CITY OF BOULDER
CITY COUNCIL AGENDA ITEM

MEETING DATE: OCTOBER 16, 2012

AGENDA TITLE
Second reading and consideration of a motion to adopt Ordinance No. 7870 amending Title 6, "Health, Safety and Sanitation", B.R.C. 1981, regarding the establishment of a fee on all disposable plastic and paper checkout bags distributed at food stores.

PRESENTERS
Jane S. Brautigam, City Manager
Tom Carr, City Attorney
Paul J. Fetherston, Deputy City Manager
David Driskell, Executive Director, Community Planning and Sustainability
Susan Richstone, Deputy Director, Community Planning and Sustainability
Jamie Harkins, Business Sustainability Specialist

EXECUTIVE SUMMARY
The purpose of this item is for City Council to consider adoption of an ordinance amending the Boulder Revised Code (B.R.C.), 1981 to create a new Chapter 6-15, "Disposable Bag Fee" establishing a $0.20 fee on all plastic and paper disposable checkout bags distributed by food stores (**Attachment A**). Council approved Introduction and First Reading of the ordinance on Oct. 2, 2012.

The fee approach is based on a life cycle perspective of both types of bags which recognizes the non-local environmental impacts as well as customer and business impacts, cost to administer, and ease of enforcement. The proposed ordinance would apply the Disposable Bag Fee only to food stores, which addresses a majority of the bag use in Boulder while minimizing city resources necessary to administer the program.

The proposed fee amount and use of the fee proceeds are based on a fee nexus study conducted by the consulting firm TischlerBise (**Attachment B**). The $0.20 per bag fee includes a retailer portion of $0.04 per bag, which will be retained by the food stores to offset ordinance compliance costs. The $0.16 per bag portion remitted to the City of Boulder will be used as follows:

1) to implement and administer the ordinance;

2) to provide free, reusable bags to the public;
3) to fund an educational outreach campaign;
4) to fund programs and equipment designed to minimize bag pollution;
5) to fund community cleanup events and other activities that reduce bag pollution; and
6) to mitigate the effects of disposable bags on the city's drainage system, wildlife and environment.

STAFF RECOMMENDATION

Suggested Motion Language:
Staff requests council consideration of this matter and action in the form of the following motion:

Motion to adopt Ordinance No. 7870 amending Title 6, "Health, Safety and Sanitation", proposing a new Chapter 6-15, "Disposable Bag Fee" B.R.C. 1981 that establishes a $0.20 fee on all disposable plastic and paper checkout bags distributed by food stores.

Staff is recommending the following:

1. A $0.20 "Disposable Bag Fee" to be charged to consumers for every disposable plastic and paper checkout bag distributed at food stores in the City of Boulder.

    a) A definition is proposed for a *food store* as a retail establishment or business located within Boulder city limits in a permanent building, operating year round, is a full-line, self-service market, and sells a line of staple foodstuffs, meats, produce, dairy products or other perishable items. The proposed fee would not apply to businesses that sell food as an incidental part of their business. *Incidental* is defined as no more than 2 percent of gross sales.

    b) $0.16 per bag is to be remitted to the city for public sector uses defined in the Disposable Bag Fee Nexus Study.

    c) $0.04 per bag is to be retained by food stores to compensate for costs incurred as a result of the ordinance.

2. Proceeds from the fee would be used by the city to:

    a) cover the costs associated with developing, implementing and administering the ordinance;

    b) provide reusable checkout bags to residents and visitors;

    c) educate residents, businesses, and visitors about the impact of disposable bags on the city's environmental health, the importance of reducing the number of disposable bags entering the waste stream, and the expenses associated with

mitigating the effects of disposable bags on the city's drainage system, transportation system, wildlife and environment;

d) fund programs and infrastructure which promote waste reduction associated with disposable bags;

e) purchase and install equipment designed to minimize bag pollution, including recycling containers, associated with disposable bags;

f) fund community cleanup events and other activities that reduce disposable bag pollution; and

g) mitigate the effects of disposable bags on the city's drainage system, wildlife and environment.

3. The portion of the fee retained by the retailer would be to:

    a) cover the administrative costs associated with collecting, accounting for, and remitting the fee to the city;

    b) develop and display educational signage and information about the Disposable Bag Fee or to encourage the use of reusable bags;

    c) train staff in the implementation and administration of the fee;

    d) improve or alter infrastructure to allow for the implementation, collection, and administration of the Disposable Bag Fee; and

    e) improve infrastructure to increase plastic bag recycling.

4. A requirement that disposable paper checkout bags distributed at food stores be 100 percent recyclable and contain a minimum of 40 percent post-consumer recycled content.

5. An ordinance effective date of July 1, 2013.

    a) In order to reduce implementation costs for computer programming, retail stakeholders indicated that a six month implementation period following ordinance adoption would be preferable. This would allow the computer update to be rolled into an existing scheduled update.

    b) An ordinance effective date at the beginning of a quarter will align with the sales tax reporting system.

6. An exemption from the Disposable Bag Fee for customers participating in federal or state food assistance programs.

a) In addition to this exemption, implementation of the ordinance will include developing and executing specific strategies and partnerships for ensuring that low income individuals have access to free reusable bags. Staff has met with food assistance and low income housing organizations, including Boulder Housing Partners, food banks and EFAA (Emergency Family Assistance Association). The distribution of free reusable bags through these organizations and through additional outreach will be a staff priority.

COMMUNITY SUSTAINABILITY ASESSMENTS AND IMPACT

- Economic: The proposed ordinance will have an economic impact on the business community in Boulder because of the need to collect and remit the fee, train employees, and provide outreach to customers about the program. However, the $0.04 per bag retailer portion of the fee is intended to offset these costs. There will also be an economic impact to consumers that do not use reusable bags when shopping at food stores. A portion of the $0.16 remitted to the city will be used to purchase and give away reusable bags to the community so that this impact may be avoided.

