

Name: Colleen Couler  
Address: 3729 Wagon Road, Ellicott City, MD 21042  
District 1

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: ANNE ROULEAU

Address: 5563 VANTAGE POINT RD

District 4 COLUMBIA

Dear Council Member,

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NO BAND! we do not need paper instead of plastic bags

Name: Bonnie Grabelle

Address: 8800 Bosley Rd. #207 Elliott City, MD 21043  
District 1

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: Judy Silver Weisberg

Address: 8713 Warm Waves Way, Columbia, MD 21046  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

DISTRICT 1

Name: RUELLA BARNES

Address: 7124 MILLBURY Ct EKRIDGE 21075  
District 1

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

DISTRICT 1

Name: JOHN BARNES

Address: 7124 MILLBURY CT ELKRIDGE MD

District 1

21075

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: Rebecca Lusby  
Address: 5413 Spindrift  
District 2 Columbia MD 21045

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.





Name: Adam Bell

Address: 9481 Greco Garth Columbia, MD 21045

District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: Ronald Meservey

Address: 9447 BRETT LN

District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: RoseMARIE Meservey  
Address: 9447 BRETT LN  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: Samuel Pearson Moore  
Address: 949B Greco Garth, Columbia MD  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: TREY GORDON  
Address: 9506 GRECO BARTT  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: Roger Jackie Colvin  
Address: 9474 Greco Park Columbia MD 21045  
District #2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

District #5

Name: Bette Hoover

Address: 5085 Green Bridge Rd

Dayton, MO 2036

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Thanks

Councilman Yungman

Name: Ann Smith  
Address: 9423 Brett Lane  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.



Name: Jim & Pat Hamilton

Address: 9465 Latch Key Row, Columbia, MD 21045  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: Ann Mays

Address: 9350 Gentle Folk Columbia MO 21045

District 3

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Thank you!

Name: Ashley Irnh

Address: 9434 Farewell Rd. Columbia, MD 21045  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: Leslie Harvey  
Address: 9434 Farewell Rd Columbia, 21045  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: Christopher Regak  
Address: 9478 Camelriver Ct.  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: Diane BIEBE

Address: 9502 GRECO GARDEN, COLUMBIA, MD 21045

District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: Lena Kennedy  
Address: 9469 Greco Garden 21045  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Name: Jacqueline Holloway  
Address: 9493 Cameldriver Ct.  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.



Name: Dr. Susan Maritzky  
Address: 3565 Church St 2043  
District 1

Dear Council Member,  
I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

NO Band!

Name: Dorothy Rockstroh

Address: 4707 Leyden Way, Ellicott City, MD 21042

District 1

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

*Dorothy L. Rockstroh*

Name: Evelyn Moxey ~~\_\_\_\_\_~~ M. Mox  
Address: 5601 Thunder Hill Rd Columbia, MD  
District 2

Dear Council Member,

I am writing today to ask that you support CB64-2019, a fee on plastic bags. Every minute of every day a garbage truck full of plastic enters our waterways. It is an environmental and health crisis unfolding before our eyes. CB64-2019 will not only address this crisis by reducing plastic, but it will also bring increased awareness to the community so we can move forward and turn the tide on plastic pollution. This bill gives consumers a choice as it is a completely avoidable fee. It also makes the important link between consumers' actions and the impact their actions have on the environment. Best of all, fees have been proven to work to change behavior and reduce plastic pollution.

Please, I pick up plastic bags every time I go walking or biking I use fabric bags—put my dollars & money where my mouth is —  
If we'll just try a little harder encouraging every one with this bill. I know we can do better!

Testimony on CB64-2019

From: Ruth E. Nimmo  
10001 Windstream Drive, Apt. 805  
Columbia, MD 21044



To: Howard County Council Members

Date: November 18, 2019

Thank you for allowing me to testify on CB64-2019 which would enact a fee on plastic bags at the retail store level. I am in favor of this bill for many reasons, but primarily for the role that plastic bags play in polluting our environment. Some facts that you should consider include:

- Plastic bags were introduced to supermarkets in 1977.
- An average family will use 60 plastic bags on four visits to the supermarket.
- 160,000 plastic bags are used globally every second.
- 5 trillion plastic bags are produced yearly. Side by side, they can encircle the world 7 times.
- Plastic will only start degrading after 700 years and will only fully degrade in 1000 years. This means that all the plastic that has ever been produced has not degraded yet.
- Plastic bags remain toxic even after it breaks down. It doesn't biodegrade, it photo-degrades. It means that after it degrades, it breaks down into smaller and smaller toxic bits of itself – and bleeds and contaminates the environment.
- Only 1 to 3% of plastic bags are recycled worldwide.
- Plastic bags are produced using petroleum, natural gas and other chemicals. Its production is toxic to the environment.
- The Great Pacific Garbage Patch, which is a floating landfill of garbage in the Pacific twice the size of Texas, is mostly composed of plastic.
- Plastic bags cause the death of many marine animals when they are mistaken for food.

Source: <https://www.theworldcounts.com/stories/interesting-facts-about-plastic-bags>

As a registered voter in Council District 4, I ask you to enact CB64 so that all of Howard County will take seriously the need to reduce our use of plastic bags. Free and low cost reusable bags are available and I laud the Less Plastics Please group for converting t-shirts into free reusable bags. Every person in the world needs to do their part in reducing plastics. We should show leadership in this important issue. Please vote "yes" for CB64.

**Bans versus Fees:  
Disposable Carryout Bag Policies and Bag Usage**

**Rebecca Taylor; ARE University of California, Berkeley; [becca.taylor@berkeley.edu](mailto:becca.taylor@berkeley.edu)**

**Sofia B. Villas-Boas; ARE University of California, Berkeley; [sberto@berkeley.edu](mailto:sberto@berkeley.edu)**

*Selected Paper prepared for presentation at the 2015 Agricultural & Applied Economics Association  
and Western Agricultural Economics Association Annual Meeting, San Francisco, CA, July 26-28*

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## **Bans versus Fees: Disposable Carryout Bag Policies and Bag Usage**

**Abstract** *Using observational data on consumer carryout bag usage, we measure the effects of Disposable Bag Policies on bag demand. Our results show that plastic bag bans with paper bag fees eliminate use of disposable plastic bags and increase use of reusable bags. However, we find significant and undesired increases in paper bag demand. We compare our results to a study on bag fees and conclude the types of bags stores choose to sell in lieu of disposable plastic bags, as well as the price of alternatives, impact whether bans are more successful than fees in discouraging disposable bag demand. JEL code: H23, Q58.*

Disposable carryout plastic bags bring convenience to supermarket customers, but at a substantial cost to the environment and to municipalities trying to keep their streets and waterways clean. With plastic bag clean-up, recycling, and land-filling costing cities and local governments millions of dollars per year, Disposable Bag Policies are gaining popularity among lawmakers across the country. Disposable Bag Policies prohibit retail stores from providing customers with free carryout bags at checkout. The ultimate goal of these policies is to alter consumer behavior—curbing the consumption of single-use bags and encouraging the use of reusable bags. Yet, while all Disposable Bag Policies share this common goal, in practice they differ in their policy prescriptions, dividing into two competing approaches: (1) Bag bans—a command-and-control approach to regulate behavior directly and (2) Bag fees—a market-based approach to incentivize individuals to change their own behavior.

