

Discussion

MEMORANDUM

March 17, 2013

TO: Transportation, Infrastructure, Energy and Environment (T&E) Committee

FROM:  Keith Levchenko, Senior Legislative Analyst
 Jacob Sesker, Senior Legislative Analyst

SUBJECT: **Discussion:** Disposable Carryout Bags

At the T&E Committee discussion of Executive Regulation 18-12 – Excise Tax on Disposable Carryout Bags, the T&E Committee Chairman asked Council Staff to schedule a more comprehensive discussion of the bag tax in early 2013, after the County would have a full year of implementation experience for the bag tax.

A number of Executive department officials and staff are expected to participate in this discussion, including:

- Kathleen Boucher, Assistant Chief Administrative Officer
- Robert Hoyt, Director, Department of Environmental Protection (DEP)
- Meosotus Curtis, DEP
- Joseph Beach, Director, Department of Finance
- Robert Hagedoorn, Chief, Treasury Division, Department of Finance

Executive branch responses to Council Staff questions are attached at ©1-5. Those responses were received too late to be analyzed or integrated into this memorandum.

Background

In May of 2011, the Council approved Bill 8-11, “Taxation - Excise Tax - Disposable Carryout Bags” (attached on ©1-6) with an effective date of January 1, 2012. This legislation imposed a 5-cent excise tax on certain carryout bags provided to customers at certain retail establishments, and requires those retail establishments to collect the carryout bag tax and remit the tax to the County. The consumer pays the tax to the retailer, who remits it periodically to the County Finance Department. The retailer may keep 1 cent of each 5-cent tax collected to cover administrative expenses of collecting and remitting the tax to the County.

Revenues and expenditures associated with the tax are included within the Water Quality Protection Fund. The FY13 Budget assumes revenues of \$561,640.¹

Discussion

Based on discussions with the T&E Chairman and with Executive staff, Council Staff has developed the following agenda for the discussion:

- Latest revenue and other trends for the bag tax.
- Bag tax/bag bans throughout the country
- Potential Changes to the Law
 - Banning Plastic Bags (continue the tax only for paper bags)
 - Increasing the Bag Tax
 - Consideration of exempting clothing stores from the bag tax

Revenue and Bag Purchase Trends

See the following page.

¹ However, at the T&E discussion last October, Executive Branch staff noted that estimated revenue for calendar year 2012 was expected to be approximately \$2.1 million.

CARRYOUT BAG TAX - MONTGOMERY COUNTY, MD

| COLLECTION MONTH | AMOUNT (\$) | CUMULATIVE AMOUNT | NUMBER OF BAGS | CUMULATIVE NUMBER | REGISTERED RETAILERS |
|------------------|-------------|-------------------|----------------|-------------------|----------------------|
| Jan 2012 | 164,298 | | 4,107,462 | | 548 |
| Feb 2012 | 171,758 | 336,057 | 4,293,952 | 8,401,413 | 666 |
| Mar 2012 | 175,224 | 511,281 | 4,380,605 | 12,782,018 | 746 |
| Apr 2012 | 175,626 | 686,907 | 4,390,652 | 17,172,670 | 803 |
| May 2012 | 181,195 | 868,102 | 4,529,868 | 21,702,538 | 851 |
| June 2012 | 197,587 | 1,065,689 | 4,939,678 | 26,642,216 | 891 |
| July 2012 | 184,843 | 1,250,532 | 4,621,087 | 31,263,303 | 910 |
| Aug 2012 | 190,660 | 1,441,192 | 4,766,505 | 36,029,808 | 928 |
| Sep 2012 | 191,964 | 1,633,157 | 4,799,107 | 40,828,915 | 942 |
| Oct 2012 | 238,753 | 1,871,910 | 5,968,827 | 46,797,742 | 954 |
| Nov 2012 | 189,073 | 2,060,982 | 4,726,818 | 51,524,560 | 979 |
| Dec 2012 | 246,378 | 2,307,360 | 6,159,443 | 57,684,003 | 1,011 |

SOURCE:

Montgomery County Department of Finance, Division of Treasury

NOTE:

Collections are received in the subsequent month. For example, December 2012 collections which represent carryout bags distributed that month are received in the month of January 2013. Also, for some smaller retailers, payment may represent a reporting period that covers several months.