- Environmental: Both plastic and paper disposable bags have wide-ranging direct impacts on the natural environment. These impacts range from "upstream" manufacturing impacts of pollution, greenhouse gas emissions and water use to "downstream" impacts on litter, contamination at recycling facilities and solid waste disposal.

- Social: Addressing disposable bag use impacts by requiring a fee could potentially impact low income residents, senior citizens and tourists. This impact will be mitigated in several ways including targeted bag giveaways and a bag fee exemption for low income consumers receiving government food assistance. Staff will partner with community groups, including local food banks and housing organizations, to ensure that free reusable bags are readily available to low income individuals.

OTHER IMPACTS

- Fiscal: The proposed Disposable Bag Fee will have a neutral impact on the city budget. Expenditures needed to implement and administer the fee and provide education and reusable bags to the community will be offset by the $0.16 per bag portion that is remitted to the city.

- Staff time: A bag fee program will require additional staff time in both the Sales Tax Division of the Finance Department and the Community Planning and Sustainability Department. These costs are included in the Disposable Bag Fee Nexus Study conducted by TischlerBise and will be offset by the $0.16 per bag portion that is remitted to the city.

FIRST READING QUESTIONS AND RESPONSE

Question: Will staff investigate creative partnerships for the design and purchase of reusable bags for the community?

> *Response*: GarCo Sewing Works, an innovative job training program in Garfield County which made the reusable bags for the City of Aspen's program, may have the ability to provide some or all of the reusable bags to meet Boulder's needs. Additional options are being investigated to ensure that the community is provided reusable bags that are in line with the city's environmental and social sustainability goals. Staff does plan on working with local organizations on bag designs as part of the ordinance implementation plan.

Question: Can the paper bag material requirement of 40 percent post-consumer recycled content be increased now or can we evolve to a higher goal in the future?

> *Response*: The majority of bag reduction ordinances implemented in the U.S. include a paper bag material requirement of at least 40 percent post-consumer recycled content. Staff found one ordinance in the Outer Banks, North Carolina that requires paper checkout bags to be 100 percent recycled content. Through research on the availability and price of paper bags, it appears that 40 percent and 100 percent recycled content are the main two options available. Previous discussions with large grocers in Boulder indicated that they are all currently using bags that are at least 40 percent recycled content, which cost between 4 and 10 cents per bag. Whole Foods and Alfalfa's currently use 100 percent recycled content bags. While pricing information is limited because of the lack of wholesale distributor price information, 100 percent recycled content bags would be more expensive for the large stores to purchase. Online outlets charge approximately 20 to 25 cents per bag. The price of 100 percent recycled content bags can be monitored over time and the requirement strengthened in the future.

Question: Many people reuse plastic checkout bags for trash – if there is a fee on them will people change their trash behavior and will there be unintended consequences?

> *Response*: While some residents reuse plastic checkout bags for trash many residents do not, which results in the litter and contamination problems at the recycling center. These residents would have the option of paying the bag fee for plastic checkout bags or could purchase bags designed for waste management instead. Trash bags as small as four gallons in size are available at local retailers.

Question: How will progress be measured and what is the ultimate goal?

> *Response*: The goal of the proposed ordinance is to eliminate the use of disposable plastic and paper checkout bags at food stores, which represent 60 to 70 percent of the total bag use in Boulder. The ultimate goal of addressing disposable bags through legislation is to eliminate their use. This would require expanding the ordinance in the future to apply to other types of stores and monitoring the effectiveness of the fee in reducing bag use.

As part of the Disposable Bag Fee Nexus Study, TischlerBise determined the following bag reduction projections for the first four years based on experiences in other communities:

- 50 percent reduction after year 1;
- 75 percent reduction after year 2;
- 85 percent reduction after year 3; and
- 85 percent reduction after year 4.

These projections will serve as short-term goals to measure the ordinance's impact and progress will be tracked through the reported number of bags distributed by applicable stores compared to the baseline estimate. The progress towards reducing the contamination costs at the Boulder County Recycling Facility due to plastic bags will also be tracked. Council will be provided with annual progress updates, and a plan to reevaluate the scope and approach of the ordinance in the future will be incorporated into the update of the Zero Waste Master Plan.

Question: What would be the result of lowering the fee on the marketing and outreach budget?

Response: The $0.20 bag fee could be reduced by removing some of the cost components from the fee calculation or by reducing the city's costs to implement and administer the ordinance. A majority of the city budget funds a robust educational outreach campaign and a large amount of reusable bags for the community. If the retailer portion is kept at $0.04, setting the fee at $0.15 would reduce the city's portion by 31 percent and setting the fee at $0.10 would reduce it by 63 percent. This would translate into the following approximate reductions in the budget for the educational outreach campaign and bag giveaways:

Over 4 Years			
Fee level	**Education/Outreach Budget**	**Bag Giveaway Budget**	**# of Bags Available**
$0.20	$908,500	$845,000	170,000
$0.15	$434,100	$625,000	125,000
$0.10	$114,701	$250,000	50,000

A $0.20 fee would provide for 170,000 reusable bags for the community over four years and a robust educational outreach campaign that includes television spots, public service announcements, radio and newspaper advertising, bus ads, prompts such as stickers and magnets and support for a wide range of store signage. It would allow for the pursuit of partnerships with hotels and other organizations that interface with tourists such as hotels, the Denver International Airport, car rental and taxi companies, and the Boulder Convention and Visitors' Bureau.

