

Background

OpinionWorks has completed two representative surveys of District of Columbia residents and businesses for the Alice Ferguson Foundation on behalf of the District Department of the Environment (DDOE).

DDOE specified two survey populations for this work:

1. Residents across the District of Columbia, and
2. District businesses that are responsible for implementing the bag fee.

The surveys assessed the public's experience with the disposable bag law, now that the law has been in place for three years. DDOE specifically sought to measure to what degree the law has impacted disposable bag use and to measure the actual change in quantity of disposable bags used.

Abstract of Findings

As will be described in this report, both surveys measured a significant reduction in disposable bag use in the District of Columbia. Four out of five District residents are using fewer disposable bags, with 10 bags per week coming into the average household before the law went into effect to four bags today. More than three-quarters of businesses are providing fewer disposable bags to their customers, resulting in 50% fewer disposable bags being purchased by businesses compared to before the law was implemented.

The result has been much less plastic bag litter, with two-thirds of both residents and businesses seeing fewer bags in the form of litter around their neighborhoods and properties. Fifty percent of businesses reported that they were saving money as a result of this law, and only one business in four said they were experiencing any negative impacts from the bag fee.

Overall, substantial majorities of both residents and business owners and managers support the bag fee personally, with 53% of residents and 63% of businesses supporting the law outright. Only 16% of residents and 8% of businesses said they were bothered by the law, while the rest said they had no feelings about the bag law either way.

Residents Survey Methodology

To create the random sample, OpinionWorks interviewed 600 randomly selected District residents by telephone from January 16 to 20, 2013. This citywide survey has a potential sampling error of no more than $\pm 4.0\%$ at a 95% confidence level, meaning that at least 95% of the time the survey results would differ by no more than that margin if every District resident had been interviewed.

Interviewees were drawn from a commercially available database of landlines; cellphones were added to the sample to increase its representative nature. The sample was balanced geographically and demographically during the interviewing process, and respondents were screened to ensure that only District residents were interviewed.

Weights were applied to bring the population sample into strict compliance with the demographic makeup of the District of Columbia, as reflected in the latest estimates from the U.S. Census Bureau.

Business Survey Methodology

A total of 177 District businesses were interviewed over an eight-week period from February 14 to April 9, 2013. Interviews were conducted face-to-face or by telephone. The Alice Ferguson Foundation played a major role in coordinating the foot canvas portion of this work. Personnel from the Alice Ferguson Foundation, the Anacostia Watershed Society, and OpinionWorks all conducted in-person interviews. To increase the sample size and the representativeness of the survey sample, OpinionWorks conducted additional interviews by telephone.

OpinionWorks began with a database, provided by the District Government, of businesses that are responsible for implementing the 5-cent disposable bag fee. Throughout the sampling process, the interviewing team sought a cross-section of businesses, so that there was good representation of all sectors.

Survey respondents were screened to ensure that their business had been in existence since 2009—before the law was enacted—so that they could provide a before-and-after perspective on their disposable bag use. They were also screened to ensure that they were aware of their obligation to implement the law.

Respondents were typically the business owners or managers. One-quarter (25%) were business owners, and 61% were managers, general managers, or presidents. The vast majority (73%) were independent businesses, rather than being part of a larger regional or national business.

Interviews were conducted in English, Spanish, Mandarin, and Korean. OpinionWorks employed English/Spanish bilingual interviewers, and the District Government provided interpreters for additional languages as needed.

The following narrative summarizes the findings from both the residents and business surveys.

Residents Survey Findings

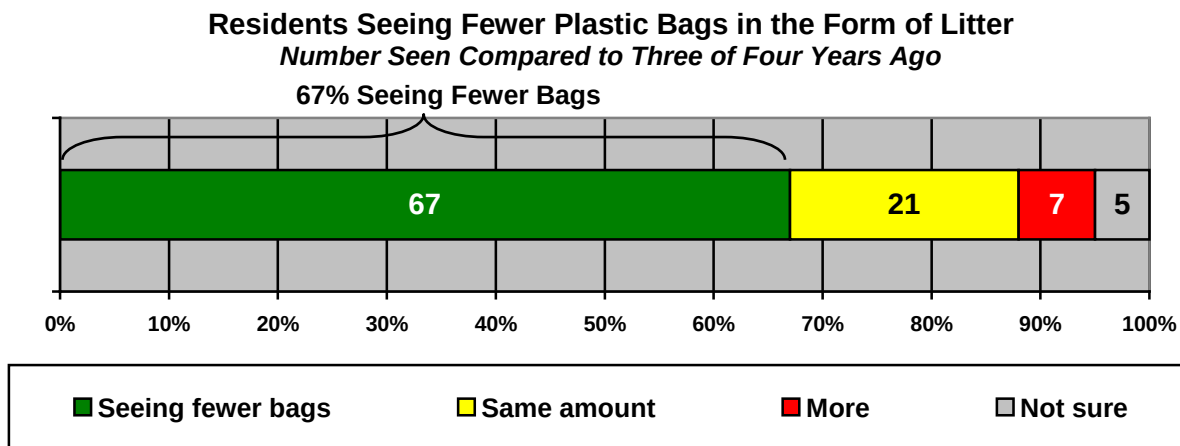
Overview

The residents survey documents strong public acceptance of the disposable bag law and an overwhelming reduction in bag use among District residents. There are several clear survey findings that demonstrate the impacts of the law. These are the most significant:

- Two-thirds of residents (67%) are seeing fewer littered plastic bags compared to three or four years ago.
- An overwhelming number of residents (80%) said they have reduced their usage of disposable bags since the law went into effect.
- On average, the median resident estimated that their household has moved from using ten disposable bags a week before the law to four bags a week in 2013.
- Four out of five residents (80%) are carrying reusable bags with them when they shop; 58% are carrying them “always” or “most of the time.”
- A majority of residents (53%) support the disposable bag law, compared to only 16% who said they are “bothered” by it. Almost one-third (30%) said they have no feelings about the law either way.

