Clean Land, Safe Water, Healthy Lives

Understanding and Tracking Disposable Bag Consumption in the District of Columbia
Disposable Bag Consumption in D.C.  
Project Objectives

1. Quantify change in bag use.

2. Measure attitudes, experiences with the law.
Disposable Bag Consumption in D.C.

Survey Groups

Important to survey both residents and businesses:

- More complete picture of change in bag use
- Slightly different perspectives: Businesses serve both residents and commuters/visitors
Disposable Bag Consumption in D.C.

Methodology

• Residents Survey
  – 600 citizens, randomly selected (±4.0%)
  – Landlines plus cell phones
  – Jan. 16-20, 2013

• Business Survey
  – 177 organizations responsible for the bag fee
  – Front-line owners and managers
  – Interviewed in-person & by phone, multi-lingual
  – Feb. 14-Apr. 9, 2013
### Disposable Bag Consumption in D.C.

#### Reduction in Plastic Bag Litter

<table>
<thead>
<tr>
<th></th>
<th>Seeing fewer bags</th>
<th>Same amount</th>
<th>More</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents</td>
<td>67%</td>
<td>21%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Businesses</td>
<td>68%</td>
<td>24%</td>
<td>4%</td>
<td>5%</td>
</tr>
</tbody>
</table>

“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?”
Disposable Bag Consumption in D.C.

Context: No Overall Reduction in Litter

Grading the Neighborhood as “Clean and Free of Trash”

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents 2013</td>
<td>19%</td>
<td>34%</td>
<td>29%</td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>Residents 2010</td>
<td>21%</td>
<td>39%</td>
<td>28%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Businesses 2013</td>
<td>18%</td>
<td>45%</td>
<td>20%</td>
<td>7%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Overall litter has not decreased, while plastic bag litter is down dramatically.

“If I were to ask you to grade how clean and free of trash the streets, sidewalks, alleys, {and parks in your own neighborhood/in the area immediately surrounding your business} are on an A to F scale where “A” is best and “F” is worst, what grade would you give?”
Disposable Bag Consumption in D.C.

80% of Residents Using Fewer Bags

74% of African-American
80% of White
86% of Hispanic
87% of Asian
91% of Mixed Race

...Residents using fewer disposable bags.

"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?"
Disposable Bag Consumption in D.C.

79% of Businesses Providing Fewer Bags

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

Residents Estimate Household Bag Use

<table>
<thead>
<tr>
<th>Number of Bags</th>
<th>Typical Week Before the Law</th>
<th>“The Last Week” (Jan. 2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3%</td>
<td>23%</td>
</tr>
<tr>
<td>1</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>2</td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td>3-5</td>
<td>21%</td>
<td>25%</td>
</tr>
<tr>
<td>6-9</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>10-19</td>
<td>30%</td>
<td>17%</td>
</tr>
<tr>
<td>20+</td>
<td>20%</td>
<td>8%</td>
</tr>
<tr>
<td>Not sure</td>
<td>8%</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td><strong>10 bags</strong></td>
<td><strong>4 bags</strong></td>
</tr>
</tbody>
</table>

“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?”
Disposable Bag Consumption in D.C.

2013 Bag Use by Type of Store

<table>
<thead>
<tr>
<th></th>
<th>Grocery Stores</th>
<th>Liquor Stores</th>
<th>Convenience Stores</th>
<th>Department Stores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.28</td>
<td>0.44</td>
<td>1.32</td>
<td>0.93</td>
</tr>
</tbody>
</table>

“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...??”

23% are only *sometimes* charged the 5-cent fee by grocery, liquor, convenience, pharmacy, and department stores.
Disposable Bag Consumption in D.C.

Change in Bags Purchased by Businesses

<table>
<thead>
<tr>
<th>Calculated Change</th>
<th>% of Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>81 – 100% reduction</td>
<td>4%</td>
</tr>
<tr>
<td>61 – 80% reduction</td>
<td>20%</td>
</tr>
<tr>
<td>41 – 60% reduction</td>
<td>44%</td>
</tr>
<tr>
<td>21 – 40% reduction</td>
<td>23%</td>
</tr>
<tr>
<td>1 – 20% reduction</td>
<td>2%</td>
</tr>
<tr>
<td>No change</td>
<td>6%</td>
</tr>
<tr>
<td>Increase</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td><strong>50% reduction</strong></td>
</tr>
</tbody>
</table>

“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?”
Disposal Bag Consumption in D.C.

Residents Carrying Reusable Bags

79% are carrying reusable bags.

24% Always, 34% Most of the time, 21% Some of the time, 8% Seldom, 12% Never

"Are you bringing reusable bags with you when you shop always, most of the time, some of the time, seldom, or never?"
Disposable Bag Consumption in D.C.

**Customers Bringing Their Own Bags**

74% of businesses seeing an increase in 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?”

[Bar chart showing 74% increased, 21% not increased, 5% not sure]
Disposable Bag Consumption in D.C.

Resident Support for Bag Fee Law

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

- Support the law: 53%
- No feeling: 30%
- Bothered: 16%
- Not sure: 1%
Disposable Bag Consumption in D.C.