Reducing the fee to $0.15 would reduce the number of bags available to 125,000 over four years and limit the reach of the educational campaign. Distribution of free bags,

store signage and lower cost messaging outlets would be prioritized over television spots, bus ads, and other more expensive but highly visible outlets. It is likely that an educational outreach campaign at this funding level would still be effective in reaching targeted populations, such as low income residents and senior citizens, however it would not have the same reach to the broader community or tourists.

A $0.10 fee would reduce the number of bags available to 50,000 over four years and limit the educational campaign to the start-up costs of distributing the free bags and creating store signage and using outlets such as social media and public service announcements to educate the public.

It is important to note that while the lower fee possibilities of $0.15 or $0.10 do still provide funds for bag giveaways to the public, the free bags alone will not ensure that residents actually use them. An effective educational campaign based on the lessons learned from the city's other programs, such as EnergySmart, 10 for Change and Zero Waste, will be needed to achieve strong reductions in disposable bag use.

Finally, the adjusted budget calculations above are based on the same bag reduction projections included in the fee nexus study. It is possible that a lower fee level would not reduce bag use as quickly as a $0.20 fee. In that case, the fee proceeds remitted to the city would be higher than these figures; however progress towards the goal of eliminating bag use would take longer. A $0.20 fee would be consistent with the paper bag fees implemented in Aspen and Carbondale, and a $0.10 fee would be consistent with that in Telluride.

In discussions with city staff from other communities, the number one lesson shared was not to underestimate the outreach effort needed for this type of ordinance due to its wide impact. City of Aspen staff budgeted $60,000 for the four months prior to their ordinance implementation, applicable to one large grocery store and a population of 6,658. Adjusted on a per capita basis, a budget of $900,000 would be comparable for Boulder. When the City of Austin passed their initial ban on plastic and paper ban, which was changed to a plastic bag ban with a fee on paper bags, they planned a $1.5 to $2 million educational campaign for the year prior to the ordinance's effective date.

BOARD AND COMMISSION FEEDBACK

The Environmental Advisory Board (EAB) discussed the draft Disposable Bag Fee Nexus Study methodology and results as well as other aspects of the proposed ordinance on Sept. 12, 2012. A majority of board members were in support of the staff recommendation for the proposed bag fee, while one board member supported a lower fee level. The EAB had the following comments at the meeting:

1. Support for reassessing the bag fee in years following its implementation.
2. Importance of a robust education and marketing campaign prior to the bag fee implementation.
3. Support for tracking bag use and reduction after implementation of the fee.

4. Importance of regularly assessing fee proceeds to the city and adjusting expenditures accordingly.
5. Support for not allowing compostable plastic bags as an exemption to the ordinance.

In addition, the following issues were discussed:

1. Concern about the potential impact of a $0.20 disposable bag fee on low income populations.

   Staff Response: Strategies for mitigating impacts of a bag fee on low income populations are being developed by staff as part of the implementation plan. Staff has been actively working to partner with food assistance and low income housing organizations to ensure that if the proposed ordinance is adopted, free reusable bags are distributed through as many channels as possible.

2. The need for a $0.20 per bag fee given the success of lower fees in other communities.

   Staff Response: The $0.20 bag fee was calculated based upon the TischlerBise study of costs associated with administering this program. TischlerBise estimated that the public sector costs would be approximately $0.16 per bag, while the costs associated with retailers implementing the fee totaled approximately $0.04 per bag. Public sector costs include City of Boulder expenses to implement and administer the ordinance and funding to mitigate the impact of bags at local recycling centers and the environment. While Washington, DC has experienced a 75 to 80 percent decrease in bag use in one year due to a $0.05 fee on both plastic and paper bags, there are significant demographic differences between the two cities. Considering that Boulder's estimated current bag use is lower than other comparable communities indicates that it is unlikely the same reductions would occur at that fee level. In communities that have adopted a ban on plastic bags with a fee on paper bags, that fee ranges from $0.10 to $0.20. Aspen and Carbondale's ordinances include a $0.20 paper bag fee, and Telluride implemented a $0.10 fee.

PUBLIC FEEDBACK

The May 15, 2012 City Council meeting packet contained a compilation of public comments received through the project website comment form and a web-based survey through that date. On Sept. 10, 2012 the draft Disposable Bag Fee Nexus Study was made available on the project website and additional public input was requested. Comments received through Oct. 8, 2012 are included in **Attachment C**.

A public meeting was held on Sept. 20, 2012 to obtain feedback on the Disposable Bag Fee Nexus Study. Approximately 30 attendees participated in a question and answer period following a staff presentation of the nexus study results. Two attendees were opposed to any ordinance addressing bag use, while the remaining attendees were evenly split between support for a bag fee and support for a bag ban. In addition to questions regarding the structure of the ordinance, the main themes of the public comments included:

- Support for a ban on just plastic bags or both types of bags rather than a fee;

- Support for the proposed fee level;
- Support for a higher fee level;
- Support for the retailer portion of the fee, with a comment that four cents per bag is very generous;
- Support for an emphasized focus on distributing free bags to low and fixed income populations;
- Support for expanding the scope of the ordinance to more than just food stores in the future;
- Concern for store cashiers that will need to explain bag fee to consumers; and
- Opposition to the fee due to contamination of reusable bags, difficulty bagging reusable bags, the opinion that the bag fee is an additional tax on groceries, and the common reuse of plastic bags for sanitary uses.

Additional feedback from the comment forms submitted at the meeting is also included in **Attachment C**.

No members of the public were present at the Sept. 12, 2012 meeting of the EAB.

Seven members of the public provided comments during public participation at the first reading on Oct. 2, 2012. Five were in favor of a ban on plastic bags, either immediately or as an eventual goal. Three supported expanding the scope of the ordinance to apply to all retail stores. One person did not support any ordinance addressing disposable bags.