Significant Reduction in Plastic Bag Litter

Two-thirds (67%) of District residents said they are seeing fewer plastic bags in the form of litter today compared to three or four years ago. Only 7% are seeing more bags, and 21% said they are seeing about the same amount.



“Compared to three or four years ago, are you seeing (randomize): [more, fewer, (or) about the same amount of] plastic bags as litter around D.C.?”

The reduction in plastic bag litter is benefitting all parts of the District of Columbia. The percentage of residents who are seeing fewer plastic bags in the form of litter ranges from 57% in Ward 3 to 77% in Ward 1.

Trend in Plastic Bags as Litter by Ward

Ward:	1	2	3	4	5	6	7	8
Fewer	77%	72%	57%	70%	69%	68%	67%	66%
Same	15%	20%	33%	21%	25%	18%	21%	18%
More	*0%	4%	2%	5%	3%	12%	5%	12%
Not sure	8%	4%	8%	4%	3%	2%	6%	4%

The reduction of plastic bag litter is even more striking considering that during that same period residents have not seen any improvement in how free of trash their neighborhoods are overall. In fact, today the grades residents gave their neighborhoods were arguably worse than they were in 2010, as illustrated in the table below.

- When asked in 2010 to grade their neighborhoods for being “clean and free of trash,” 21% of respondents gave their neighborhoods an “A” and 39% a “B,” for a total of 60% giving a positive grade.
- In the 2013 survey, 19% of respondents gave their neighborhoods an “A” and 34% a “B,” for a total of 53% giving a positive grade.
- Twelve percent of respondents graded their neighborhood a “D” or “F” in 2010, compared to 17% in 2013.

Residents Grade Their Neighborhood for Being “Clean and Free of Trash”
2010 vs. 2013

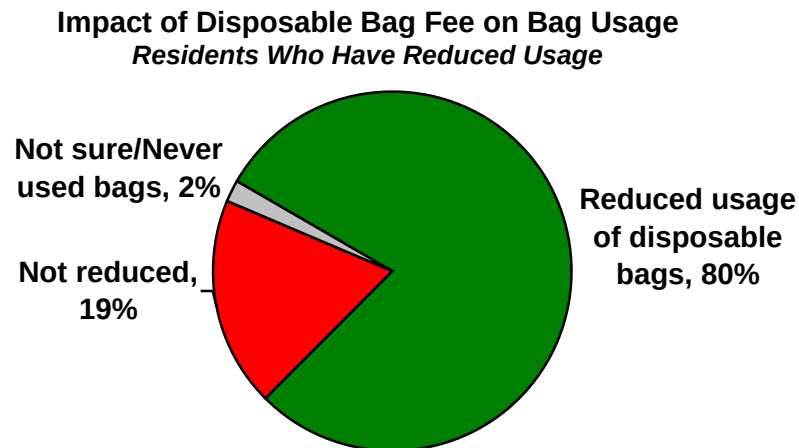
Grade:	A	B	C	D	F	Not sure
2013	19%	34%	29%	11%	6%	1%
2010*	21%	39%	28%	6%	6%	1%

**Random telephone survey of 600 District residents conducted for DDOE by OpinionWorks, July 21–28, 2010*

“...If I were to ask you to grade how clean and free of trash the streets, sidewalks, alleys, and parks in your own neighborhood are on an A to F scale where ‘A’ is best and ‘F’ is worst, what grade would you give?”

Overwhelming Reduction in Disposable Bag Use

The 5-cent disposable bag fee has resulted in a significant behavior change by District residents. An overwhelming 80% of residents said they have reduced their usage of disposable bags since the 5-cent fee was introduced in 2010. Only 19% said they have not reduced their bag usage.



"As you may recall, in 2010 D.C. introduced a new 5-cent fee on disposable bags at stores and carry-outs. Have you reduced your usage of disposable bags since the 5-cent bag fee was introduced in 2010?"

This significant reduction is found in all parts of the District of Columbia and among all demographic groups. For example:

- 74% of African-American residents have reduced their bag use, as have 88% of white, 86% of Hispanic, 87% of Asian, and 91% of mixed-race residents.
- Residents of all ages are overwhelming likely to have reduced disposable bag use, though the reduction is slightly broader among younger residents, with 83% of those under age 50 reducing their bag use, compared to 75% of those over 50.

Quantifying the Reduction in Residents' Disposable Bag Use

Residents estimated that their households have reduced their disposable bag use from ten bags to four bags per week since the law went into effect.

- On average, residents estimated that four disposable bags came into their household during the seven days prior to the survey.
- Almost one-quarter of residents (23%) said they used *no* disposable bags during those seven days.
- By contrast, residents estimated their bag usage at 10 bags per week before the law was introduced in 2010.
- Only 3% of residents said their household used *no* disposable bags prior to the implementation of the law.

Residents' Estimates of Disposable Bag Usage
Number of Bags Entering Household in Seven Days

Number of Bags	Typical Week Before the Law	"The Last Week" (Jan. 2013)
0	3%	23%
1	2%	7%
2	5%	9%
3-5	21%	25%
6-9	11%	10%
10-19	30%	17%
20+	20%	8%
Not sure	8%	1%
Mean	14.51 bags	6.99 bags
Median	10 bags	4 bags

"Before the 5-cent bag fee was introduced in 2010, about how many disposable bags came into your household from stores and carry-outs in a typical week?"

"If you were to think back over the last week, in other words the last seven days, and try to estimate the number of disposable bags that have come into your household from stores and carry-out restaurants located in D.C., what number would you say?"