The adoption of both types of policies has been widespread in the U.S. At the local level, fees on both plastic and paper carryout bags have been adopted by several cities and counties on the east coast, while the most popular policy prescription on the west coast has been bans on plastic bags coupled with fees on paper bags. At the state level, as of October 2014 legislation stood with two states having already banned plastic bags,<sup>1</sup> three states considering similar bans,<sup>2</sup>

<sup>1</sup> California and Hawaii (all four counties in Hawaii have banned plastic bags making it a statewide ban in effect).

and four states considering fees on all disposable bags.<sup>3</sup> In light of the pervasiveness of both policies, this paper asks: *Does the type of policy matters with respect to changing consumer behavior?*

The standard economic analysis, dating back to Pigou's work in the 1920's, has emphasized the efficiency advantages of economic incentive (EI) mechanisms, such as fees and taxes, over command-and-control (CAC) approaches, such as bans (Sandmo 1976). When polluters (i.e. plastic bag users) differ in their costs of abatement (i.e. forgoing plastic carryout bags), the flexibility offered by EI approaches reduces the aggregate cost of achieving a given level of pollution reduction in comparison to uniformly-applied CAC policies. However, the cost of information and monitoring also underlie the choice between taxes and bans. Compliance with bans may be relatively cheaper to monitor, which could account for the occurrence of these forms of regulation (Christiansen and Smith 2012). Moreover, when there is significant uncertainty about the costs of pollution abatement, the outcomes from regulations which set a pollution quantity (or cap) can differ from those which set a pollution price, and conditions for one to dominate depend on the sensitivity of marginal abatement costs and marginal pollution damages to the pollution level (Weitzman 1974). Therefore, if policymakers do not know consumers' demand elasticity for disposable carryout bags or the pollution damages from an additional bag, economic theory is ambiguous about whether bans or taxes should be chosen.

Given the theoretical uncertainty and the growing prevalence of both types of policies, it is imperative to compare outcomes under each regulation tool. With this objective in mind, we (1) empirically investigate whether a bag ban has had its intended effects on the types of bags consumers use at checkout, and (2) compare and contrast outcomes under this bag ban to those

<sup>2</sup> Massachusetts, New Jersey, Rhode Island, and Puerto Rico.

<sup>3</sup> Massachusetts, New Jersey, New York, and Pennsylvania.

of a bag fee. To accomplish the first task, we take advantage of a policy change in the neighboring Californian cities of El Cerrito, Richmond, and San Pablo. Starting January 1, 2014, these cities began to prohibit retail stores from providing customers with plastic single-use bags at checkout. Any retail establishment that provides a recycled paper carryout bag or reusable bag to a customer must charge a minimum of five cents per bag. Using this policy change as a natural experiment, we collect observational data on customers' bag choices at a set of stores in these cities, both before and after the policy took effect. We observe customers during checkout and record the number and types of bags used, the length of transaction times, whether a bagger was present and basic customer demographic information. Besides collecting counterfactual data in the pre-policy period, we also collect data at stores in the control cities of Berkeley and Concord, where there was no bag policy change during our sample period.

With our unique panel dataset, we use a simple difference-in-differences empirical strategy to measure how plastic bag bans with paper bag fees affect customers' demand for various types of disposable and reusable bags. We further measure whether changes in consumer behavior due to the policy shock are heterogeneous across the size of the fee (i.e. 5-cent fees versus 10-cent fees) and store type (i.e. national supermarket chain versus discount chain). In particular, we collect data at two markedly different grocery chains within the same treated and control cities. Not only do these chains attract a different clientele within the same city—as evidenced by the demographic data we collect—their management also chose different responses to the same Disposable Bag Policy. The first chain, which we refer to as the National Chain, chose to charge the minimum required 5 cents per paper bag. Alternatively, the second chain—referred to as the Discount Chain—chose to charge 10 cents per paper bag and introduced a 15-cent thick-plastic reusable bag. By running the same difference-in-differences analysis on each



of these chains separately, we are able to compare how the types and prices of bags offered influence consumer behavior.

For our second objective, we investigate how outcomes under plastic bag bans compare to outcomes under bag fees, by juxtaposing our results to those of a concurrent bag fee. Homonoff (2013) studies the 5-cent single-use plastic and paper bag fee in Montgomery County Maryland and finds that the use of disposable bags drops 42 percentage points after the policy implementation. While there exist previous studies examining how Disposable Bag Policies affect consumer behavior (Dikgang et al. 2012), Homonoff (2013) was the first to collect data on bag usage in both the pre- and post-policy period and at treated and control stores. By replicating the methodology of Homonoff (2013) on our sample of stores, we are able to directly compare results, and consequently, draw conclusions on the effectiveness of bag bans versus bag fees.

To preview some of our results, we find that both policies lead to remarkably similar increases in reusable bag usage and reductions in disposable bag usage at National Chain stores.<sup>4</sup> However, in comparing the Discount Chain to the National Chain, we find that charging 10 cents (instead of 5 cents) for paper bags and offering cheap, alternative reusable bags leads to even larger reductions in disposable bag demand. Specifically, after the policy change, paper bag demand increased by only 8.52 percentage points at Discount Chain stores, as compared to 46.50 percentage points at National Chain stores. Thus the types of bags that stores decide to sell in lieu of single-use plastic bags, as well as the price of alternatives, has significant impacts on the effectiveness of Disposable Bag Policies, especially in regards to paper bag demand.