Resident Support for Bag Fee Law

<table>
<thead>
<tr>
<th>Support by Ward</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support the law</td>
<td>60%</td>
<td>76%</td>
<td>72%</td>
<td>59%</td>
<td>54%</td>
<td>54%</td>
<td>35%</td>
<td>34%</td>
</tr>
<tr>
<td>No feelings</td>
<td>21%</td>
<td>15%</td>
<td>18%</td>
<td>24%</td>
<td>26%</td>
<td>24%</td>
<td>43%</td>
<td>46%</td>
</tr>
<tr>
<td>Bothered</td>
<td>17%</td>
<td>7%</td>
<td>10%</td>
<td>17%</td>
<td>17%</td>
<td>23%</td>
<td>20%</td>
<td>16%</td>
</tr>
<tr>
<td>Not sure</td>
<td>2%</td>
<td>2%</td>
<td>*%</td>
<td>*%</td>
<td>3%</td>
<td>*%</td>
<td>2%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Negative feelings never rise above 23% in any ward.

“Do you support the law, are you bothered by the law, or do you have no feelings about it either way?”
Disposable Bag Consumption in D.C.

**Business Support for Bag Fee Law**

Nearly two-thirds of business owners/managers support the law personally. Only 8% are negative.

“Do you personally support the law, are you bothered by the law, or do you have no feelings about it either way?”
“Overall, has the bag fee affected your business positively, negatively, or hasn’t affected you either way?”

69% positive or neutral impact on the business

- Positively: 21%
- Hasn't affected: 48%
- Mixed: 8%
- Negatively: 19%
- Not sure: 4%
Disposable Bag Consumption in D.C.

Impact of the Bag Fee on Businesses

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>21%</td>
</tr>
<tr>
<td>Hasn't affected</td>
<td>48%</td>
</tr>
<tr>
<td>Mixed</td>
<td>8%</td>
</tr>
<tr>
<td>Negatively</td>
<td>19%</td>
</tr>
<tr>
<td>Not sure</td>
<td>4%</td>
</tr>
</tbody>
</table>

Most of the negatively affected cite customer complaints, often pinpointing tourists, suburban residents. Some customers misunderstand the fee, thinking the business is just trying to profit.

“Overall, has the bag fee affected your business positively, negatively, or hasn’t affected you either way?”

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OPINIONWORKS
PUBLIC SPIRITED RESEARCH
Disposable Bag Consumption in D.C.

Impact of the Bag Fee on Businesses

46% of the “negatively” affected businesses support the law anyway, citing cost savings, reduced litter, or benefit to environment.

“Overall, has the bag fee affected your business positively, negatively, or hasn’t affected you either way?”
Disposable Bag Consumption in D.C.

Financial Impact of Bag Fee Law

“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?”

- 50% Business saved money
- 40% Did not save money
- 10% Not sure

OPINIONWORKS
PUBLIC SPIRITED RESEARCH
Disposable Bag Consumption in D.C.
Resident Impression of Law’s Purpose

<table>
<thead>
<tr>
<th>Main Purpose of the Law</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>To encourage people to use fewer disposable bags</td>
<td>51%</td>
</tr>
<tr>
<td>To raise general revenue for the D.C. Government</td>
<td>23%</td>
</tr>
<tr>
<td>To raise money for a specific purpose</td>
<td>15%</td>
</tr>
<tr>
<td>Or something else</td>
<td>8%</td>
</tr>
<tr>
<td>All of those purposes (Not read)</td>
<td>2%</td>
</tr>
<tr>
<td>Not sure</td>
<td>6%</td>
</tr>
</tbody>
</table>

Residents primarily see the law as an agent of behavior change, not revenue-raising.

“Which of these do you think is the main purpose of the law?” (Read list.)
Disposable Bag Consumption in D.C.

Low Awareness of Dedication of Funds

The help businesses most want from the District Government is publicizing the purposes of the law.

- River cleanup: 35%
- Other: 44%
- No specific purpose: 17%
- Not sure: 61% unaware of any purpose for the money collected.

“Are you aware of any specific purpose for the money collected from the bag fee?” (If necessary): “What is that purpose?” (Do not read list.)
Disposable Bag Consumption in D.C.
Survey Summary

• Bag Use:
  – 80% of residents using fewer bags.
  – D.C. household reduced number of bags by 60%.
  – Businesses provide an average of 50% fewer bags.
  – Tourists, suburban residents may account for difference.
  – 79% of residents carrying reusable bags.
Disposable Bag Consumption in D.C.

Survey Summary

• Impacts:
  – 69% of businesses experienced positive or neutral impact.
  – 50% of businesses saving money.
  – 67% less plastic bag litter, at a time of no reduction in overall litter.

Strong support for the law:
Only 16% of residents and 8% of businesspeople express opposition.
Disposable Bag Consumption in D.C.

Distributors

• Methodology
  – 34 distributors identified
  – 10 completed surveys, by phone and email
  – June-July 2013

• Results
  – Insignificant impact on business
  – High awareness but negative perception of law