During the seven days immediately preceding this survey, residents took more disposable bags from grocery stores than from other types of stores. The average (median) customer carried out one disposable grocery store bag and none from any of the other types of stores.

Expressing the average as a mean provides more differentiation, but it also gives greater weight to the small number of customers that use *many* disposable bags. As a mean, it is evident that grocery stores account for more than three times as many disposable bags used by residents, compared to the next largest purveyor of disposable bags, convenience stores.

Residents' Use of Disposable Bags by Type of Business

Number of Bags	Grocery Stores	Liquor Stores	Convenience Stores ¹	Department Stores
Zero²	45%	86%	61%	80%
1	5%	4%	12%	5%
2	10%	4%	11%	3%
3-5	17%	4%	11%	7%
6-9	7%	*0%	1%	2%
10-19	11%	*0%	2%	2%
20+	4%	*0%	1%	1%
Not sure ²	1%	1%	1%	1%
Mean	4.28	0.44	1.32	0.93
Median	1	0	0	0

"I would like to ask about some specific types of stores located in D.C. Again, just give me your best guess. Over the last seven days, how many disposable bags have you gotten from...?"

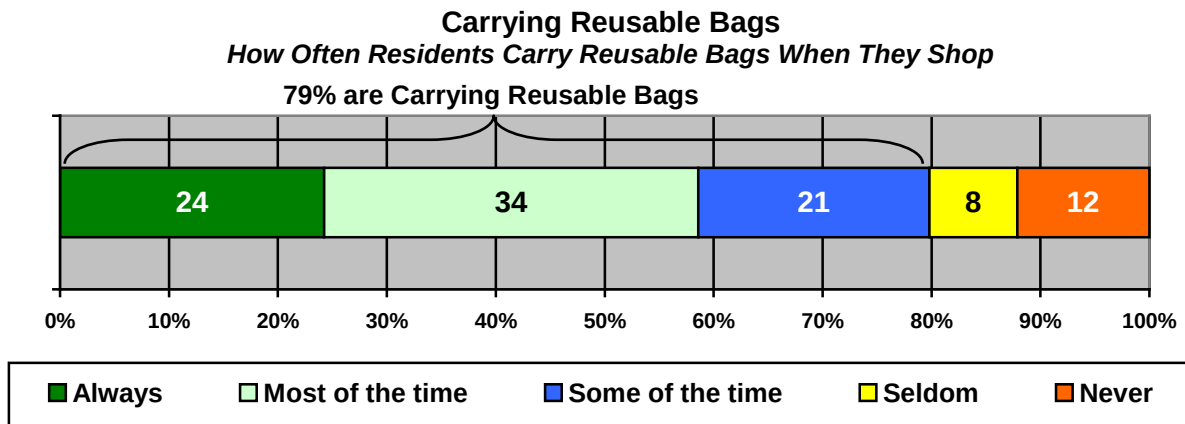
¹"Convenience stores or pharmacies like CVS and Rite Aid"

²The 23% who said in a prior question that they use no bags at all, and the 1% who said they were not sure about their bag use were not asked this question. They were automatically coded as zero or not sure, respectively, in the table above.

Continued or additional enforcement of the bag law may be required. Sixty-six percent (66%) of residents said they were always charged the 5-cent fee when they got a disposable bag from “grocery, liquor, convenience, pharmacy, and department stores.” But one resident in four (23%) said they were *only sometimes* charged the 5-cent fee. A handful of others said they never used disposable bags or were not sure.

Widespread Use of Reusable Bags

Four out of five residents (79%) said they carry reusable bags with them when they shop. Of this 79%, 24% said they “always” carry reusable bags, 34% carry them “most of the time,” and 21% “some of the time.” Only 20% “seldom” or “never” carry reusable bags.



“Are you bringing reusable bags with you when you shop always, most of the time, some of the time, seldom, or never?”

Bringing reusable bags is by far the leading way residents avoid paying the disposable bag fee. While 61% said they bring reusable bags to avoid the fee, another 16% said they usually carry out their purchases without a bag. Fifteen percent said they simply do not try to avoid the fee.

Residents said that the greatest reason they continue to use disposable bags is forgetting to bring bags with them when they shop. Almost half (48%) of residents who had used at least one disposable bag in the prior week said that was the reason. The other reasons followed well behind and are described in these basic categories:

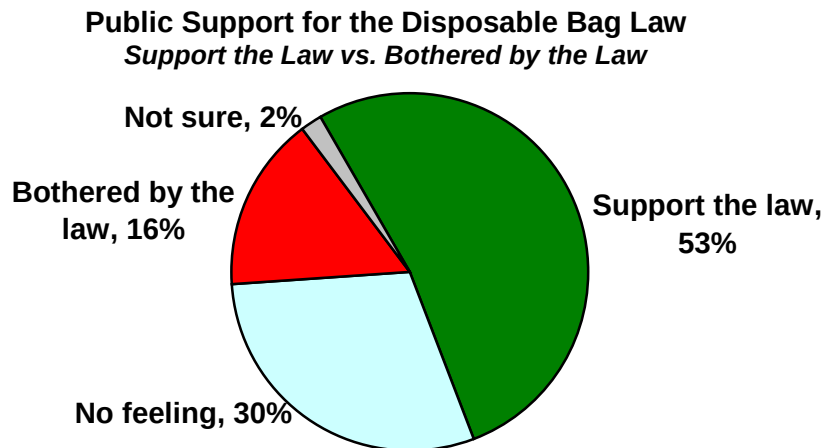
- Convenience and self-described “laziness;”
- Impromptu and unplanned shopping;
- Reusing the disposable bags at home as trash bags or to pick up pet waste;
- A concern that reusable bags are not sanitary or would become contaminated by spilled or greasy food; and
- A handful who volunteered that they were not being charged for disposable bags.