To our knowledge, no other study has empirically compared the effect of these two types of policies on bag demand; however, empirical evidence for other commodities does exist. With

<sup>4</sup> We refer to both paper and plastic bags as disposable bags. Thus for customers facing a plastic bag ban, disposable bag use is only comprised of paper bags. For customers facing a paper and plastic bag fee, it is a mix of both.

respect to the regulation of production-side externalities, empirical studies have compared EI instruments versus CAC approaches in reducing air pollutants (Oates et al. 1989) and in incentivizing the production of higher fuel economy vehicles (Greene 1990). However, given that the *consumption* of disposable bags creates the externality in question, our analysis relates more closely to the limited empirical literature on the regulation of consumption-driven externalities. For instance, Adda and Cornaglia (2010) analyze the effect of bans and taxes on passive smoking and find that excise taxes are more effective at reducing exposure to tobacco smoke than smoking bans in public places. The reason is that bans displace smokers to private places where they contaminate non-smokers, especially young children. Although disposable bags and cigarettes are very different commodities in many respects, our analysis likewise finds that bans displace consumption in unintended ways in which taxes do not.

As the first study to both rigorously analyze consumer bag demand responses to plastic bag bans with paper bag fees and to compare outcomes under bag bans to those under bag fees, the results of this paper have the potential to shape current and future policy—and not just policies regulating disposable bags but also other disposable products such as Styrofoam containers and plastic bottles. Our results suggest that as cities, counties, and states continue to design and adopt Disposable Bag Policies, they will want to consider not only their objectives for reusable and plastic bag usage, but also their objectives for paper bag consumption. The rest of the paper proceeds as follows. Section 2 reviews the background on disposable carryout bags. Section 3 describes the empirical setting, the policy changes that led to the experimental design, the data collection methodology, and the data. Section 4 lays out the empirical strategy and presents the results. Section 5 compares our results to previous studies and discusses policy implications and Section 6 concludes.

## Background on Disposable Bag Policies

### *Environmental Costs of Disposable Carryout Bags*

Standard disposable plastic bags cost retailers on average 3 cents each and paper bags cost 7 to 10 cents each.<sup>5</sup> However, customers do not directly see the price of the disposable bags they use, as the majority of grocery stores roll the price of these bags into the total cost of the transaction. Without seeing a price, customers are prone to use more plastic bags than they would be willing to pay for at face-value, and this overuse is costing municipalities millions in clean-up expenses annually. Each year Americans are estimated to consume 100 billion single-use plastic bags (Clapp and Swanston 2009)—approximately 325 bags per person per year—the vast majority of which are eventually landfilled or littered. When not kept in landfills, plastic bags end up in storm drains, rivers and oceans—degrading water quality, harming birds and aquatic life, clogging waterways, and becoming a general eyesore. Even when properly disposed of in a receptacle, plastic bags are easily blown away due to their light weight and aerodynamics (Kauffman & Wolff 2009). Furthermore, the 5.2 percent of plastic bags that do get recycled (USEPA 2006) become a major problem for recyclers as the bags often clog the machines used to sort material.<sup>6</sup> A study of the budgets of 6 major cities in the U.S. finds that the litter control of plastic bags costs between 3.2 and 7.9 cents per bag (Burnett 2013). Given that approximately 100 billion plastic bags are consumed in the U.S. each year, municipalities across the U.S. together spend up to \$3.2 to \$7.9 billion per year to clean-up plastic bags.

In light of the sizeable costs of plastic bags, one might be tempted to answer the age-old

<sup>5</sup> Bag cost estimates come from interviews with the store managers in our sample, but media articles also confirm these estimates (“Plastic Ban Means Higher Costs are in the Bag.” *Crain’s Chicago Business*. 3 May 2014. [Online](#)). The cost of paper bags depend on bag size and the presence of handles. Store owners list disposable bags as their fourth largest operating cost, after electricity, payroll, and credit card fees.

<sup>6</sup> “Which Bag is Best: Paper or Plastic?” *The Oregonian*. 17 May 2007. [Online](#).

question “Paper or Plastic?” with a resounding “Paper!” However, single-use paper bags are not without their own environmental costs and thus may not be an adequate alternative to plastic. The negative environmental impacts of paper bags include: (i) paper bags are more energy and water intensive to manufacture than plastic bags, with paper bag production using 70 percent more energy and 17 times more water than the production of plastic bags of the same carrying capacity (Chaffee and Yaros 2007), (ii) it takes 98 percent less energy to recycle a pound of plastic than a pound of paper, and (iii) paper bags are 9 times heavier than plastic bags and require more space in transportation trucks and landfills.<sup>7</sup> Therefore, by switching from plastic to paper, society is simply trading one set of environmental costs for another. However, the important take-away is that the environmental costs of single-use plastic bags are felt acutely in the budgets of local municipalities, especially those along waterways, whereas the environmental cost associated with paper bags are more broadly spread across all people in a population. Therefore it is unsurprising that in practice Disposable Bag Policies have been more aggressive against plastic bag consumption than paper bag consumption.

#### *Policies to Regulate Disposable Carryout Bags*

Given the aforementioned costs of disposable bag usage, governments in the U.S. began passing laws to regulate disposable bags in the mid to late 2000's.<sup>8</sup> On January 1, 2010 the District of Columbia became the first city in the U.S. to require a fee, charged at checkout, for using single-use plastic and paper bags. This law—which passed in response to a District

<sup>7</sup> “Graphic: Paper or Plastic?” *The Washington Post*. Oct. 3, 2007. [Online](#).

<sup>8</sup> Internationally disposable bag regulations started earlier, with several countries banning the use of plastic bags in the global South, where the externalities of plastic bags are exacerbated by less established municipal waste collection and recycling. Policies later spread to the global North, with Ireland becoming the first industrialized country to impose a tax on customers for using plastic bags in 2002 (Convery et al. 2007).

HOWARD COUNTY COUNCIL PUBLIC HEARING

November 18, 2019

7:00 pm

**CB 64-2019**

**In Favor**

Meagan Braganca  
3720 Valerie Carol Court  
Ellicott City, MD 21042

How many species are on the planet? An estimated 8.7 million

How many use plastic bags? 1

For what amount of time? An average of 12-14 minutes for a single use

Are there less polluting options? Yes

Does the plastic bag pollution adversely affect countless species? Yes

Do we even know the extent of damage we are causing these species and their habitat? No

So what are we talking about here? Changing peoples' ingrained, entrenched behavior so that when we start talking about statewide, and eventually - country-wide ban on petrochemical plastic bags our addiction will already be broken.

