution?

State and Local Collaboration:

Richard Coupland, an industry expert on waste management mentioned that to achieve zero waste goals, local governments need to have a comprehensive plan for all types of waste materials (Coupland, R., 2018). Additionally, each waste stream should have a robust plan and partnerships with a network of stakeholders (consumers, retailers, restaurants, manufacturers, recycling companies, recycling markets). Thus, an ecosystem needs to be created. Coupland argues the State has a crucial role in this process. He claims that local governments are not successful in implementation of their plastic bag regulations because they are focusing on just one aspect of waste management. Thus, a comprehensive vision and regulatory action for waste management is needed.

Local governments may lack the capacity to handle the negative impact of their regulations on stakeholders. Strict local regulations can make municipalities unattractive to new business investments. Further, patchwork legislation is disadvantageous because it increases costs of compliance to businesses and creates an uneven playing field for business competition between localities. Single-use plastic bags cause machinery jams in recycling units and get rejected from recycling facilities and end up in landfills. Creating a robust recycling market at the local level is difficult due to the smaller scale of operations that need high investment and maintenance of recycling machinery. So, without the involvement of state government, creating a domestic market for recycling is a challenge.

Uniform state policies can provide this comprehensive vision and support. Municipalities can implement regulations better if state policies are supportive of their waste management goals. There is a need for state and local collaboration in creating a comprehensive solution to waste management. California provides a good model for this collaboration.

The Case of California:

Effective since July 1st, 2015, California implemented a statewide ban ([S.B. 270](#)) on single-use plastic bags.

Hybrid Ban-Fee: California adopted a hybrid ban-fee regulation which prohibits the provision of single-use carryout bags to customers, with some exceptions. Additionally, it imposes a fee of not less than 10 cents on recycled paper bags, compostable or reusable bags. The funds raised from fee collection are used to offset the costs of providing these alternatives.

Ensuring Compliance: Plastic bag manufacturers were prohibited from producing and distributing single-use plastic bags. They were mandated to submit third-party certification for reusable bags made of plastic film to the Department of Resources, Recycling, and Recovery ([CalRecycle](#)). Currently, this can be submitted through the [Reusable Grocery Bag Reporting System](#) (RGBRS).

Encouraging Good Behavior: The State mandates that stores establish an at-store recycling program, which gives customers the opportunity to return clean plastic bags to the store.

Create Recycling Markets: California has established financial provisions to encourage recycling as well as curtail manufacturer pushback. These provisions include dedicated funding to provide loans for creation and retention of jobs in the manufacturing and recycling of plastic bags with recycled content. The funds are also made available for converting manufacturing from single-use plastic bag production to reusable plastic bag production.

Uniform local legislation: The law prohibits local governments from implementing any further regulations on plastic bags that are inconsistent with the State law.

Eco-system creation: Hybrid ban-fee is even more effective when an eco-system is created by the state government that addresses all issues of all stakeholders such as manufacturers, retailers, recycling companies, city waste management departments and consumers. This means creating a comprehensive waste management system, conducive environment for domestic/local recycling markets, and loan financing mechanisms to aid single-use manufacturers in shifting to machinery used for producing reusable bags. Education plays an important role in this process. These measures would ensure that there is no industry pushback, job losses or financial losses to the manufacturers. Thus, state governments play an important role in creating a conducive environment for the hybrid ban-fee model.

Recommendations:

As of May 2019, sixteen states have pending legislation that will restrict the use of plastic bags. At this point it is important to remind the states that a mere ban would amount to creating a new Frankenstein monster – increased use of alternatives.

Learning from New York’s Case:

Statewide ban is not enough: New York’s statewide plastic bag ban will be effective beginning March 2020. The law offers counties an option to impose a 5-cent fee on paper bags, of which 3 cents will go to the Environmental Protection Fund, and 2 cents will go to the local government ([Senate Bill S1508C](#), 2019). 40% of the revenue will be used to distribute reusable bags to marginalized communities. While this is encouraging news, the state has chosen to not explicitly adopt a Hybrid Ban-Fee model. In such a scenario, it is crucial that counties adopt a fee regulation because a mere ban will give rise to the use of alternatives, thereby creating a new problem in waste management.

Carefully calculate the fee: State and local governments should carefully assess the impact of plastic bags on their waste management, clean-up, disposal and public health functions. The fee or tax imposed on single-use plastic bags or reusable alternatives, must be based on the findings of such an empirical analysis. Municipalities in New York state that are currently imposing a fee, tax or hybrid regulation are collecting 5-cents to 15-cents per bag to curb its use. This suggests New York’s proposed 5-cent fee may be too low.

8

Conclusion

Key Takeaways:

Our study analyzed various local regulations that are used to curb the consumption of plastic bags and the state actions that aid or impede these regulations. Based on our analysis, we summarize our findings as follows:

1. Bans are not an effective regulatory tool when used alone. They do not necessarily lead to reduction in plastic bag consumption. They may lead to an increase in the consumption of alternatives such as paper bags, which are a water intensive product. Lastly, bans generate industry pushback, while a fee or tax may not. Hybrid Ban-Fee works better than bans as they discourage the use of alternatives.
2. Fees can be used as an incentive to encourage retailers to refrain from using single-use plastic bags. The sharing of revenue that is generated from the fee imposed on plastic bags makes business sense to retailers. As a result, fees lead to behavioral change in retailers.
3. Bans and the ban component of Hybrid Ban-Fee regulation lead to manufacturing and job losses. Hence, manufacturers prefer fees over bans.
4. The opposition to the ban component of hybrid regulation can be addressed through state and local collaboration, as seen in the case of California. Supportive state policies create an ecosystem that reduces the negative impacts of the regulation on the stakeholders and incentivizes environmentally friendly business choices by creating domestic recycling markets.

1 Bans do not work,
hybrid ban-fee
models do

2 Fee and incentives
lead to behavioral
change in use

3 Manufacturers oppose
bans, but not fees

4 Need state and
local collaboration

ⁱ Getty Images

ⁱⁱ Ron Prendergast, R. *Turtle Consuming Plastic Bag at Melbourne Zoo.*

Retrieve on: December 12th, 2018

Retrieved from: <https://blog.epa.gov/2016/11/01/confronting-plastic-pollution-one-bag-at-a-time/>

ⁱⁱⁱ Potomac Riverkeeper Network. Potomac River Cleanup.

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