By a large margin, residents reuse or recycle their disposable bags, rather than throwing them away. Nearly two-thirds (63%) said they usually reuse their disposable bags, and 26% said they usually recycle them. Only one in ten (10%) said they typically throw the bags away.

Most residents (78%) do not shop outside the District of Columbia to avoid the bag fee. Twelve percent said they shop outside the District “often” to avoid the fee, and 9% said they do that “occasionally.”

Strong Public Support for the Fee

A majority of residents (53%) support the disposable bag law, while only 16% said they are “bothered by the law.” Thirty percent of residents said they have “no feelings about it either way.”



“Do you support the law, are you bothered by the law, or do you have no feelings about it either way?”

Opposition to the law is very low across the District of Columbia. The number who are “bothered” does not exceed 23% in any ward of the city. Outright support reaches past 70% in Wards 2 and 3.

Support for the Bag Law by Ward

Ward:	1	2	3	4	5	6	7	8
Support	60%	76%	72%	59%	54%	54%	35%	34%
No feelings	21%	15%	18%	24%	26%	24%	43%	46%
Bothered	17%	7%	10%	17%	17%	23%	20%	16%
Not sure	2%	2%	*%	*%	3%	*%	2%	4%

Understanding the Purpose of the Law

A majority of residents understand the bag law to be an agent of behavior change. When asked to choose its main purpose from a short list, 51% said the law was intended “to encourage people to use fewer disposable bags.” A smaller number (38%) see the main purpose as raising funds, whether general revenue, or for a specific purpose.

Main Purpose of the Law as Understood by Residents

To encourage people to use fewer disposable bags	51%
To raise general revenue for the D.C. Government	23%
To raise money for a specific purpose	15%
Or something else	8%
All of those purposes (Not read)	2%
Not sure	6%

"Which of these do you think is the main purpose of the law?" (Read list.)

Of the 8% who said the purpose was "something else," most identified an environmental goal, or Anacostia River restoration specifically.

Directly asked in an open-ended question whether they could name "any specific purpose for the money collected from the fee," 35% volunteered a purpose specifically related to the Anacostia River, water protection, or a more general environmental benefit. Fewer than 4% mentioned other possible purposes, such as education funding.

But 61% could not think of any specific purpose for the bag fee money, or said there was no dedicated purpose. These results suggest the need for greater investment in public education to explain the purpose of the collected funds.

By way of context, District residents see the health of the water in the Anacostia River as poor. A near-majority of 47% gave the Anacostia's waters a grade of "D" or "F" for health.

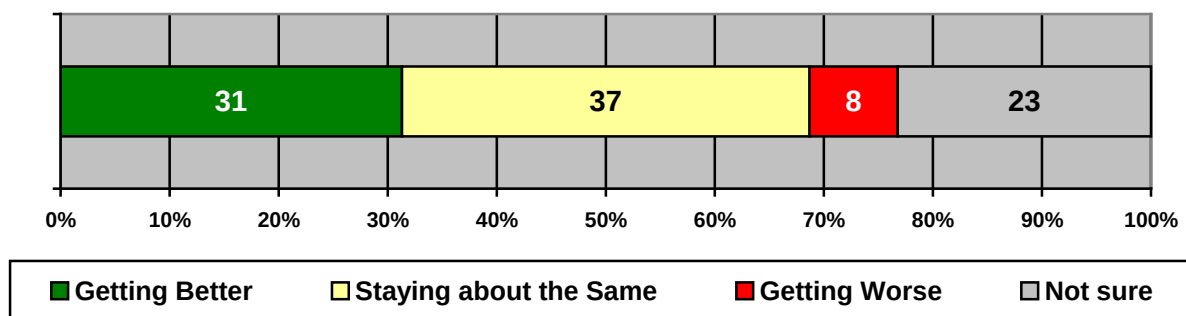
Grading the Anacostia River

Grade:	A	B	C	D	F	Not sure
	2%	7%	25%	23%	24%	19%

"On that same A to F scale, how would you grade the health of the water in the Anacostia River?"

If there is good news, it is found in the perceived trendline of water health. Four times as many residents see the Anacostia's waters as "getting better" instead of "getting worse" (31% to 8%), while 37% see no change. Such positive perceptions are key to engaging residents in the continued work of improving the health of local waters.

Perceived Trend in Anacostia River Health



"Is the health of the water in the Anacostia River generally (randomize): [getting better, getting worse, (or) staying about the same]?"

Business Survey Findings

Overview

This survey of District of Columbia businesses identifies a significant reduction in disposable bag use, validating the core findings of the survey of residents.

Businesses report a 50% reduction in bag use on average (median). As many as four out of five businesses reported fewer bags provided to customers. Businesses also reported a 40% increase in the number of customers bringing their own reusable bags when they shop.