Staff sent letters to smaller food stores that were not originally part of the stakeholder group meetings earlier this year to obtain feedback on the proposed ordinance. The stores that met with staff included India's Grocery and 7 Eleven on Valmont Road. Both stores were very supportive of the proposed ordinance and requested that signage be very clear in identifying the bag fee as a City of Boulder policy and not a fee the stores are imposing on consumers.

BACKGROUND

Both plastic and paper bags have significant environmental impacts throughout their life cycle. Plastic bags contribute to litter in trees and waterways, and cause frequent equipment shut-downs at the Boulder County Recycling Facility by contaminating the waste stream. Paper bags have more "upstream" environmental impacts since they are much more energy and water intensive to manufacture. (See **Attachment D** for more information about the environmental impacts of disposable bags.)

The 2006 Master Plan for Waste Reduction, which is in the process of being updated, includes an overarching goal of 85 percent waste diversion by the year 2017. While reducing the use of disposable bags will not significantly impact waste diversion overall, it will address other council priorities such as maximizing participation in zero waste initiatives.

At the Oct. 11, 2011 City Council Study Session on the Master Plan for Waste Reduction update (renamed the Zero Waste Master Plan), staff presented research on approaches taken by other communities to reduce disposable bag use. City Council directed staff to explore options for

reducing disposable plastic and paper checkout bag use in Boulder though a process that involved business stakeholders.

At the May 15, 2012 City Council meeting, five options were presented for reducing disposable bag use in Boulder, developed with input from Safeway, King Soopers, Whole Foods, Target, Alfalfa's, and phone surveys with several smaller grocers. These options included:

- A fee on both plastic and paper checkout bags;
- A ban on plastic bags with a fee on paper bags;
- A ban on both plastic and paper bags;
- Educational campaign only; and
- No action.

The favored approach of the large grocers was an educational campaign, followed by a fee on both plastic and paper checkout bags. A ban on plastic bags and shift to all paper bags would require infrastructure changes at grocer check-outs and significant increased bag purchase costs.

City Council voted 7-1 (Karakehian opposed, Ageton absent) in favor of developing a fee on both plastic and paper checkout bags at all food stores, addressing approximately 60 to70 percent of all bags distributed in the city. This approach recognizes the life cycle environmental impacts of both types of bags and supports a shift away from all disposable bags. It also minimizes the impacts to large grocery stores, retains consumer choice, and offsets costs to the city, including an educational campaign and bag giveaways to the community.

ANALYSIS

Fee Nexus Study

In general, the purpose of a fee is to defray the cost of a particular government service, as opposed to a tax, which is imposed to pay for general government services. Under state law, there must be a reasonable relationship (nexus) between the fee amount and the cost of the service provided to the community.

To determine the appropriate amount for the Disposable Bag Fee, staff contracted with TischlerBise, a private consulting firm, to conduct a fee nexus study (**Attachment A**). The bag fee is comprised of several components that can be viewed as building blocks in calculating the proposed fee:

1. Costs incurred by the public sector (both by the city as well as by the Boulder County Recycling Facility and the Center for Hard-to-Recycle Materials).
2. Costs for externalities such as greenhouse gas emissions and waterway impacts.
3. Costs incurred by retailers to collect and administer the fee.
4. Current estimate of bag usage in the city and an estimate of the current number of bags to which the fee will be applied.
5. Projected annual bag use reduction as the fee requirement is implemented.

The bag fee formula, based on the total costs to the city and the retailer to implement and administer the program over a four year period and the projected amount of bags distributed in future years, is:

Related Costs/Bags Used = Fee per Bag

1. Public Sector Costs
   The following public sector cost components are included in the fee calculation and discussed in detail in the body of the report (pages 15 to 19):
   - Development, implementation, administration and enforcement of the ordinance through both the Finance Division and the Community Planning and Sustainability Department;
   - Purchase and distribution of free reusable bags to the community;
   - Design and implementation of a robust educational outreach campaign;
   - Design and production of store signage;
   - The impact of plastic bag contamination at the Boulder County Recycling Facility; and
   - The cost to recycle plastic bags at the city-supported Center for Hard to Recycle Materials (CHaRM).

   Staff provided TischlerBise with detailed cost estimates based on experiences of other large outreach campaigns, such as Energy Future, and discussions with Aspen staff, who implemented a plastic bag ban and paper bag fee earlier this year. Total city costs over the first four year period are estimated at $2.2 million.

2. Externalities
   The fee nexus study includes the optional cost component of offsetting disposable bag externalities, which are the environmental impacts of both plastic and paper bags throughout their whole life cycle, from manufacturing to disposal. The calculated externality cost in the fee nexus study (p. 21 - 22) represents a greenhouse gas emissions offset for the life cycle emissions of bags distributed in the city, support for city waterway cleanup programs, and Water Restoration Certificates to offset the water footprint of both types of bags. The proposed $0.20 bag fee does include this cost component.

3. Retailer Portion
   The proposed ordinance allows foods stores that collect the bag fee to retain a portion of the fee to compensate for ordinance compliance costs. TischlerBise and city staff worked with large grocers to determine the type and estimated amount of costs associated with a bag fee. These costs include:
   - Initial implementation and ongoing costs for training staff;
   - Initial and ongoing marketing to customers on the Disposable Bag Fee;
   - One-time technology computer programming to handle fee and enable tracking;
   - Administrative costs for tracking, reporting and remitting fee collections; and

- Other ancillary effects such as increased bagging time during the transaction.

4. Bag Usage and Reduction Assumptions
   Estimates of current bag usage in Boulder were refined with input from additional retailers. Approximately 14,340,400 plastic and paper bags were distributed in 2011 at applicable food stores. This number was the basis of future bag use projections, incorporating both the natural growth of bag use due to population growth and the following reduction assumptions:
   - 50 percent total reduction after year 1;
   - 75 percent total reduction after year 2;
   - 85 percent total reduction after year 3; and
   - 85 percent total reduction after year 4.