There is no place for these products in our future. The state of our planet dictates that we must change, so business as usual is not an option anymore. If it was, we wouldn't be having this hearing, the 200 counties across the U.S. that have put fees or restrictions on the plastic bags, wouldn't have. But they, like we, understand the urgency.

As for the detractors:

1. For the people that don't understand why plastic is a problem, please ask me or any member of the Less Plastic Please group to share studies, facts, data and stories of marine animals that have been killed by these products
2. For those who want to just ban plastic bags outright- great!! When the time comes to push this initiative at the state level, I look forward to seeing your passion for this issue shine through. Until then, please act as though the nickel is a nonstarter
3. For the petrochemical plastic bag industry, the decrease in usage of the products that you are familiar with is I'm sure a concern. But let this piece of legislation be your canary in the coal mine. The movement towards a sustainable world in clean energy, sustainable packaging, and build our cities is coming. There is no stopping it at this point. The planet demands it, so we have to change. Sustainable source material is the future of your industry. Adapt to it or fall by the wayside.

“The stone age ended not because we ran out of stones so will the age of oil end, but it will end far before we run out of oil” That’s a quote from the former oil minister of Saudi Arabia.

Other industries are seeing the colossal wave of change. The used luxury car market has a surplus 20% of inventory. This is a number that’s been steadily climbing. Why? Because everyone wants EVs. This trend is not going to reverse any time soon- or ever.

You owe it to your employees, your community, your planet to adapt to the change and pivot to sustainable 100% degradable sourcing. Because all it will take is a young wiz kid to come up with a cheap way to manufacture cassava-based plastic bags, set up global network distribution – and that’s it, you’ll be pushed out of the marketplace. How do I know? Because corporations are not just crafting greener practices for their companies, they have begun to internalize sustainability goals as top priorities. Take Apple for example. Not only are they, as of last year, running the entire company on renewable energy, but they are urging their suppliers to do the same with their Supplier Clean Energy Program portal. So sustainability isn’t just happening in a vacuum, it is permeating everywhere. It will continue to. It’s coming- so get ahead of it

Thank you

TESTIMONY TO THE HOWARD COUNTY COUNCIL

CB64-2019 AN ACT to require a specified fee on certain disposable bags

POSITION: Support

BY: Ruth Auerbach, District 3 Resident, 9455 Clocktower Lane, Columbia, MD 21046

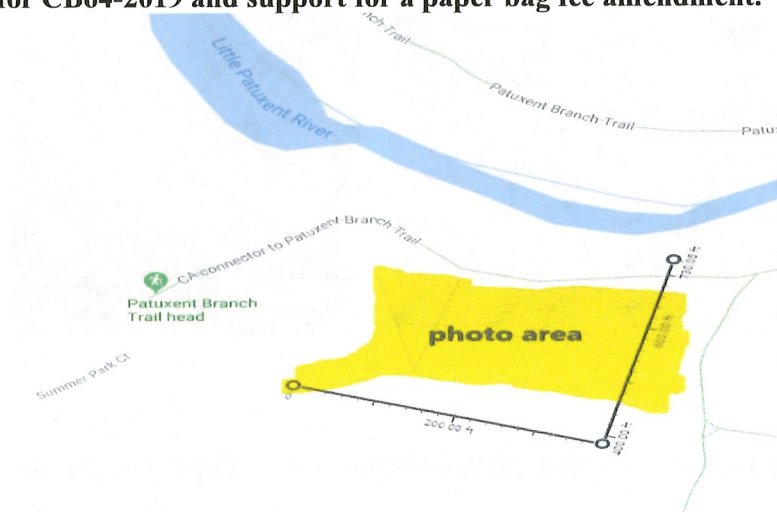
Date: November 18, 2019

I grew up in Montgomery County, MD, and frequently visit there. Montgomery County has been collecting a bag fee for seven years. The first time I encountered it at a grocery store, I admit I was annoyed. However, I quickly became accustomed to it, and I found that bringing reusable bags to the store is easy. I've acquired all my reusable bags for free through business promotions and my workplace.

Plastic waste is a serious environmental problem that will not go away easily. By imposing a disposable bag fee in Howard County, I anticipate that many Howard County residents will respond like I did and switch to reusable bags. We must start doing the easy things now. From the UN Report on Single-use Plastics, "We are already unable to cope with the amount of plastic waste we generate, unless we rethink the way we manufacture, use and manage plastics. Ultimately, tackling one of the biggest environmental scourges of our time will require governments to regulate, businesses to innovate and individuals to act."

To demonstrate the disposable bag problem in Howard County, on March 2, 2019, I took photos of the disposable bags on the the Columbia Association public space and townhome association property behind the townhouses 9449 – 9467 Clocktower Lane. I found over 30 bags in this relatively small plot. These bags are less than 200 yards from the Little Patuxent River, in an area which drains into it. Below I include an approximate map of the area and a few of the photos I took there.

**I urge your support for CB64-2019 and support for a paper bag fee amendment.**





**Again, I urge your support on CB64-2019 and support for a paper bag fee amendment.**



## Testimony in support of CB64-2019

November 18, 2019

Good evening. My name is Liz Feighner and I live in District 3.

**I am testifying in support of CB64** – putting a free on single use plastic. Plastic and its toxic additives pose serious risks to human health at every stage of the plastic lifecycle. In 2019, plastic production and incineration will release tons of greenhouse gases and toxic chemicals into the atmosphere – equivalent to the emissions from 189 coal-fired power plants. These emissions are growing rapidly because plastics are a by-product of oil and gas, and drilling for oil and gas, known as fracking, is undergoing a boom in the US. Fueled by cheap fracked gas, the world's largest fossil fuel companies are betting big on plastics (especially single use) and are massively expanding the infrastructure for making plastic -- ethane cracker plants, pipelines and petrochemical hubs. The American Chemistry Council projects that the industry will invest over \$200 billion in new or expanded facilities by 2025 in the US alone, locking us into decades of climate warming emissions.

A plastic bag's toxic trail starts with fracking, including in neighboring states of PA, W. Va and Ohio. Frontline communities and industry workers are exposed to highly toxic chemicals at fracking sites, at refineries that produce plastic products, and at incinerators that burn plastic waste, like the Bresco Incinerator in Baltimore. Numerous studies have documented a rise in cancer rates, birth defects, low birth weights, heart attacks and asthma for those living near these facilities. Of course, fracking and refining sites are often near low income communities of color, where residents lack the resources to fight back.