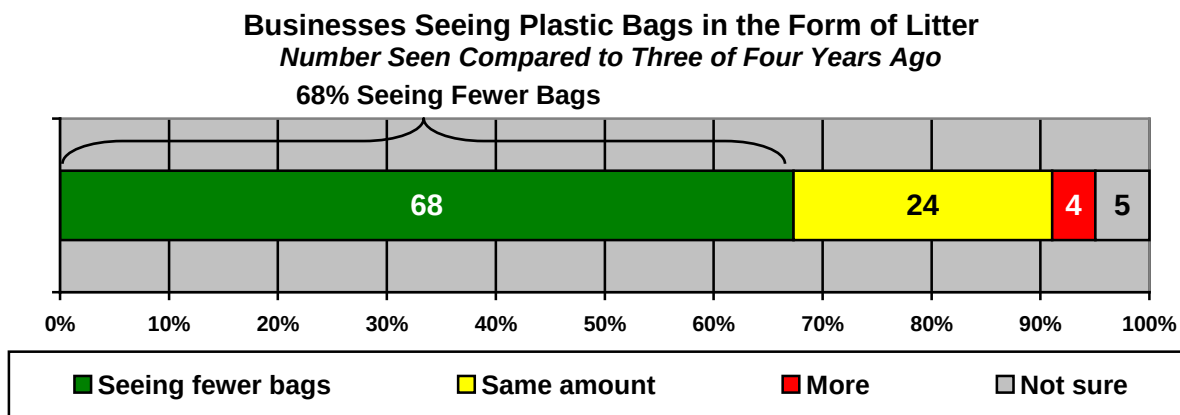
The survey indicates that customer acceptance of the law is growing. Though many business owners and managers report customer annoyance and complaints, customers appear to have adjusted by bringing their own bags in much greater numbers, and many business owners report that customers' attitudes are improving.

The primary type of help businesses most want from the District Government in implementing this law is greater public education on the purposes of the law and the positive environmental outcomes resulting from the money collected.

For their own part, business owners and managers are personally supportive of the law by a very large margin.

Significantly Less Plastic Bag Litter

Business owners and managers are consistently seeing fewer plastic bags in the form of litter compared to "three or four years ago." An overwhelming 68% of businesses are seeing fewer plastic bags found as litter around their businesses, compared to only 4% who are seeing more. One-quarter (24%) see no difference, and 5% are not sure.



"Compared to three or four years ago, are you seeing (randomize): [more, fewer, (or) about the same amount of] plastic bags found as litter around your business?"

Business owners and managers gave a fairly positive grade to how clean and free of trash they find the streets, sidewalks, and alleys immediately surrounding their businesses. Nearly two-thirds (63%) gave a grade of "A" or "B" on the traditional "A" to "F" scale.

By comparison, on the residents survey a smaller 53% gave their neighborhood a grade of “A” or “B.”

Business Grade Their Surroundings for Being “Clean and Free of Trash”
Businesses vs. Residents

Grade:	A	B	C	D	F	Not sure
Businesses	18%	45%	20%	7%	9%	*%
Residents	19%	34%	29%	11%	6%	1%

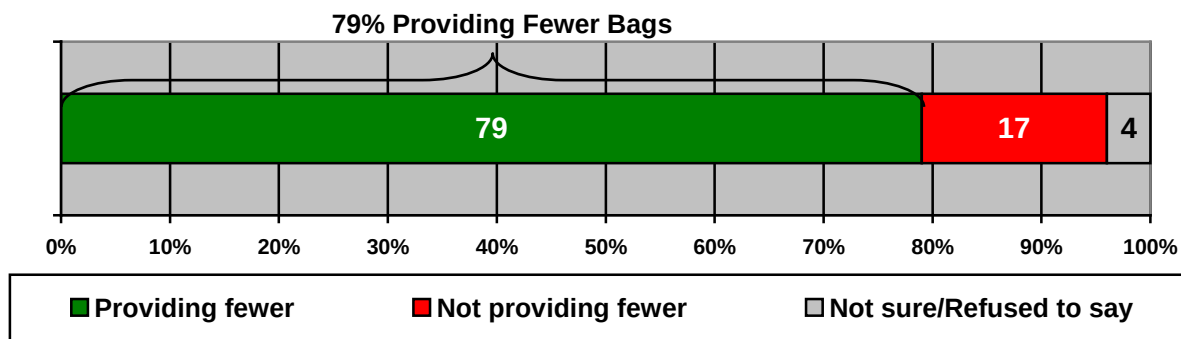
“Students are often given the grades of A, B, C, D, or Fail. If I were to ask you to grade how clean and free of trash are the streets, sidewalks, and alleys in the area immediately surrounding your business, using an A to F scale where ‘A’ is best and ‘F’ is worst, what grade would you give?”

Businesses Providing Fewer Disposable Bags

An overwhelming majority of District businesses said they have given out fewer disposable bags since the bag law went into effect. The survey measured both the reduction in disposable bags given to the *average* customer, and the *overall* number of disposable bags used by the business. The two measures provided similar results.

By their own assessment, four out of five businesses (79%) have reduced the number of disposable bags they provide to the average customer since the bag fee was introduced in 2010. Only 17% said they have not reduced the number of bags they provide to the average customer.

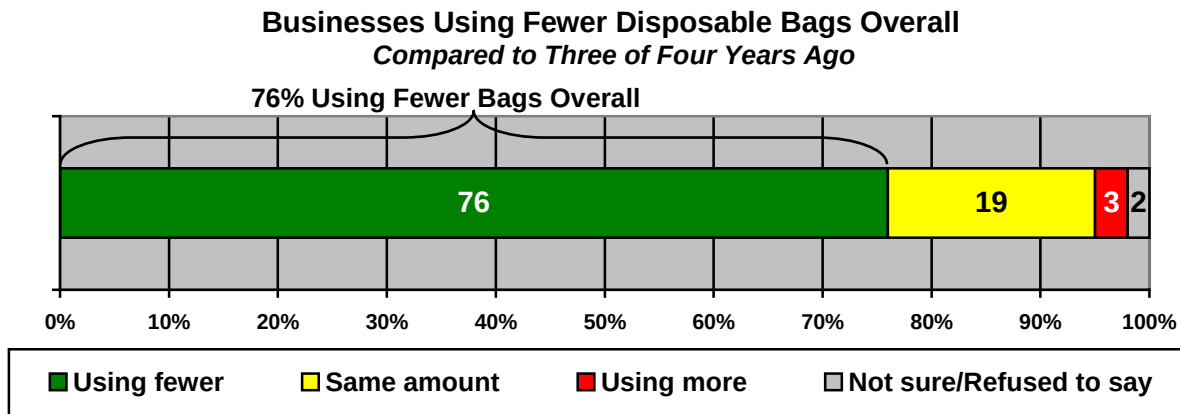
Businesses Providing Fewer Disposable Bags to the Average Customer
Compared to Three or Four Years Ago



“Has your business reduced the number of disposable bags you provide the average customer since the 5-cent bag fee was introduced in 2010?”