   Although Washington, DC saw a larger first year reduction due to a bag fee program, Boulder's current bag use estimate is below that of other comparable communities. Therefore, a 50 percent reduction is a rational projection of likely results. In addition, while bag fee policies have not been in place long enough in the U.S. to show demonstrated long-term trends, Ireland did experience a "plateau" effect approximately four years after fee implementation. This effect is recognized in the projections above, and a reason that the fee study was based on a four year time period. Given that disposable bag fees are a relatively new policy tool, it will be important to track the results carefully and re-evaluate the fee level over this time horizon.

5. Fee Calculation Results
   The weighted average of the cost components above were calculated on a per bag basis and added together to arrive at the total fee amount of $0.199. Based on this calculation, the recommended fee amount is $0.20 to ease collection and remittance, with retailers retaining $0.04 per bag.

Cost Component	Amount
Public Sector Portion	$0.154
Retailer Portion	$0.044
Externality Portion	$0.001
TOTAL	**$0.199**

Paper Bag Material Requirement

On May 15, 2012, City Council directed staff to consider a requirement for a minimum level of recycled content or related requirement for paper bags distributed at food stores. The most common requirement in ordinances adopted by other communities is that papers bags be 100 percent recyclable and contain a minimum of 40 percent postconsumer recycled content. The proposed ordinance includes this provision. All of the major grocers currently operating in the city are already distributing bags that meet this requirement, and it will set an important baseline

for new food stores. All smaller food stores that participated in stakeholder discussions currently use plastic bags.

Compostable Plastic Bag Exemption
An issue discussed at both the April 26, 2012 EAB meeting and the May 15, 2012 City Council meeting was a possible exemption for checkout bags made from compostable materials. The proposed ordinance does not include an exemption from the Disposable Bag Fee for this type of bag. According to Eco-Cycle staff, who operate the Boulder County Recycling Facility for Boulder County, compostable bags cause the same contamination problems at the facility as plastic bags, including frequent equipment shutdowns for bag removal.

Staff discussed this topic with Western Disposal, who operates the composting facility that receives a majority of the organic waste from the city's residential sector. Information obtained from Western indicates that while current technology can create compostable bags that will degrade over time if conditions are ideal, the bags do not break down during the time they are in Western's possession. Because of this issue, Western spends a significant amount of resources, particularly in equipment and labor costs, removing pieces of compostable bags from the compost product.

It is also very likely that a substantial percentage of compostable checkout bags distributed to the public at stores would not be properly sorted into the organics waste stream. While all single family residences receive curbside organics collection with their trash service, multifamily commercial accounts do not. According to 2011 hauler reports, approximately seven percent of all multifamily service addresses had compost collection. Therefore the compostable checkout bags from this sector will likely be disposed of in the trash, where they are unlikely to decompose in landfills. Decomposition of organic materials in the landfill contributes to the production of the greenhouse gas methane.

Finally, it is also possible that consumers will mistakenly deposit compostable bags at plastic bag recycling receptacles. This would be extremely problematic since the markets for plastic bags have very strict requirements for the material—moisture, dirt or other non-plastic materials will contaminate an entire batch of bags. This may result in an overall reduction in the amount of plastic bags recycled.

IMPLEMENTATION
After the adoption of an ordinance, staff will begin preparing for its implementation on the proposed date of July 1, 2013. The associated expenses will be reimbursed by the bag fee proceeds once collection begins. The work plan preceding the ordinance's effective date will include the following:

<u>November - December 2012</u>:

1. Continue outreach to all food stores to provide educational information about the ordinance, its effective date and its requirements;
2. Begin developing the financial return form and other software changes to allow the Finance Division to collect and track the Disposable Bag Fee;

3. Begin to design the educational outreach campaign about the ordinance for the community (including messaging and tactics) and signage for applicable stores;
4. Continue to develop existing and new relationships with organizations that interface with low income and senior populations; and
5. Investigate options and place order for reusable bags to be distributed to the community, giving priority to bags that are made in the U.S., preferably as local as possible.

January – March 2013:

1. Finish design and production of materials for the education outreach campaign and store signage;
2. Begin distribution of free reusable bags to the community at large, and targeted distribution through organizations and other outreach methods to low income and senior populations;
3. Begin educational outreach and marketing campaign to inform the community of the Disposable Bag Fee and its effective date;
4. Develop partnerships with different types of organizations in Boulder with different audiences to provide educational materials and reusable bags;
5. Develop partnerships with organizations that interface with tourists to Boulder, including hotels, visitor bureaus, the airport and car rental companies; and
6. Begin distribution of signage to stores so that customers have very advanced notice of the fee.

April – June 2013:

1. Continue to work with food stores to ensure they are prepared to begin collecting the fee;
2. Continue and ramp-up reusable bag distribution; and
3. Continue and ramp-up educational outreach and marketing campaign to the community.

ATTACHMENTS

A – Draft Ordinance
B – Disposable Bag Nexus Fee Study
C – Public Comment
D – Life Cycle Analysis Studies

ORDINANCE NO. 7870

AN ORDINANCE ADDING A NEW CHAPTER 6-15, "DISPOSABLE FOOD BAG FEE," B.R.C. 1981, AND SETTING FORTH RELATED DETAILS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO:

Section 1. A new Chapter 6-15, "Disposable Bag Fee," B.R.C. 1981 is added as follows:

Title 6 Health, Safety and Sanitation

Chapter 6-15 Disposable Bag Fee

6-15-1

a) **Purpose:** It is the purpose of this chapter to protect the public health and safety and implement the city's Climate Action Plan, Zero Waste Master Plan and the Boulder Valley Comprehensive Plan.