Monthly data may be revised as new information is received (data above shows the latest information).

Amounts are shown rounded to whole dollars.

Retailers may file as corporate entity (i.e., not by store location), may file using consolidated return (i.e., multiple store locations in the County), and may file from out-of-state. Therefore, the County does not have data on collections or number of bags by store location.

The CY2012 revenue and expenditure data, at first glance, appear to indicate that monthly revenue and consumption increased. However, the number of registered retailers increased from 548 to 1,011 during the course of that year. Furthermore, one year of revenue and consumption data does not allow for adequate analysis of the effect of seasonal purchasing and short-lived increases in consumer confidence or consumer expenditures. Analysis of consumption and revenue trends through CY2013 will provide a more complete picture.

Other Jurisdictions

Although there are no statewide bag taxes or bans in place in the United States, a number of local jurisdictions in 14 states have bag taxes and/or bans in place.² The chart on ©6 summarizes the bag taxes/bans that exist across the country. Taxes and bans are most common in California, where 45 jurisdictions have passed legislation. In the DC area, the District of Columbia and Montgomery County are the only jurisdictions with bag taxes or bans. There has been no related legislation approved elsewhere in Maryland or in the states of Delaware, Pennsylvania, Virginia, or West Virginia.

The scope of legislation ranges from:

- A ban on plastic bags (most of the jurisdictions that have legislated in this area have banned plastic bags).
- A ban on plastic bags and a charge for paper bags (typically ranging from 5 cents to 25 cents per paper bag). This is the most common scope of legislation.
- A ban on both plastic and paper bags (Carpinteria, CA bans single-use paper bags)
- A charge covering both paper and plastic bags with no ban (Montgomery County, DC, and Boulder, Colorado)

It should also be noted that jurisdictions may have different parameters as to which retailers (size and type for instance) are subject to a bag tax or ban. Also, some jurisdictions require that paper bags include a certain percentage of recycled content.

Differential Treatment of Disposable Paper and Plastic Bags

Several jurisdictions have banned plastic bags while taxing paper bags. Montgomery County and the District of Columbia have both imposed taxes on paper and plastic carryout bags. Only one jurisdiction, Carpinteria, CA, has banned both paper and plastic bags. Differential treatment of paper and plastic bags presumes differential environmental impact.

The comparative environmental impacts of paper versus plastic have been debated for many years. In terms of which bag a consumer should choose at purchase, the EPA does not take a position on paper versus plastic bags. Instead, EPA recommends minimizing the number of bags you use and reusing and recycling the bags that you do use. There are pros and cons associated with paper and plastic bags. For some examples of these pros and cons, see a summary by the National Cooperative Grocers Association on ©7-9.

² A 15th state (Arizona) enacted legislation that initiated a voluntary reduction program and evaluation that could lead to a 5 cent tax on disposable bags at large retail stores.

Banning Disposable Plastic Bags

In considering whether to move from a tax to a ban on plastic bags, the Council should consider whether such a ban is justified for environmental reasons and also whether there are any other positive or negative impacts from moving from a charge to a ban.

From Council Staff's perspective, one advantage of the County's current bag tax (compared to a plastic bag ban and paper bag charge, for example) is that the tax regime creates an incentive for the use of reusable bags as an alternative to the environmentally harmful alternatives of single-use plastic carryout bags and single-use paper carryout bags. Ultimately, the consumer can choose a plastic or paper bag, based on which bag they are more likely to reuse and/or recycle.³ A ban on plastic bags would effectively make this decision for consumers.

Banning Disposable Plastic and Paper Bags

Alternatively, the County could also consider a ban on both plastic and paper bags. Such a ban would put plastic and paper bags on equal ground, but would do so at the expense of consumer choice. Currently, consumers still appear to want to purchase some plastic or paper bags (albeit fewer than before the bag tax went into effect)—a ban on both would limit that choice and alter bag consumption patterns.

Recommendation: Given that the County's current bag tax appears to be resulting in a substantial reduction in the number of paper and plastic bags purchased and, at least anecdotally, in the number of plastic bags ending up in stream valleys, Council Staff believes the current bag tax for both types of bags should be continued. The success of the bag tax in terms of reducing disposable bag use can be revisited periodically by the Council.