Similarly, 76% of businesses are using fewer disposable bags overall since the law went into effect. This result is true despite the fact that nearly two-thirds (63%) of owners and managers said their businesses are at least as large as in 2009 or have grown since then.

Only 3% of businesses are using more bags than before the law went into effect. Meanwhile, 19% of businesses said they are using about the same number of disposable bags.



"What about your total usage of disposable bags as a business since the law went into effect in 2010? Is your business using fewer disposable bags overall, more bags, or about the same amount?"

Quantifying the Decrease in Disposable Bags

A key goal of this survey was to quantify the change in disposable bags provided to customers by District businesses. On the business survey, this was accomplished in two ways:

1. By asking the businesses to estimate in percentage terms the overall change in the quantity of disposable bags they are providing; and
2. By asking businesses to provide the hard number of bags, cases of bags, or dollars spent on bags both before and after the law went into effect, and calculating the change.

When asked to estimate the percentage change in bags provided since the law went into effect, District businesses estimate their average (median) reduction as 35%.

Estimated Reduction in Providing Customers with Disposable Bags As Estimated by Business Owners/Managers

Less than 10%	6%
10–25%	26%
26–50%	44%
50–75%	12%
75–100%	11%
Mean	40% reduction
Median	35% reduction

*"In percentage terms, how much of a reduction has there been in the number of disposable bags--or cases of bags--you provide customers since the law went into effect?"
(If necessary): "Just give me your best guess."*

More accurately, when asked in raw numbers to report their bag usage—in numbers of bags or cases of bags purchased, or dollars spent—both before and after the law, the average (median) reduction in overall bag use businesses report is 50%. The distribution of responses is detailed in the table below.

Actual Reduction in Disposable Bag Purchasing by Businesses
Computed Percentage Based on Hard Estimates of Quantity of Bags Purchased

91-100% reduction	1%
81-90% reduction	3%
71-80% reduction	11%
61-70% reduction	9%
51-60% reduction	12%
41-50% reduction	32%
31-40% reduction	17%
21-30% reduction	6%
11-20% reduction	2%
1-10% reduction	*0%
No change	6%
Increase	2%
Mean	47% reduction
Median	50% reduction

"How many disposable bags are you buying for your business in a typical month today, whether that is the total number of bags, the number of cases of bags you order, or the amount your business spends on disposable bags?"

"Using the same type of measurement, in other words (fill in appropriate measure based on prior question): {number of bags/cases of bags/dollars spent on bags}, how many disposable bags were you buying for your business in a typical month before the bag law went into effect three years ago?"

Customer Reaction

When asked in an open-ended way to describe the reaction of their customers to the law, 40% described negative reactions, such as customer complaints and annoyance.

Thirty percent (30%) said the reaction is generally positive, with about half of those overtly positive, and the other half said the customer reaction was negative at first but has become more positive over time. Seventeen percent (17%) said the reaction has been mixed.

Customer Reaction to the Bag Law **Business Owner/Manager Assessment**

Negative Reactions:

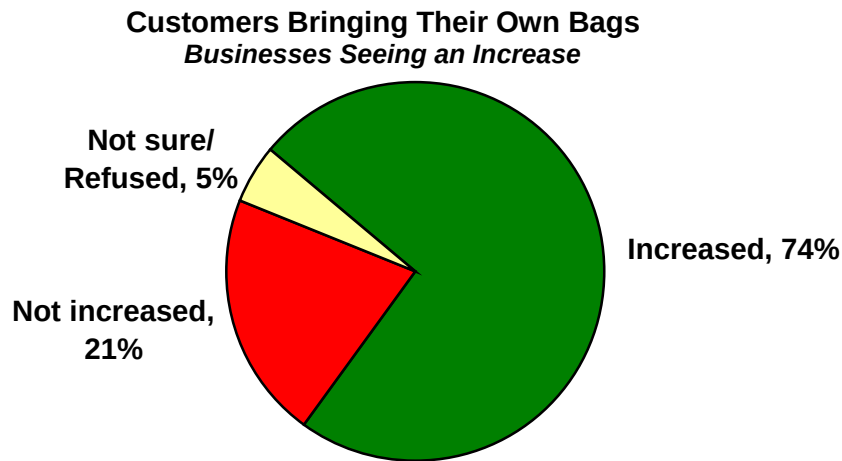
Customers complain, are annoyed 27%
Customers have a strong negative reaction, or I have lost business 13%

Positive Reactions:

Customers like it, see benefit of it, are not bothered by it 16%
At first it was bad, but customers more receptive now 14%
Some like it, some don't 17%
Other 3%
Nothing/Not sure/Refused to say 10%

"What has been the reaction of your customers?" (Open-ended)

Meanwhile, businesses reported a dramatic increase in the number of reusable bags customers are bringing with them when they shop. Three-quarters (74%) said they have seen an increase in the number of customers bringing their own bags.



"Since 2010, have you seen an increase in the number of customers who are bringing their own bags with them when they shop?"

When asked to estimate the percentage of customers who bring their own bags today and before the law was implemented, business owners and managers reported a large increase overall, as enumerated in the table below. Averaging their responses, 5% of customers were bringing their own bags before the law, compared to 26% today, as estimated by business owners and managers.