After using our plastic bag once, recycling is better than landfilling or burning, but we can't recycle our way out of this problem. When plastic is recycled, it is often used to make another item of lower quality, such as furniture stuffing or packing materials. This is referred to as 'downcycling.' Plastic can be downcycled only once or twice, before it is eventually discarded. Recycling is basically a prelude to the landfill or incinerator. In addition, recycling plastic costs more than making plastic items from virgin materials. The fracking boom has upended the recycled plastics markets so that municipalities are forced to spend more trying to dispose of all of this plastic. Some US localities have even stopped recycling. Howard County has more recycling restrictions and our county schools have announced that they will stop recycling in school cafeterias next fall.

Even with all our recycling, only 9% of the plastic produced in the world between 1950 and 2015 was recycled. In the United States, only 9.1% of the plastic was recycled in 2015 and the amount that we recycle is dropping. The Plastic Pollution Coalition estimates that only 2.9% of plastic will be recycled in 2019 in the United States and the United Nations estimates that by 2050, our oceans will have more plastic by weight than fish.

The US and other wealthy nations exported our recycled plastic waste to China until 2018, when China shut its doors because of contamination. This move exposed the problems and hidden truths of the global plastic recycling industry. Today, the world is literally drowning in plastic waste, and countries—even wealthy and developed ones—have been unable to cope. Our plastic waste is now being diverted from China to other low-income countries in Southeast Asia with poor regulations and

waste management. The burning of plastics in these countries contaminate their soil, water and air, and plastic waste in open landfills fouls their beaches and rivers. In the ocean, we've created five massive floating islands of plastic. The largest -- the Great Pacific Garbage Patch -- is twice the size of Texas. After years of recycling or throwing **away** our trash, we are finally seeing that there is no **'away.'** Our addiction to plastic leads to much suffering for our fellow humans as well as all other life on our one Earth.

All plastic eventually degrades into fragments and microplastics that leach toxic additives into our air and water, our food chain and eventually into us. Because of a lack of transparency regarding the chemicals and additives in plastics, we don't even know all of the potential harms.

For our climate and our health, we must reduce the production of single-use, disposable plastic bags, stop the development of new oil, gas and petrochemical infrastructure, and quickly transition to sustainable, and zero-waste communities. Putting a fee on plastic bags will be a first step towards the goal of reducing single-use shopping bags.

Sincerely,

Liz Feighner  
District 3

## CB64 Testimony – SUPPORT

Good evening. My name is Sue Hughen. I'm a member of Less Plastic Please.

At the beginning of 2019, the group was discussing topics on the future plastic bag fee bill. I volunteered to work on possible solutions for those individuals that might have a problem buying a reusable bag to avoid the fee.

In February, I and others, began making reusable bags from T-shirts. T-shirts were a readily available resource that didn't cost anything. We started having T-shirt drives at schools and collecting leftovers from church drives.

The construction process creates scraps that we take to H&M in the Columbia Mall. They turn them into insulation and give a 15% off coupon for each bag brought in. Win Win!

Looking for a store partnership for these free bags was the next step. LA Mart in Oakland Mills, Columbia stepped up to the challenge. Since they have a store in Silver Spring with a bag fee, they were very supportive of our idea. Before the Montgomery County fee, they were buying 50-60 cases of bags each month. After the Montgomery County fee, they buy 10 cases of bags each month. We placed a box near the registers and the bags are taken as fast as they are made; over 300 so far.

In September, we began a partnership with the Howard County Public School System Department of Special Education. The students are making the no-sew version of the T-shirt bags. They deliver them to LA Mart when finished. A DSE goal is to

have their students participate in a community service projects.

Other community outreach has been through Transition Howard County Repair Café. I have given demonstrations on how to make a T-shirt bag and set up a project table during the events. One of the best events was Kid's Day where we had many kids making their own no-sew bag to take home with them.

These community partnerships show that there is support throughout the County for this bill and reducing plastic pollution.

We asked the State of Maryland to enable Howard County to enact this bill. It may not be a perfect bill, or satisfy everyone's desires. However if we do not act now, it will not meet anyone's goals.

Please vote YES on CB64.

Sue Huguen  
5621 Columbia Rd. #403  
Columbia, MD 21044  
410-952-4896



HOWARD COUNTY COUNCIL  
AFFIDAVIT OF AUTHORIZATION  
TO TESTIFY ON BEHALF OF AN ORGANIZATION

I, Paul J. Baicich, have been duly authorized by  
*(name of individual)*

Our Revolution Howard County to deliver testimony to the  
*(name of nonprofit organization or government board, commission, or task force)*

County Council regarding CB64 to express the organization's  
*(bill or resolution number)*

support for/ ~~opposition to / request to amend~~ this legislation.  
*(Please circle one.)*

Printed Name: Paul J. Baicich

Signature: \_\_\_\_\_

Date: 10 Nov 19

Organization: Our Revolution Howard County

Organization Address: 7237 Swan Point Way, Columbia MD 21045

7237 Swan Point Way, Columbia MD 21045

Number of Members: 125+

Name of Chair/President: Paul J. Baicich, Chair

*This form can be submitted electronically via email to [councilmail@howardcountymd.gov](mailto:councilmail@howardcountymd.gov) no later than 5pm the day of the Public Hearing or delivered in person the night of the Public Hearing before testifying.*

# TESTIMONY IN FAVOR OF CB64-2019,

by Paul J. Baicich, Chair, Our Revolution Howard County

**18 November 2019**

I'm here to express our support for CB64, the bag-fee proposal introduced by: Council Members Opel Jones and Christiana Mercer Rigby.

I hope to keep my comments down to two-and-a half minutes.

I love plastic. I love the internal combustion engine. I love antibiotics.

But as everyone here knows, we can have too much of a good thing.

Antibiotics save lives, but *if* they are prescribed for every time you have the sniffles or have a cough, the social risks add up to a bacterial resistance that is a danger to all of us.

The internal combustion engine is responsible for major advances over the last century, but the social costs of the excessive use of private engines with CO<sub>2</sub> emissions threaten the environment in the U.S. (e.g., Los Angeles, Houston, New York, Washington-Baltimore, Denver) and elsewhere (e.g., in China and India) on our planet.