Increasing the Bag Tax

One policy alternative which would increase the incentive to consumers to reduce consumption of single-use bags for retail purchases would be to increase the charge per bag. Montgomery County's bag tax is 5 cents. As noted on the chart showing other jurisdictions' disposable bag laws, many jurisdictions charge 10 cents, and some are moving to even higher charges. This option would require legislation, as the 5 cent charge is established in Section 52-102(a) of the County Code.

Recommendation: Council staff would caution that the early evidence indicates that the tax appears to be substantially reducing bag use. Council Staff believes the existing bag tax should be

³ For example, pet owners can choose to purchase plastic bags from the grocery store rather than purchase additional pet waste disposal bags from a pet store.

given the rest of the calendar year (its second full year of implementation) to see where the bag sale trends go.

Exempting Clothing and/or Other “Non-Grocery” Stores

Much of the focus of the bag tax is on grocery stores, since that is presumably where most single-use bags are purchased. This makes sense, since people buy food regularly and other items less often and generally with fewer bags.

However, the County’s bag tax applies to all retail establishments (with some specific exceptions). Anecdotally, Council Staff has noticed that shoppers at clothing and other non-grocery stores appear to be less likely to bring their own reusable bag to the store with them.

However, there does not appear to be any hard data on what proportion of disposable bags are purchased from “non-grocery” stores or what proportion of shoppers bring reusable bags to these stores. A survey of these types of stores would be useful to answer these questions.

If such a survey were to reveal that the volume of bags purchased is low compared to the overall total and compliance remains low over time, perhaps the issue of charging at these stores should be revisited.

However, Council Staff does not see charging for single-use bags at non-grocery stores as a major issue, since the tax itself is such a small portion of the total consumer cost, the revenue goes toward water quality/pollution prevention efforts, and there is some benefit to conveying a single message that there is a charge for almost all disposable carry-out bags.

Attachments

KML:F:\Levchenko\DEP\Bag Tax\TE Committee Bag Tax Discussion 3 21 13 edits.doc

1. Please provide a list of all the information retailers currently provide to you as part of the bag tax remittance process.

A. Taxpayers enter (1) the period for which they are filing, and (2) the number of bags used during the reporting period.

2. Can you track bag sales by a particular store over a particular period of time? If so, please provide some examples (i.e. a traditional grocery store and a traditional clothing store).

A1. We calculated the number of bags issued by the six largest grocery store retailers to develop the table at the right that shows what an average store reports. Please note some caveats:

- At times retailers made either duplicate payments or made corrections to previous filings which account for some of the monthly fluctuations.
- These retailers file consolidated returns –meaning they file one report for bag usage in all their Montgomery County stores.
- Retailers file a report for the previous month. The usage for January 2013 report was provided to the County in February.
- For the 13 months represented in the table to the right, the average bags per month used was 374,065 bags, compared with the February 2013 filing of 370,923 bags.

| | AVERAGE |
|---------------|----------------|
| | STORE |
| Feb-13 | 370,923 |
| Jan-13 | 458,793 |
| Dec-12 | 361,892 |
| Nov-12 | 557,378 |
| Oct-12 | 355,339 |
| Sep-12 | 374,365 |
| Aug-12 | 358,507 |
| Jul-12 | 348,066 |
| Jun-12 | 336,253 |
| May-12 | 337,397 |
| Apr-12 | 322,615 |
| Mar-12 | 327,574 |
| Feb-12 | 353,708 |
| | 374,065 |

A2. Below are the number of bags used by one department store retailer with multiple locations in the County.. Retailers file consolidated returns for all their locations within Montgomery County.

| Month Remitted | BAG COUNT |
|----------------|-----------|
| | |
| Mar-13 | |
| Feb-13 | 265,289 |
| Jan-13 | 380,494 |
| Dec-12 | 239,851 |
| Nov-12 | 239,924 |
| Oct-12 | 280,038 |
| Sep-12 | 252,234 |
| Aug-12 | 231,287 |
| Jul-12 | 287,528 |
| Jun-12 | 216,701 |
| May-12 | 206,823 |
| Apr-12 | 258,688 |
| Mar-12 | 211,298 |
| Feb-12 | 239,416 |
| Jan-12 | |
| | |
| | 254,582 |

3. Do you have any way to track purchases of paper bags versus plastic bags at stores?

A. No. Filers enter total bags provided to customers during a reporting period - regardless of whether they are paper or plastic..