Customers Bringing Their Own Bags
Estimated by Business Owners/Managers

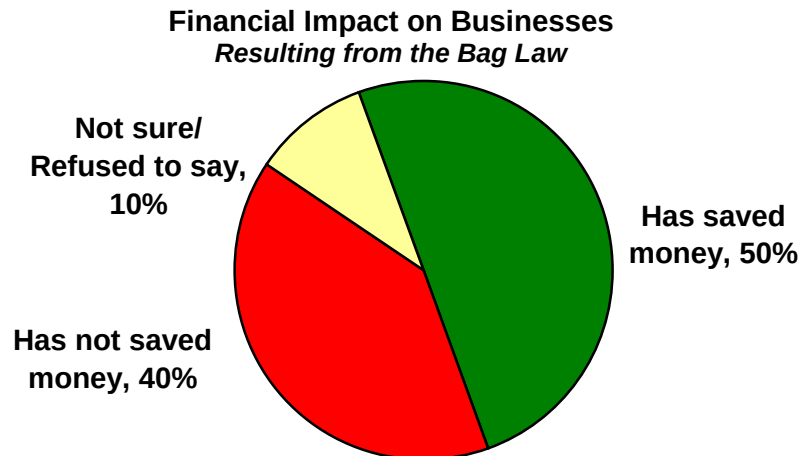
	Percentage Before the Law	Percentage Now
75% or more	*0%	9%
50–74%	1%	11%
25–49%	4%	18%
1–24%	37%	44%
0%	49%	13%
Not sure	9%	5%
Mean	5%	26%
Percentage reporting at least some customers bringing their own bags	42%	82%

"Can you estimate the percentage of customers that were bringing their own bags before the law went into effect and the percentage that are bringing them now?"

Overall, 42% of businesses estimated that some of their customers brought their own bags before the law went into effect, while 82% of businesses estimated that some of their customers were bringing their own bags three years later—a 40% increase. (Recall that a similar 79% of residents said they were carrying reusable bags at least some of the time in 2013.)

Impact on Businesses

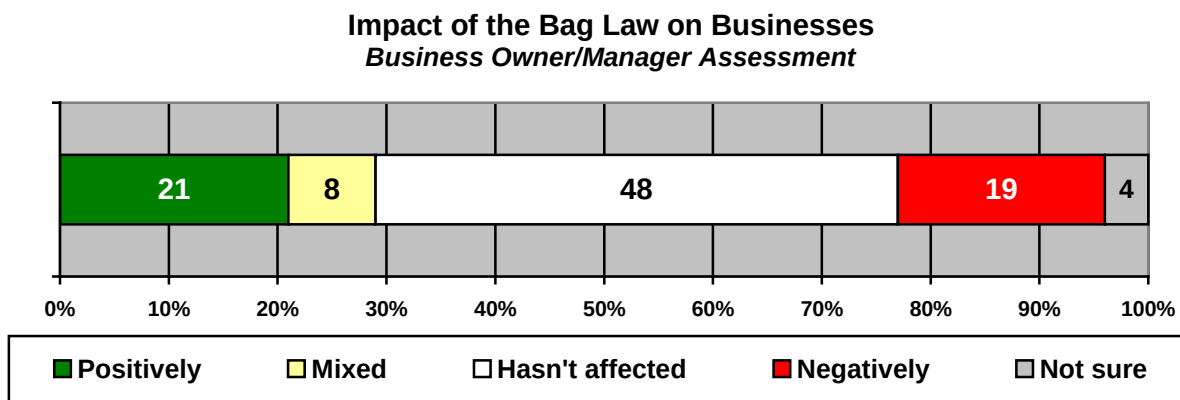
One-half (50%) of business owners and managers said they have saved money by buying fewer bags for their customers or by keeping a portion of the 5-cent fee, compared to 40% who said they have not saved money.



"Have you found that your business has saved money by buying fewer bags for your customers, or through keeping a portion of the 5-cent fee?"

More than two-thirds (69%) of business owners and managers have seen no negative impact on their businesses from the bag law. Of those, 21% said the law has affected their business positively, and 48% said the law has not affected their business in either way. Another 8% said the law has had both positive and negative effects on their business.

By contrast, only 19% said the law has affected their business negatively. Adding in the 8% who have seen both positive and negative effects brings the total to 27% who have seen any negative impact on their business.



"Overall, has the bag fee affected your business positively, negatively, or hasn't affected you either way?"

All businesses were asked an open-ended question to indicate what their experience as a business has been with the law, both positive and negative. On the positive side, 20% said the

business is spending less on bags, 19% said the law is good for the environment and is reducing litter and trash, and 14% cited positive customer attitudes.

Nearly half (48%) of those who have seen negative impacts talked about customer complaints, the leading response by far. Nine percent mentioned some discomfort personally or on behalf of the business with the fee, and 8% felt that there was some customer confusion or lack of information about the law.

Business Assessment of the Positives and Negatives of the Bag Law
Open-ended Question; Categorized Responses

Positives

My business spends less money on bags, has cut costs	20%
The law is good for the environment, means less trash	19%
Customers are OK with the law, receptive to what it is doing.....	9%
Customers are reusing bags, feel good about doing this	5%
Creates awareness of the environment, recycling	3%
Other	4%
Nothing/Not sure	39%