Plastics provide us with wonderful and essential tools, from medical devices (e.g., prosthetics) and building materials to those fabulous green-colored, county-provided compost bins expanding across Howard County.

But single-use plastic bags are a waste.

The social costs - in terms of clean-up, threats to waterways and wildlife, the fact that bags are *not* free after all, and that recycling options have been virtually closed – simply illustrate that their time, their practicality, has passed.

It's time to start seriously changing *public behavior* on single-use plastics, starting with plastic bags. A fee *will* do that, having people think twice about walking out

of a store with a bag that's not the one they walked in with! If not this proposal, what easier or more logical steps can be considered to change behavior?

Besides, the use of the fees, as described in CB64, include some very creative and forward- thinking proposals, including stream clean-ups, anti-littering education, and more.

*This should be simple, folks.* The hard stuff would include seriously addressing the internal combustion engine that I mentioned (and that most of us used to get here tonight), the lack of serious public transportation in (and through) the county, and the resulting greenhouse effect. We can save that heavy stuff for some other time. Let's get this easy stuff out of the way.

Thankyou.

Paul J. Baicich  
7237 Swan Point Way  
Columbia, MD 21045  
410-992-9736





HOWARD COUNTY COUNCIL  
AFFIDAVIT OF AUTHORIZATION  
TO TESTIFY ON BEHALF OF AN ORGANIZATION

I, Patricia Hersey, have been duly authorized by  
*(name of individual)*

Less Plastic Please to deliver testimony to the  
*(name of nonprofit organization or government board, commission, or task force)*

County Council regarding CB64 to express the organization's  
*(bill or resolution number)*

support for / opposition to / request to amend this legislation.  
*(Please circle one.)*

Printed Name: Patricia Hersey

Signature: Patricia Hersey

Date: 11/5/19

Organization: Less Plastic Please

Organization Address: 9362 Farewell Rd., Columbia

9362 Farewell Rd., Columbia

Number of Members: 20

Name of Chair/President: Patricia Hersey

*This form can be submitted electronically via email to [councilmail@howardcountymd.gov](mailto:councilmail@howardcountymd.gov) no later than 5pm the day of the Public Hearing or delivered in person the night of the Public Hearing before testifying.*



9462 Farewell Rd  
Columbia, MD 20145  
11/18/19

Howard County Council  
George Howard Building  
3430 Court House Drive  
Ellicott City, MD 21043

Dear County Council members,

Good Evening. My name is Pat Hersey, Co-Founder of Less Plastic Please. I am here tonight to speak in favor of CB64, the bill for a completely avoidable fee on plastic bags.

First, will all those in support of this bill please stand. Please note the reusable bags that Less Plastic Please sews from donated t-shirts. We say if we have a t-shirt, you have a bag. Thank you all.

When Less Plastic Please birthed the idea for this bill, we had two objectives: to address the immediate issue of the plastic crisis in Howard County and the long-term issue of our throwaway society through behavior change.

As we researched for the best way to reach these goals, we found the key to success are strategies that educate and fit into the user's life style. A fee fits the bill. Think of the fee like a nudge.

Unlike a ban, the value of a nudge is that they do not attempt to force sudden and abrupt changes in consumer behavior. It simply helps sway folks to make a choice. For the change to be lasting, it needs to be voluntary and based on choice. [1] Examples of nudges are candy by a cash register or "Do you want fries with a that?"

Despite the size of the fee, the impact is effective due to a psychological principle called loss aversion. Once you own something, psychologically, you do not want to surrender it, even if it is a nickel. [2]

Research also points out that people tend to be somewhat mindless, passive, decision makers. [3] So a small adjustment, such as a 5-cent fee, disrupts habitual mindless behaviors and helps people draw a tighter linkage between environmental awareness and their actions. [4]

This bill creates a stumbling block for mindless decision making.

We understand that change is hard.

However, studies show that gradual change is most effective and long lasting.[5]

This bill gives consumers time to adjust to change. Change that must happen.

We wanted to respect the intelligence of the citizens of Howard County by giving choices. Choices gives ownership to our actions leading to increased awareness of those actions. [6] Fees are designed to persuade and to educate, not dictate. The consumer also has the choice to pollute. But with this bill, the polluters pay.

We were aware of the plastic bag industry and wanted be considerate of the employees, which I believe is approximately 160. We wanted to allow for a gradual transition away from plastics, as we all need to do.

We took into consideration the impact on low-income citizens.

Aside from the t-shirt bags Less Plastic Please makes, this bill will allow for free bag giveaways. When the overhead is lower from not providing bags, everyone benefits, especially low-income people. Again, this is a completely avoidable fee.

And, of course, we focused on the dangers of plastic.

Time does not allow me to discuss all the detrimental impacts. But I do know, the more you learn about plastic, the less you sleep at night.

Lastly, we examined our values.

A disposable society is a very expensive place to live.

We must start caring about our planet as seriously our teens and pre-teens care. Right now, we have a choice. This next generation will need to live with this our choice. Let's make sure it is the right choice.

The County Council has a golden opportunity to turn the tide on plastic pollution in Howard County and set new social norms that will make our children proud. Let's be the leadership others will follow.

Thank you.

[1] <https://fourminutebooks.com/nudge-summary/>

[2] <https://www.psychologytoday.com/us/blog/neuronarrative/201707/8-reasons-why-its-so-hard-really-change-your-behavior>

[3] <https://www.vox.com/the-highlight/2019/8/20/20806651/plastic-bag-ban-straw-ban-tax>

[www.smithsonianmag.com/smart-news/why-charging-plastic-bags-makes-people-give-them-180953315/](http://www.smithsonianmag.com/smart-news/why-charging-plastic-bags-makes-people-give-them-180953315/)

<https://www.aeaweb.org/conference/2014/retrieve.php?pdfid=189>

[4] <https://qz.com/1173081/the-behavioral-economics-that-explain-why-we-need-a-tax-on-disposable-coffee-cups/>

[5] <http://www.allaboutbags.ca/reduction.html>

[6] <https://www.i-scoop.eu/power-choice/>

Hello county council. Thank you for taking the time to listen to my thoughts on CB64. I'm Iris Zhan, I'm a 15 year old sophomore from River Hill High School, and I'm back in this building to testify in favor of a fee on plastic bags countywide. I want to thank the state delegation, that maryland general assembly, the governor, and the council for helping us make it this far.