4. Based on the 2012 data previously provided, what are your projections for:

a Monthly revenue for calendar year 2013? Do you expect the revenue to continue to fluctuate up and down, settle into a steady level, or decline over time?

A. We expect the revenue during 2013 to continue to increase as the number of registered retailers increase and smaller retailers reach the \$100 threshold required for filing.

We anticipate that there will eventually be a leveling off and a decrease in the number of bags used, as was the experience in the District of Columbia. Over time this could change if the County's population and number of registered retailers continues to increase.

b. Registered Retailers (do you expect the number of registered retailers to continue to rise steadily each month? What are the total number of retailers you expect to ultimately register for the program?)

A. We expect the number of registered retailers to continue to increase as more of these retailers reach the \$100 threshold for filing. There is no estimate available for the total number of retailers in Montgomery County.

5. How was the original estimate of the annual number of disposable bags distributed calculated? Given the number of disposable bags purchased in 2012 via the bag tax (57.7 million), does DEP or Finance believe the initial estimate of disposable bags used prior to the implementation of the bag tax (82.9 million) was too low? NOTE: A 2009

study by the International Trade Commission (ITC) put overall annual disposable plastic bag use by the US at 102 billion. That is about 335 bags per capita. Extrapolating that to the Montgomery County population would result in 325 million plastic bags per year. Unless paper bags are used instead of plastic, the total number of disposable bags used per year would be higher.

- A. The original estimate of disposable bags was based on estimates from the District of Columbia one year after the District had implemented its bag tax.. This estimate was presented in the Economic Impact and Fiscal Summary to the T&E Committee in April of 2011 as shown below.

The number of carryout bags currently used in Montgomery County in one year is estimated to be 82,950,000. This figure was derived using figures from the District of Columbia's bag tax program and adjusting them for the estimated number of retail establishments in Montgomery County. The District's first year bag tax collections of \$2.1 million translate into 52,500,000 bags (@ 5 cents per bag). Using figures from the U.S. Bureau of the Census, the ratio of the 2009 population of Montgomery County to that of the District is 1.62, and the ratio of retail trade establishments in Montgomery County to the number of such establishments in the District is 1.57. It was assumed that a comparable factor (1.58) represents the ratio of carryout bags used in the County in a year to the number used in the District. Multiplying the District's 52,500,000 bags by 1.58 yields an estimate of 82,950,000 for the number of carryout bags currently used per year in Montgomery County.

- 6. Of the total number of retailers in the program, how many do you estimate are traditional grocery stores? What proportion of the total bag purchases do you estimate come from grocery stores? Have you asked retailers for their estimates of what proportion of shoppers purchase 1 or more bags when they shop at these stores? If so, what is their anecdotal experience?**

A1. Finance does not have information on the number of grocery stores as a share of all retailers.

A2. The six largest grocery stores over 13 months of collections represent, on average, 47 percent of all bags issued (29.2 million from these grocery stores versus 62.7 million for all retailers).

A3. Finance does not request information from retailers on bag purchasing behavior.

A4. Finance does not request this information.

- 7. Same question as #4 but for clothing/department stores.**

A1. Finance does not have information on the number of clothing/department stores as a share of all retailers.

A2. Finance staff will forward response.

A3. Finance does not request information from retailers on bag purchasing behavior.

A4. Finance does not request this information.

8. If disposable bag use remains constant over the next year, does DEP believe consideration should be given to increasing the bag tax to further discourage their use?

A. No. Even if disposable bag use remains constant, the more appropriate gauge from an environmental perspective is the number of bags in our streams, on roads and in our litter. There could be many reasons unrelated to this latter gauge for bag usage to remain constant or even increase, such as new retailers meeting the \$100 threshold, population growth, etc. Whether there are more bags in streams is one of the metrics DEP is currently working on. Other metrics will also be developed to determine the effectiveness of the bag law. Evidence from Earth Day cleanups will be compiled and available for Council this summer.

9. If disposable bag use remains particularly high at clothing/department stores and the proportion of these bags to the overall universe are low, does DEP believe consideration should be given to eliminating the bag tax for these types of retailers?