(b) **Findings:** The City Council finds as follows:

(1) The city, through its policies, programs, and laws, supports efforts to reduce the amount of waste that must be land-filled and pursue "zero waste" as a long term goal by emphasizing waste prevention efforts;

(2) That the use of single-use disposable bags has severe impacts on the environment on a local and global scale, including greenhouse gas emissions, litter, harm to wildlife, atmospheric acidification, water consumption and solid waste generation;

(3) Despite recycling and voluntary solutions to control pollution from disposable carryout bags, many disposable single-use bags ultimately are disposed of in landfills, litter the environment, block storm drains and endanger wildlife;

(4) Boulder consumers use approximately 14.3 million disposable bags from food stores each year; and

(5) The city's taxpayers bear the costs associated with the effects of disposable bags on the solid waste stream, drainage, litter and wildlife.

(c) **Intent:** The disposable bag fee is necessary to relieve city taxpayers of the costs imposed upon the city associated with the use of disposable bags. The City Council intends that the requirements of this chapter will assist in offsetting the costs associated with using disposable bags to pay for the mitigation, educational, replacement, and administrative efforts of the city.

6-15-2 Definitions.

The following terms used in this chapter have the following meanings unless the context clearly indicates otherwise:

"Disposable Bag" means a bag that is not a Reusable Bag.

"Disposable Bag" does not include:

(a) Bags used by consumers inside stores to:

(1) Package bulk items, such as fruit, vegetables, nuts, grains, candy or small hardware items;

(2) Contain or wrap frozen foods, meat, or fish;

(3) Contain or wrap flowers, potted plants, or other items where dampness may be a problem;

(4) Contain unwrapped prepared foods or bakery goods; or

(5) A non-handled bag used to protect a purchased item from damaging or contaminating other purchased items when placed in a recyclable paper bag or reusable bag.

(b) Bags provided by pharmacists to contain prescription drugs.

(c) Newspaper bags, door-hanger bags, laundry-dry cleaning bags, or bags sold in packages containing multiple bags intended for use as garbage, pet waste, or yard waste bags.

"Food Store" means a retail establishment or business located within Boulder city limits in a permanent building, operating year round, that is a full-line, self-service market and which sells a line of staple foodstuffs, meats, produce, household supplies, or dairy products or other perishable items.

"Food Store" does not include:

(a) Temporary vending establishment for fruits, vegetables, packaged meats and dairy;

(b) Vendors at farmer's markets or other temporary events;

(c) Businesses at which foodstuffs are an incidental part of the business. Food sales will be considered to be "incidental" if such sales comprise no more than 5 percent of the business's gross sales in the city as measured by the dollar value of food sales as a percentage of the dollar value of total sales at any single location.

"Recycled Paper Bag" means a means a paper bag that is 100 percent recyclable and contains at least 40 percent post-consumer recycled content.

"Reusable Bag" means a bag that is:

(a) Designed and manufactured to withstand repeated uses over a period of time;

(b) Is made from a material that can be cleaned and disinfected regularly;

(c) That is at least 2.25 mil thick if made from plastic;

(d) Has a minimum lifetime of seventy five uses; and

(e) Has the capability of carrying a minimum of 18 pounds.

"Disposable Bag Fee" means a city fee imposed and required to be paid by each consumer making a purchase from a Food Store for each Disposable Bag used during the purchase assessed for the purpose of mitigating the impacts of Disposable Bags.

6-15-3 Disposable Bag Fee Requirements.

(a) For each Disposable Bag provided to a customer, Food Stores shall collect from customers, and customers shall pay, at the time of purchase, a Disposable Bag Fee of $0.20.

(b) Food Stores shall record the number of Disposable Bags provided and the total amount of Disposable Bag Fee charged on the customer transaction receipt.

(c) A Food Store shall not refund to the customer any part of the Disposable Bag Fee, nor shall the Food Store advertise or state to customers that any part of the Disposable Bag Fee will be refunded to the customer.

(d) A Food Store shall not exempt any customer from any part of the Disposable Bag Fee for any reason except as stated in section 6-15-6, "Requirement for Disposable Paper Bags," B.R.C. 1981.

6-15-4 Retention, Remittance, and Transfer of the Disposable Bag Fee.

(a) A Food Store may retain 20 percent of each Disposable Bag Fee collected, which is the "Retained Percent."

(b) The Retained Percent may only be used by the Food Store to:

(1) Provide educational information about the Disposable Bag Fee to customers;

(2) Provide the signage required by section 6-15-5, "Required Signage for Food Stores," B.R.C. 1981;

(3) Train staff in the implementation and administration of the fee;

(4) Improve or alter infrastructure to allow for the implementation, collection, administration of the fee;

(5) Collect, account for and remit the fee to the city; and

(6) Develop and display informational signage to inform consumers about the fee or encourage the use of reusable bags.

(c) The Retained Percent shall not be classified as revenue for the purposes of calculating sales tax.

(d) The amount of the Disposable Bag Fee collected by a Food Store in excess of the Retained Percent shall be paid to the city and shall be used only as set forth in subsection (g) to mitigate the effects of disposable bags in Boulder.

(e) A Food Store shall pay and the city shall collect all Disposable Bag Fees. The city shall provide the necessary forms for Food Stores to file with the city, to demonstrate compliance with the provisions of this ordinance.

(1) If payment of any amount to the city is not received on or before the applicable due date, penalty and interest charges shall be added to the amount due as described in section 6-15-8, "Audits and Violations," B.R.C. 1981.

(f) The Disposable Bag Fee shall be administered by the city manager. The city manager is authorized to legislative and interpretive rules pursuant to chapter 1-4, "Rulemaking," B.R.C. 1981, to implement this chapter, prescribe forms and provide methods of payment and collection and otherwise implement requirements of this chapter.