We are almost done this fight but there are <sup>so many</sup> more fights. I'm not here to tell you scary statistics like by 2050 there will be more fish than plastic or that we are eating a credit card of plastic each week to make you care about this issue. Howard County prides itself on being sustainable and caring about nature, but this pride is very passive, and this needs to change.

We need to be proactive as we are running out of time as we are facing numerous ecological crises. We need to recognize that business as usual cannot continue and that this bag fee is the first best step in the best direction away from business as usual. This will turn the tide in the fight against plastic pollution.

We may be concerned about small businesses but this will help small businesses, as this financial incentive <sup>net</sup> to use plastic bags means they can spend <sup>less</sup> money buying plastic bags. This fee is avoidable and there are easy ways to make reusable bags. I don't want my future to become a dystopian novel reality of a world trashed with toxic plastic.

I know that we must build a better world because it is possible and we have no other choice. So right here right now we draw the line. I will turn 16 on Wednesday and all I want for my birthday is a sustainable future I can look forward to. Now it's up to you to decide our fate. Thank you.

Good evening. My name is Sam Seliger. I am a Senior at Howard High School, where I am in the Environmental Club, and a Columbia resident. In one week, I will be old enough to vote. I am here to voice my support for CB64-2019, which will impose a five-cent tax on disposable plastic bags.

It is estimated that 100 billion single-use plastic bags are used in the United States in a single year.<sup>1</sup> According to Waste Management, only 1% of them are recycled.<sup>2</sup> That means that every year, 99 billion plastic bags are thrown out, either going to landfills, or into the streets and natural environment as litter, where they will take five centuries to decompose, photo-degrading into small toxic particles called micro-plastics.<sup>1</sup>

Littered plastic bags are dangerous for wildlife. When they eventually make their way to rivers, bays, and oceans, they are often eaten by turtles, fish, and other wildlife, and residual plastic pollution makes its way up the food chain, poisoning even more animals. One third of leatherback sea turtles are found with plastic in their stomachs.<sup>1</sup> It is estimated that 60% of all seabirds have ingested pieces of plastic, which can cause them to starve.<sup>3</sup> Bags can also end up in huge collections of marine waste, such as the Great Pacific Garbage Patch, a floating island of plastic garbage far larger than the state of Maryland.<sup>3</sup>

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<sup>1</sup> "10 Facts About Single-Use Plastic Bags," Center for Biological Diversity  
[https://www.biologicaldiversity.org/programs/population\\_and\\_sustainability/sustainability/plastic\\_bag\\_facts.html](https://www.biologicaldiversity.org/programs/population_and_sustainability/sustainability/plastic_bag_facts.html)

<sup>2</sup> "Guidelines - Plastic vs Paper Bags," Waste Management Northwest  
<http://www.wmnorthwest.com/guidelines/plasticvspaper.htm>

<sup>3</sup> "Ocean Plastics Pollution," Center for Biological Diversity  
[https://www.biologicaldiversity.org/campaigns/ocean\\_plastics/index.html](https://www.biologicaldiversity.org/campaigns/ocean_plastics/index.html)

Overall, plastic bags make up a sliver of the ever-growing climate crisis that threatens all life on Earth. But there is an easy first step towards lessening our use, and we desperately need to take advantage of it. Governments across the world, from the nations of Bangladesh and Pakistan, to nearby Montgomery County, have enacted laws banning, or creating disincentives for, single-use plastic bags.<sup>4</sup>

These laws work. In Chicago, the percentage of grocery shoppers using single-use plastic bags went from 82% to 55% in the year after a seven-cent tax was instituted.<sup>5</sup> The percentage of shoppers using reusable bags, and of those not using bags at all, both more than doubled.

After Montgomery County levied its five-cent tax in 2012, the proportion of customers who used disposable bags dropped by more than half, according to one survey.<sup>4</sup> The number of plastic bags found in nearby waterways fell by over 65%.<sup>6</sup>

The evidence is clear. A small tax on plastic bags can drastically reduce their use, and as a result, reduce plastic pollution.

In order to keep Howard County's waterways clean, and to chip away at the massive onslaught of plastic trash thrown into the environment every day around the world, we need to lessen our plastic trash.

This tax will not stop climate change, but it is a step in the right direction.

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<sup>4</sup> "Plastic Bag Bans Have Been Enacted in Over 400 Cities And States. But Did It Reduce Waste?" Vox <https://www.vox.com/the-highlight/2019/8/20/20806651/plastic-bag-ban-straw-ban-tax>

<sup>5</sup> "Skipping The Bag: Assessing the impact of Chicago's tax on disposable bags." Homonoff, Tatiana, et al. [https://www.ideas42.org/wp-content/uploads/2018/09/Bag\\_Tax\\_Paper\\_final.pdf](https://www.ideas42.org/wp-content/uploads/2018/09/Bag_Tax_Paper_final.pdf)

<sup>6</sup> "A Maryland County's Nickle Tax for Plastic Bags is Paying Off, But Not As Planned," Washington Post [https://www.washingtonpost.com/local/md-politics/a-maryland-countys-nickel-tax-for-plastic-bags-is-paying-off-but-not-as-planned/2016/07/04/5b6acbc0-3e28-11e6-84e8-1580c7db5275\\_story.html](https://www.washingtonpost.com/local/md-politics/a-maryland-countys-nickel-tax-for-plastic-bags-is-paying-off-but-not-as-planned/2016/07/04/5b6acbc0-3e28-11e6-84e8-1580c7db5275_story.html)

Good evening, we are Chloe Shader and Bella Saunders of Be the Change Club, Atholton High School's activism club.

We believe that that the forest conservation act needs to be passed because:

- 1) We need to comply with state law.
- 2) Trees are important.

Let's expand on that second point a little bit. My lungs are expanding right now, talking to you, because of trees! And while there's a lot of hype behind holding up the sky, it turns out that trees do something arguably more important: holding together the ground. Especially within our changing climate, trees are more important than ever and the changes in this act would hold developers accountable for their actions. Howard County's location in the Chesapeake Bay watershed only adds to the weight of this bill--the health of our forests will impact the health of this important estuary.

To protect trees and forests is to value our environment: as a place to live in, learn from, and enjoy.

The last time that the County updated the forest conservation act was in the 1990s. I wasn't even born then! That's when people got their movies from blockbuster video, Friends was still on air, and barely anyone had a cellphone! Clearly, this legislation is in dire need of an update. We need to turn our focus to the future to protect our forests.