A. No. The main goal of the bag tax is to eliminate bag litter in County streams. Exempting retailers representing a significant portion of bags used would not help us achieve this goal. Another goal of the bag tax is to shift some of the financial burden of litter reduction programs to those using bags because bags comprise a high percentage of litter in our streams. There is no reason for not requiring clothing and department stores to charge the tax to their customers who choose to use disposable bags to help achieve this latter goal. From a practical and logistical perspective, exempting clothing and department stores from charging for bags would make it more confusing for both retailers and consumers to know which stores should charge for bags and which ones should not. Exempting some retailers would only serve to undermine consumers' motivation to switch to reusable bags. As stated in the answer to the previous question, the number of disposable bags used is just one of the many metrics that can be used to analyze the effectiveness of the bag tax and is not an appropriate indicator if used without factoring in bags found in streams, population growth, number and type of retail establishments reporting, employment statistics, etc.

10. What is DEP's opinion regarding the comparative environmental footprint of paper bags versus plastic bags?

A. During our initial research for the bag law, DEP concluded that the environmental footprint of paper bags versus plastic bags is comparable. In terms of overall environmental impact, both paper and plastic bags use enormous amounts of natural resources in their manufacture and cause unsightly pollution when improperly disposed. Both types of bags contribute to problems caused by litter and cost the County money to clean up.

The following are some environmental facts about disposable paper versus plastic bags that were found from our research. Since both of these disposable bag options have negative environmental costs, the easiest way to avoid contributing to these issues is to bring your

own reusable bag. This Washington Post story provides a succinct compilation of disposable bag facts: <http://www.washingtonpost.com/wp-dyn/content/graphic/2007/10/03/GR2007100301385.html>

It takes more than four times as much energy to manufacture a paper bag as it does a plastic bag. The use of toxic chemicals during the production of paper for bags contributes to air pollution, such as acid rain, and water pollution. The production of paper bags generates 70 percent more air and 50 times more water pollutants than production of plastic bags. It takes 90% less energy to recycle a pound of plastic than it takes to recycle a pound of paper.

In the plastics industry's use of toxic chemicals, 5 of the top 6 chemicals that generate the most hazardous waste as rated by the EPA are commonly used in plastic production. Hundreds of thousands of marine animals die every year after eating discarded plastic bags. Bags choke animals or block their intestines. Plastics are petroleum based, come from a non-renewable resource, are not biodegradable, and therefore will not decompose over time.

11. What is DEP's opinion regarding the littering/pollution impact of plastic bags versus paper bags?
 - A. Litter as a whole is the issue. In Montgomery County, both plastic and paper bag litter can be found in our streams and creeks. Both types of bags can cause pollution that impacts the health of our watershed. The more disposable bags that are used for customers to carry out their purchases, the more chances there are for these bags to end up littering our community and polluting our natural resources. The point of the bag law is to lessen our dependence on disposable bags in order to reduce their occurrence in our environment.
12. **Does DEP believe there is merit in considering banning plastic bags while continuing a bag tax for paper bags?**
 - A. The County wants to eliminate all bag litter in its streams. The bag law is encouraging shoppers to use reusable bags and thus reduce the number of plastic and paper bags that may wind up on roadsides and in storm drains. The production of plastic and paper bags both have significant environmental impacts as noted in the response to question #10. Both bag types should be subject to policies which prevent potential bag litter and help reduce resources used in the manufacture of new bags.
13. **What specific efforts has the bag tax revenue funded so far in FY13? What is the total amount expected to be spent in FY13 (\$561,640 in revenue was assumed in the Approved Budget)?**
 - A. Start up costs have covered distributing reusable bags to the County's low income and senior populations, making sure that consumers and retailers understand how the law is being implemented and setting up a payment mechanism for retailers. Since start up began, about \$350,000 has been spent on these initiatives, with about \$84,000 spent during FY13. Remaining funds will be encumbered for litter control activities or other programs designed to improve water quality. These include upgrading stormwater ponds, restoring stream banks, installing rain gardens, green roofs, etc, and litter control projects.