Negatives

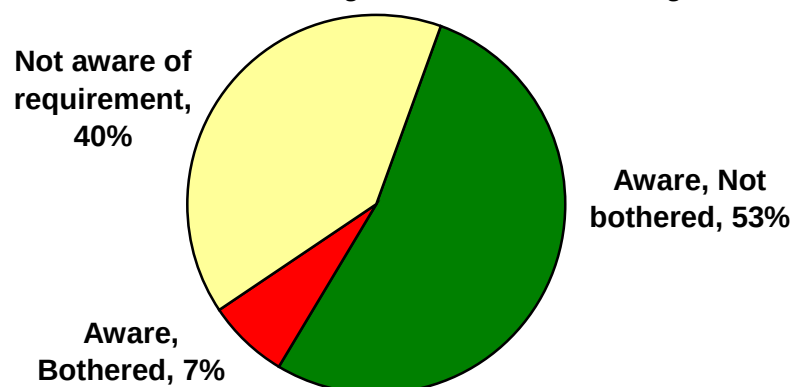
Customers complain, get angry	48%
The fee is bad for our business, or I don't like having to ask customers for fee.....	9%
Customers not aware of bag law, confused about law's purpose.....	5%
Customers think our business is charging fee rather than D.C.	3%
Other	6%
Nothing/Not sure	29%

"What has been your experience as a {business/organization} with the 5-cent bag fee, both positive and negative?" (Open-ended)

Understanding of the Law

Sixty percent (60%) of businesses were aware of a requirement to print a recycling message on disposable bags, while 40% were not. Only 7% said they were bothered by the requirement.

Requirement to Print a Recycling Message on the Bags
Awareness and Attitude among Business Owners/Managers



"Are you aware of any special requirements in the bag law about printing a recycling message on your bags?" (If aware): "Does that requirement bother you or not bother you?"

Three-quarters (78%) could articulate a purpose for the disposable bag law. Most of those (63%) tied the bag law directly to river clean-up, and most others mentioned a general environmental purpose. The responses have been categorized below.

Business Understanding of the Purpose of the Bag Law

Open-ended Question; Categorized Responses

Anacostia River cleanup	35%
"Save the River"	24%
Save or clean the environment, reduce pollution	13%
No specific purpose	8%
Encourage people to use fewer bags	8%
Reduce trash, litter in D.C.....	5%
Clean the river (general), Potomac River	4%
Other	2%
Not sure.....	14%

*"Are you aware of any specific purpose for the bag law?"
 (If necessary): "What is that purpose?" (Open-ended)*

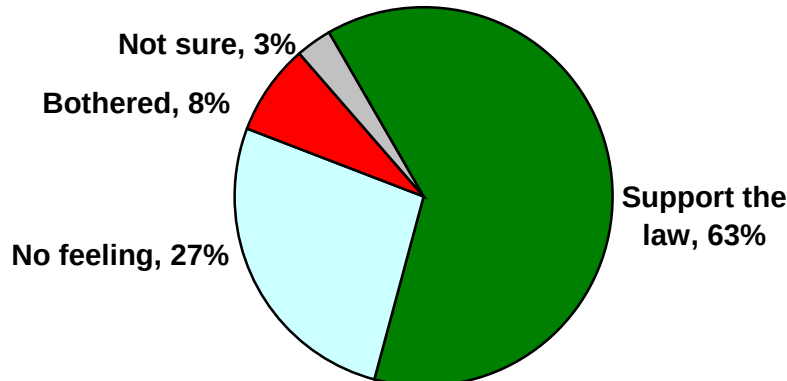
These responses indicate much stronger awareness of the bag law's environmental purpose compared to the residential community, where only 35% made a connection to the Anacostia River or another environmental benefit.

Strong Owner and Manager Support for the Bag Law

Businesspeople are personally supportive of the law, with 63% saying they support it, and only 8% saying they are bothered by it. About one-quarter (27%) said they have no feelings about the law either way. This level of personal support among businesspeople surpasses the level of support among District residents, where 53% supported the law and 16% were bothered by it.

Business Owner/Manager Support for the Disposable Bag Law

Support the Law vs. Bothered by the Law



"Do you personally support the law, are you bothered by the law, or do you have no feelings about it either way?"

About one-half of businesspeople said there was something specific the District Government could do to help them implement the bag law. As illustrated below, the largest number of comments were related to promoting the law, its purpose, and its benefits more widely.

A number of businesses specifically said they want to know how the fee is impacting environmental cleanup.

How the City Could Be More Helpful
Open-ended Question; Categorized Responses

Advertise, promote, make people aware of the law and purpose of the fee	18%
Help businesses get, provide reusable bags	4%
Promote environmental benefits of law; show how fee helps	3%
District Government already doing a good job, is helpful	3%
Get rid of the bag fee.....	2%
Give us signs, materials that explain, promote the law	2%
Increase the fee.....	2%
Make sure fee is used to clean up environment; show us the results.....	1%
Give more of the fee to the businesses.....	1%
Other	11%
Nothing/Not sure/Refused to say	52%

"What could the City do to be more helpful to you as you implement the bag fee?" (Open-ended)

Conclusions

This study of both residents and businesses in the District of Columbia documents a profound change in disposable bag consumption and a resulting improvement in the amount of plastic bag litter that is seen.

Residents have changed their behavior, with 80% of residents using fewer disposable bags, for an average household reduction from ten bags to four bags per week.

Businesses continue to hear customer complaints, but they say acceptance of the law is improving. For their part, businesses report that they are giving out 50% fewer bags.

While the reductions in bag use reported by residents and businesses are similar, the small difference may be explained at least in part by the commuters and visitors who also patronize District of Columbia businesses, and who were not interviewed for this study.

Majorities of both residents and businesspeople support the disposable bag law personally. Most residents understand the main purpose of the bag law to be about behavior change, and about one-third know that the money collected will be used to restore local waterways. Businesspeople suggest that the District Government provide more public outreach to explain those purposes and build further acceptance of the law—and OpinionWorks agrees based on the research we have conducted in the District of Columbia in 2010 and today.

It has been our pleasure to undertake this important work for DDOE. We stand ready for further practical interpretation of these findings as needed.

OpinionWorks, LLC
Annapolis, Maryland
October 2013