We can protect our environment not only by protecting our forests but also by decreasing our dependence on single-use plastic bags. Most of us pay little mind to the amount of single use plastic that we use but unfortunately, our actions have caught up to us. The tax on disposable bags would combat climate change and pollution and the prioritization of education and equity in this bill will serve as an asset to a variety of groups in our community. Again, our location makes the actions of our county even more important: plastic waste from Howard County can be washed into our watersheds, and eventually, the Chesapeake Bay. By using sustainable alternatives to single-use bags, each and every one of us can take a step in conserving our oceans and our planet.

We often talk about Howard County being a model for success, equity, and community. However, we require a healthy environment to support these ideals. The people in our county deserve the opportunity to fight for the issues that matter most to them. We deserve the opportunity to play outside and not live in fear that our future children won't have the opportunity to do the same.

By committing to protecting our forests, replanting trees within the same watershed, raising the cost and maximum deforestation limit for developers, and decreasing our dependence on single use plastic, we can continue to sustain our thriving city and a safe, healthy community for ourselves, our families, and our future.

# Stop using plastic bags

Hello my name is Daksh Bahl.

I am here to say why we need to stop using plastic.

Plastic kills marine animals, ecosystems, and is hazardous to humans. Did you know that 18.2 trillion pounds of plastic have been produced around the world!?

The average human throws away 185 pounds of trash a year, globally producing 320 million tons of plastic annually.

A recent report reveals that using plastic containers to store or heat food in microwaves could pose a potential health risk to children. Thyroid function which regulates energy in the body is altered by BPA.

BPA is a compound present in plastics and it causes type 2 diabetes, impacts blood pressure, affects body weight and causes other ailments.

Early research suggests that BPA can harm the heart and arteries, leading to troubles like abnormal heartbeat.

Plastic waste kills up to a million seabirds a year. When seabirds ingest plastic it takes up space in their abdomen causing starvation. Many seabirds are found dead with their stomachs full of waste.

Plastics in our oceans affects creatures large and small.

We need to stop using plastic in order to save our WORLD!!!!!!!

So this is why I am asking you to support CB64. Taxing plastic bags is one way that we can start to make a difference. The money made can be used to educate people about the harmful effects of single use plastics. It really is just a habit change. If we educate people about the dangers of using too much single use plastic, we will see that change. Please support CB64. Our future depends on your support.



Good evening, my name is Grace Edmondson. I am 6<sup>th</sup> grade student at Patuxent Valley Middle School. I come here tonight to offer my support for the bill that would have Howard County residents pay a small fee for using plastic bags.

- Howard County has always been a leader within our state and is often looked to for creativity and trailblazing ideas when dealing with complex problems. By passing this law, Howard County could be an example to other counties in the state and across the nation by leading the way in fighting against global warming, pollution and waste. Taking this first and important step could lead to other ideas and opportunities in the goal to have a plastic-free world. Who knows? We could even be a county that had numerous zero-waste stores.
- Percentage wise- a few people in this county are doing their part to reduce their plastic habits. But a few people isn't enough. Simply having some people that recycle, use reusable straws and bags isn't enough. We need more action by all and the plastic bag fee would enact that change.
- I have heard that some think the fee would be too costly for some residents. Reusable bags are often given away for free at local events or from organizations or they could be purchased for low prices at places like grocery stores or even the dollar store. I know you might be thinking of the cost? The cost to me is my future and the future of my little sister and the future of our planet. In my opinion, the cost to not do anything is too high.

I thank you for listening to my thoughts and I implore you to cast your vote for not only my future but also the future of all Howard County children.



**HOWARD COUNTY COUNCIL  
AFFIDAVIT OF AUTHORIZATION  
TO TESTIFY ON BEHALF OF AN ORGANIZATION**

I, Sarah Price, have been duly authorized by  
*(name of individual)*

Maryland Retailers Associatio to deliver testimony to the  
*(name of nonprofit organization or government board, commission, or task force)*

County Council regarding CB64-2019 to express the organization's  
*(bill or resolution number)*

support for / opposition to / request to amend this legislation.  
*(Please circle one.)*

Printed Name: Sarah Price

Signature: \_\_\_\_\_

Date: 11/15/19

Organization: Maryland Retailers Association

Organization Address: 171 Conduit St, Annapolis, MD 21401

171 Conduit St, Annapolis, MD 21401

Number of Members: About 150 Retailer Members

Name of Chair/President: Cailey Locklair

*This form can be submitted electronically via email to [councilmail@howardcountymd.gov](mailto:councilmail@howardcountymd.gov) no later than 5pm the day of the Public Hearing or delivered in person the night of the Public Hearing before testifying.*



HOWARD COUNTY COUNCIL  
AFFIDAVIT OF AUTHORIZATION  
TO TESTIFY ON BEHALF OF AN ORGANIZATION

I, Defne Demirekler, have been duly authorized by  
*(name of individual)*

Less Plastic Please to deliver testimony to the  
*(name of nonprofit organization or government board, commission, or task force)*

County Council regarding CB64-2019 to express the organization's  
*(bill or resolution number)*

support for / opposition to / request to amend this legislation.  
*(Please circle one.)*

Printed Name: Defne Demirekler

Signature: *Defne Demirekler*

Date: 11/18/20

Organization: Less Plastic Please

Organization Address: \_\_\_\_\_

Number of Members: \_\_\_\_\_

Name of Chair/President: Pat Hersey

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HOWARD COUNTY COUNCIL  
AFFIDAVIT OF AUTHORIZATION  
TO TESTIFY ON BEHALF OF AN ORGANIZATION

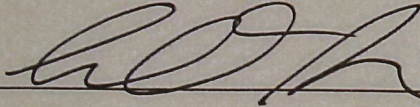
I, Carolyn Parsa, have been duly authorized by  
*(name of individual)*

Sierra Club Howard County to deliver testimony to the  
*(name of nonprofit organization or government board, commission, or task force)*

County Council regarding CB-62 & CB-64 to express the organization's  
*(bill or resolution number)*

support for / opposition to / request to amend this legislation.  
*(Please circle one.)*

Printed Name: Carolyn Parsa

Signature: 

Date: November 18, 2019

Organization: Sierra Club Howard County

Organization Address: 7338 Baltimore Ave, College Pk

7338 Baltimore Ave, College Pk

Number of Members: 1450

Name of Chair/President: Carolyn Parsa

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