| Jurisdictions with: | | | | |
|-----------------------|-----------------------------|-------------------------------------|---|---|
| State | Bag Tax | Plastic Bag Ban | Comment | |
| Alaska | | Bethel | ban on plastic bags only | |
| | | Homer | ban on plastic bags only | |
| | | Hooper Bay | ban on plastic bags only | |
| California | Alameda County Waste Mana | Alameda County Waste Manager | ban on plastic bags, 10 cent charge on paper and reusable bags | |
| | | Belmont | ban on plastic bags, 10 cent charge on paper bags (up to .25 in 1/15) | |
| | Calabasas | Calabasas | ban on plastic bags, 10 cent charge on paper bags | |
| | Capitola | Capitola | ban on plastic bags, 25 cent charge on paper bags | |
| | | Carmel-by-the-Sea | ban on plastic bags only | |
| | | Carpinteria | ban on all single-use bags (paper and plastic) | |
| | | Colma | retail stores may sell paper or reusable bags for a small charge | |
| | | Cupertino | retail stores may sell paper or reusable bags for a small charge | |
| | | Daly City | ban on plastic bags, 10 cent charge on paper bags | |
| | | Dana Point | ban on plastic bags only | |
| | | Fairfax | ban on plastic bags only | |
| | | Foster City | retail stores may sell paper or reusable bags for a small charge | |
| | | Glendale | ban on plastic bags, 10 cent charge on paper bags | |
| | | Half Moon Bay | ban on plastic bags, 10 cent charge on paper and reusable bags | |
| | | Laguna Beach | ban on plastic bags, 10 cent charge on paper bags | |
| | | Long Beach | ban on plastic bags, 10 cent charge on paper bags | |
| | | Los Altos | ban on plastic bags, 10 cent charge on paper bags (up to .25 in 1/15) | |
| | | Los Angeles County | Los Angeles County | ban on plastic bags, 10 cent charge on recycled paper bags |
| | | | Malibu | ban on plastic bags only |
| | | | Manhattan Beach | ban on plastic bags only |
| | | Marin County | Marin County | ban on plastic bags, 5 cent charge on paper bags |
| | | Mendocino County | Mendocino County | ban on plastic bags, 10 cent charge on paper bags |
| | | Menlo Park | Menlo Park | retail stores may sell paper or reusable bags for a small charge |
| | | Millbrae | Millbrae | ban on plastic bags, 10 cent charge on paper and reusable bags |
| | | Monterey | Monterey | ban on plastic bags, 10 cent charge on paper and reusable bags |
| | | Mountain View | Mountain View | ban on plastic bags, 10 cent charge on paper bags |
| | | Ojai | Ojai | ban on plastic bags, 10 cent charge on paper bags |
| | | Pacifica | Pacifica | ban on plastic bags, 10 cent charge on paper bags |
| | | | Palo Alto | ban on plastic bags only |
| | | Pasadena | Pasadena | ban on plastic bags, 10 cent charge on paper bags |
| | | Portola Valley | Portola Valley | ban on all single-use bags, 10 cent charge on reusable bags |
| | | San Carlos | San Carlos | ban on all single-use bags, 10 cent charge on reusable bags |
| | | | San Francisco | First plastic bag ban in the nation (April 2007) |
| | | San Jose | San Jose | ban on plastic bags, 10 cent charge on paper bags (up to .25 in 1/14) |
| | | San Luis Obispo County Integr | San Luis Obispo County Integrate | ban on plastic bags, 10 cent charge on paper bags |
| | | San Mateo County | San Mateo County | ban on all single-use bags, 10 cent charge on reusable bags |
| | | Santa Clara County | Santa Clara County | ban on plastic bags, 15 cent charge on paper bags |
| | | Santa Cruz County | Santa Cruz County | ban on plastic bags, 10 cent charge on paper bags |
| | | Santa Monica | Santa Monica | ban on plastic bags & cost pass-through reqmt per recyclable paper bag |
| | | Solana Beach | Solana Beach | ban on plastic bags, 10 cent charge on paper bags |
| | | South San Francisco | South San Francisco | ban on plastic bags, not sure of charge on paper/reusable bags |
| | | Sunnyvale | Sunnyvale | ban on plastic bags, 10 cent charge on paper bags (to rise to .25) |
| | | Ukiah | Ukiah | ban on plastic bags, 10 cent charge on paper bags |
| | | Watsonville | Watsonville | ban on plastic bags, 10 cent charge on paper bags (to rise to .25 in 5/13) |
| | | West Hollywood | West Hollywood | ban on plastic bags, 10 cent charge on paper bags |
| | Colorado | | Aspen | ban on plastic bags, 20 cent charge on paper bags |
| | | | Boulder | ten cent charge per plastic or paper bag |
| | | | Carbondale | ban on plastic bags, 20 cent charge on paper bags at grocery stores =>3,500 sq ft |
| | | | Telluride | ban on plastic bags, 10 cent charge on paper bags |
| | Connecticut | | Westport | ban on plastic bags only |
| | District of Columbia | District of Columbia | | 5 cent charge on paper and plastic bags |
| | Hawaii | | Hawai County | ban on plastic bags only |
| | | | Honolulu County | ban on plastic bags only |
| | | | Kauai County | ban on plastic bags only |
| | | | Maui County | ban on plastic bags only |
| | Maryland | Montgomery County | | 5 cent charge on paper and plastic bags |
| | Massachusetts | | Brookline | ban on plastic bags only |
| New York | | East Hampton | ban on plastic bags only | |
| | | Mamaroneck | ban on plastic bags only | |
| | | Rye | ban on plastic bags only | |
| | | Southampton | on non-biodegradable bags | |
| North Carolina | | Barrier Islands (Hyde, Currituck, e | ban on plastic bags only | |
| Oregon | Corvallis | Corvallis | ban on plastic bags, 5 cent charge on paper bags | |
| | | Portland | ban on plastic bags only | |
| Rhode Island | | Barrington | sunset January 31, 2015 | |
| Texas | | Austin | applies to both plastic and paper bags | |
| | Brownsville | | \$1 charge per transaction | |
| | | Fort Stockton | ban on plastic bags only | |
| Washington | | Bainbridge Island | ban on plastic bags only | |
| | Bellingham | Bellingham | ban on plastic bags, 5 cent charge on paper bags | |
| | | Edmonds | ban on plastic bags only | |
| | Issaquah | Issaquah | ban on plastic bags, 5 cent charge on paper bags | |
| | | Mukilteo | ban on plastic bags only | |
| | Port Townsend | Port Townsend | ban on plastic bags, 5 cent charge on paper bags | |
| | Seattle | Seattle | ban on plastic bags, 5 cent charge on paper bags | |