(g) Funds from the Disposable Bag Fee shall be used only for the expenditures that are intended to mitigate the effects of Disposable Bags, including without limitation the following:

(1) Administrative costs associated with developing and implementing the Disposable Bag Fee.

(2) Activities of the city to:

(A) Provide reusable carryout bags to residents and visitors;

(B) Educate residents, businesses, and visitors about the impact of disposable bags on the city's environmental health, the importance of reducing the number of single-use carryout bags entering the waste stream, and the expenses associated with mitigating the affects of single-use bags on the city's drainage system, transportation system, wildlife and environment;

(C) Fund programs and infrastructure that allow the Boulder community to reduce waste associated with Disposable Bags;

(D) Purchase and install equipment designed to minimize bag pollution, including, recycling containers, and waste receptacles associated with Disposable Bags;

(E) Fund community cleanup events and other activities that reduce trash associated with Disposable Bags;

(F) Mitigate the effects of Disposable Bags on the city's drainage system, transportation system, wildlife and environment;

(G) Maintain a public website that educates residents on the progress of waste reduction efforts associated with Disposable Bags; and

(H) Fund the administration of the Disposable Bag Fee program.

(h) No Disposable Bag Fees collected in accordance with this ordinance shall be used only for general government purposes.

(i) Disposable Bag Fees collected in accordance with this chapter shall be continually available for the uses and purposes set forth in subsection (g) of this section without regard to fiscal year limitation. No Disposable Bag Fee funds shall be used for any purpose not authorized in this chapter.

6-15-5 Required Signage for Food Stores.

Every Food Store subject to the collection of the Disposable Bag Fee shall display a sign in a location outside or inside of the business, viewable by customers, alerting customers to the city of Boulder's Disposable Bag Fee.

6-15-6 Requirement for Disposable Paper Bags.

No Food Store shall provide any paper bag that is not a Recycled Paper Bag.

6-15-7 Exemptions.

A Food Store may provide a Disposable Bag to a customer at no charge if the customer provides evidence that he or she is a participant in a federal or state Food Assistance Program.

6-15-8 Audits and Violations.

(a) Each Food Store licensed pursuant to the provisions of this chapter shall maintain accurate and complete records of the Disposable Bag Fees collected, the number of Disposable Bags provided to customers, the form and recipients of any notice required pursuant to this chapter, and any underlying records, including any books, accounts, invoices, or other records necessary to verify the accuracy and completeness of such records. It shall be the duty of each Food Store to keep and preserve all such documents and records, including any electronic information, for a period of 3 years from the end of the calendar year of such records.

(b) If requested, each Food Store shall make its records available for audit by the city manager during regular business hours for the city to verify compliance with the provisions of this chapter. All such information shall be treated as confidential commercial documents.

(c) If any person fails, neglects, or refuses to collect the Disposable Bag Fee; or underpays the Disposable Bag Fee on a regular basis; or underpays the Disposable Bag Fee because of negligence or fraud, the city manager shall make an estimate of the fee due, based on

available information, and shall add thereto penalties, interest, and any additions to the fee. The manager shall serve upon the delinquent Food Store personally, by electronic mail or by first class mail directed to the last address of the Food Store on file with the city, written notice of such estimated fee, penalties, and interest, constituting a Notice of Final Determination, Assessment, and Demand for Payment, (also referred to as "Notice of Final Determination") due and payable within 20 calendar days after the date of the notice. The Food Store may request a hearing on the assessment as provided in section 6-15-9, "Hearings," B.R.C. 1981.

(d) If payment of any amount of the Disposable Bag Fee to the city is not received on or before the applicable due date, penalty and interest charges shall be added to the amount due in the amount of:

(1) A penalty of ten percent of total due;

(2) Interest charge of one percent of total penalty per month.

6-15-9 Hearings.

(a) A Food Store may request a hearing on any proposed fee imposed under this title after receiving a Notice of Final Determination, by filing a request for hearing within 20 calendar days of the date of mailing of the Notice of Final Determination. The city manager may allow a later filing of a hearing request if the Food Store shows good cause for a late filing. The request for hearing shall set forth the reasons for and amount of changes in the Notice of Final Determination that the Food Store seeks and such other information as the manager may prescribe.

(b) The city manager shall conduct the hearing under the procedures prescribed by chapter 1-3, "Quasi-Judicial Hearings," B.R.C. 1981, except that the manager shall notify the Food Store in writing of the time and place of the hearing at least seven calendar days before it is scheduled, unless the Food Store agrees to a shorter time. The hearing shall be held within 60 days of the date of receipt of the request for a hearing, unless the Food Store agrees to a later date.

(c) The city manager shall conduct the hearing and may administer oaths and take testimony. The hearing officer on the appeal shall not be the same individual who determined the amount of the fee.

(d) In lieu of a request for hearing as provided in subsection (a) of this section, a Food Store may request an extension of up to 20 calendar days for seeking a hearing by filing a written request within 20 calendar days after the date of mailing of the Notice of Final Determination or refund denial or may file a written brief and such other documents and information as the Food Store wishes within 20 calendar days after the date of mailing of the Notice of Final Determination or refund denial and request the city manager to reconsider the action without a hearing. If the Food Store requests a reconsideration of the manager's decision, the manager shall consider the request and render a decision, after which the Food Store may request a hearing thereon as provided in subsection (a) of this section.

(e) The city manager may modify or abate in full the fee, penalty, and interest protested by the Food Store or grant the requested refund, based on the evidence and argument presented.

(f) The city manager shall send a Notice of Final Determination to the Food Store setting forth a decision, including any amount found due or amount of claim for refund denied and the grounds for allowing or rejecting the claim in whole or in part. The determination notice is an assessment that is due and payable within 30 days from its date, unless the Food Store appeals the city manager's decision.