Source: <http://www.cawrecycles.org>


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About Membership

Food co-ops throughout the U.S. are eligible for membership in NCGA. [Find out more about the requirements and benefits of membership.](#)

Checkout Choices: The Paper vs. Plastic Controversy

Who would have thought that choosing between paper and plastic at the checkout would present such a dilemma? For a while the environmentally conscious were convinced that paper was the more ecological choice. (It certainly seems more natural, as a renewable, recyclable plant product.) Some communities have even banned the ubiquitous plastic shopping bag. Research hasn't exactly confirmed the ecological superiority of paper, however. In fact, some experts provide solid evidence that plastic is sometimes the more ecological choice.

Of course, both plastic and paper bags impact the environment, using natural resources and contributing to greenhouse gas production in their manufacture, transportation, and disposal. Life cycle analysis is what scientists do to figure out the environmental impact of an item. Plenty of these have been conducted on plastic and paper bags, but the information generated can be tricky to compare. For example, when fully assessing the impact of a bag, you need to know if it's made from recycled or virgin materials (and if paper, whether the timber was harvested from a sustainable forest), how far the manufacturing supplies will travel, and how many miles the bag will travel to the final consumer. To assess the carbon footprint of production, you need to know the manufacturer's environmental policies. And when gauging the long-term impact of the product, it depends in part on whether the bag will be reused or recycled or composted or dumped in the landfill.

Keeping the fact that such variables exist in mind, here is just some of the key information about both plastic and paper bags:

Plastic Bags

- Cause less global warming pollution and have less of an impact on biodiversity and water, according to scientists at the National Resources Defense Council (NRDC). For example, plastic bags use 40 percent less energy during production and less than 4 percent of the water used to make paper bags. And plastic bags generate 79 percent fewer greenhouse gas emissions than composted paper bags.
- Cost less to transport, saving on fuel costs. In fact, it would take about seven trucks to transport the same number of paper bags as a single truck of plastic bags, according to The Environmental Literary Council.
- Take up less landfill space. Plastic bags account for about 9 to 12 percent of waste volume, while paper occupies about half of overall landfill volume.

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- Take less energy to recycle. It takes 91% less energy to recycle a pound of plastic than it takes to recycle a pound of paper.

On the other hand:

- Ninety percent of grocery bags are plastic, which is made from petroleum. It takes 12 million barrels of oil to make a year's worth of plastic bags (100 billion of them) for Americans.
- Five of the top six chemicals that produce the most hazardous waste (according to EPA rankings) are used in plastics production.
- Less than 5 percent of plastic bags are recycled. About 4 billion plastic bags are thrown away -- littered throughout the world -- each year. Tied end to end, they could circle the earth 63 times. Instead they hang from fences and trees, blow across streets and fields.
- Because recycling plastic is expensive and time-consuming, many of the plastic bags collected for recycling are shipped for incineration to countries with lax environmental laws.
- When improperly disposed of, plastic bags cause problems in coastal areas, where they threaten sea life for as long as 1,000 years while the plastic remains in the water. Sea turtles mistake them for jelly fish and as many as one million sea creatures are killed each year by plastic bags, which also clog sewer pipes and cause stagnant, unhealthful water for humans.
- Plastic does not break down in the landfill. It will always be there. Even biodegradable plastic -- which is made of wood fibers mixed with plastic fibers -- leaves tiny plastic pieces in the earth.

Paper Bags

- Can hold more than plastic bags, if packed well.
- Are more often recycled than plastic bags. According to the EPA, Americans currently recycle 19.4% of paper bags but only 0.6 percent of plastic bags. (Granted, both numbers are too low!)
- Are biodegradable. While modern landfills don't allow for this process to occur as it should (the bags are buried and receive no air and sunlight for decomposition), paper bags do naturally break down -- as mulch in the garden, for example.
- Do not rely on petrochemical production.
- Can be produced from sustainable forests.

On the other hand:

- The paper industry has an enormous environmental footprint. It takes more than four times as much energy (2,511 BTUs) to produce a paper bag as it does a plastic bag (594 BTUs). And paper bag production generates 50 times more water pollutants and 70 percent more air pollutants than the plastic bag production.
- About 14 million trees were used in 1999 to make 10 billion paper bags for Americans. And when forests are cut down to make paper, major absorbers of greenhouse gases are eliminated.
- A paper bag generates greater methane emissions in the landfill than a plastic bag.
- For strength, most paper grocery bags are made from virgin pulp, not recycled materials.

What to Do



All this research may make you feel like you're caught between a paper mill and a petrochemical plant. But this is one environmental dilemma that has a fairly easy solution: BYOB. Make a small investment in reusable bags and keep them in your home, your car, and/or your office. You can find bags made of all kinds of materials; look for those that are sturdy (heavy canvas is one good choice) and roomy enough to haul your groceries (string cotton bags expand greatly but can also be easily tucked into a purse or backpack). If you're the least bit crafty you might even want to try to make your own out of fun fabrics. Another option is storage crates, which make loading and unloading groceries especially easy. And make sure you get in the habit of toting your own bag for all kinds of shopping expeditions, not just groceries.

When you're caught without your own bag:

- Chose whichever bag -- plastic or paper -- you are most likely to recycle.
- Use as few bags as necessary. Buy less, pack each bag more fully, don't double bag.
- Skip the bag altogether when you have only an item or two to carry.
- When you get the paper or plastic bag home, make sure you reuse it: for lining trash cans and diaper pails, for packing materials, composting (paper), craft projects and wrapping paper (paper). Re-use it on your next shopping trip. Or take it to a nearby Goodwill or consignment shop that can reuse bags.

Learn More

Learn more from these sources:

- [Institute for Lifecycle Assessment, October 28, 2004.](#)
- [Paper or plastic? The Environmental Literary Council](#)
- [Paper vs. plastic -- The shopping bag debate](#)
- [Plastic Recycling Directory](#)
- [The ULS Report, REVIEW OF LIFE CYCLE DATA RELATING TO DISPOSABLE, COMPOSTABLE, BIODEGRADABLE, AND REUSABLE GROCERY BAGS, 2007](#)

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