(g) If after 20 calendar days from the date of the mailing of the Notice of Final Determination or refund denial, the fee has not been paid, no request for hearing has been made, no extension has been requested and no request for reconsideration has been filed by the Food Store, the Notice of Final Determination previously mailed constitutes a final assessment of the amount of the fee specified, together with interest and penalties, except as to any amounts about which the Food Store has filed a protest with the city manager.

6-15-10 Criminal Sanctions.

(a) The city attorney, acting on behalf of the people of the city, may prosecute any violation of this title in municipal court in the same manner that other municipal offenses are prosecuted.

(b) The maximum penalty for a first or second conviction within two years, based on date of violation of this section, is a fine of $500.00. For a third and each subsequent conviction within two years, based upon the date of the first violation, the general penalty provisions of section 5-2-4, "General Penalties," B.R.C. 1981, shall apply.

6-15-11 Severability.

If any section, subsection, sentence, clause or phrase of this chapter is for any reason held invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this chapter**.**

Section 3. The provisions of this ordinance relating to the collection of the Disposable Bag Fee and required store signage shall become effective July 1, 2013. All other provisions shall be effective 30 days from the date of passage. The city manager shall develop and implement the administrative and financial processes for the collection of the fee between the effective date of this ordinance and June 30, 2013.

Section 4. This ordinance is necessary to protect the public health, safety, and welfare of the residents of the city, and covers matters of local concern.

Section 5. The City Council deems it appropriate that this ordinance be published by title only and orders that copies of this ordinance be made available in the office of the city clerk for public inspection and acquisition.

INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY TITLE ONLY this _____ day of _____ 2012

.

_____
Mayor

Attest:

_____
City Clerk

READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED PUBLISHED BY TITLE ONLY this _____ day of _____ 2012.

.

_____
Mayor

Attest:

_____
City Clerk

ATTACHMENT B

Disposable Bag Fee Nexus Study

City of Boulder, Colorado

Submitted to:

City of Boulder, Colorado

September 24, 2012

Prepared by:

TischlerBise
Fiscal, Economic & Planning Consultants

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TischlerBise, Inc., is a fiscal, economic, and planning consulting firm that specializes in impact fees, fiscal/economic impact analyses, infrastructure funding strategies, user fees, revenue enhancement options, and market/economic studies. Our firm has been providing consulting services to public agencies for over thirty years. ***In this time, we have prepared over 800 impact fee evaluations and over 100 user fee evaluations – both of which require establishing a nexus between the fee amount and those creating the need.*** *We have extensive previous experience preparing fee studies in the State of Colorado, including for the City of Boulder. Other TischlerBise Colorado clients include: Arapahoe County, Castle Rock, Eaton, Erie, Evans, Greeley, Johnstown, Louisville, Mesa County, Pitkin County, Pueblo, Steamboat Springs, and Westminster.*

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September 2012

DISPOSABLE BAG FEE NEXUS STUDY

City of Boulder, Colorado

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EXECUTIVE SUMMARY

STUDY OVERVIEW

The City of Boulder is developing an ordinance to reduce disposable checkout bag use in Boulder. On May 15, 2012, City Council voted to move forward with an ordinance placing a fee on both plastic and paper checkout bags at food stores.[1] In order to determine the appropriate level and uses of the bag fee, the city issued a Request for Proposals (RFP) to hire an independent consultant to complete a *Disposable Bag Fee Nexus Study*. TischlerBise has been retained by the City of Boulder to conduct the study.

According to the staff recommendation,[2] a nexus fee approach:

- Acknowledges the life cycle environmental impacts of both types of bags, supporting a shift away from disposable bag use in general and not from one type of bag to another;
- Creates an effective financial incentive to change behavior;
- Initial feedback from the large grocers indicated a preference for a fee in comparison to a ban on plastic bags since it minimizes their implementation and administrative costs;
- Retains consumer choice and convenience; and
- Helps offset the city costs for implementation, administration, education, and strategies to minimize impacts to low income consumers and tourists.

Furthermore, by applying the nexus fee only to food stores, the fee:

- Targets a majority of bag use in Boulder while maximizing clarity of the ordinance;
- Avoids confusion for businesses around who must comply; and
- Minimizes city resources required for administration, enforcement and monitoring of exemptions and threshold levels.

This report outlines the approach, methodology, information, and calculations used to derive the disposable checkout bag nexus fee.

---

[1] See http://www.bouldercolorado.gov/LEAD/bags for background on the issue and city supporting documentation.

[2] From City of Boulder, City Council Agenda Item: "Consideration of a motion providing direction on options for reducing disposable checkout bag use in Boulder," May 15, 2012.

APPROACH

Stores to be Regulated

Boulder City Council voted to move forward with an ordinance placing a fee on both plastic and paper checkout bags at food stores only. The fee will not apply to produce bags, newspaper bags, or any other kind of food packaging bags. At this time the ordinance will not apply to restaurants. There are currently approximately 45 food stores in the city that will be affected.

Fee Components

The nexus fee is comprised of several components that can be viewed as building blocks in calculating the fee:

1. Current estimate of bag usage in the city and the estimate of the current number of bags to which the fee will be applied
2. Future projection of number of bags to which the fee will be applied (including a baseline projection and reductions due to fee implementation)
3. Costs incurred by the public sector
4. Costs incurred by retailers
5. Costs for externalities (*option*)

The approach in calculating the fee is to project costs and bag usage (with assumed reductions due to the imposition of the fee) over a four-year period to derive a weighted average to smooth out costs that are higher in the first years.

Bag Usage

This study provides detail on current and projected bag usage in the City of Boulder. This information was developed through local retailer interviews and ongoing research. Bag usage estimates in this report reflect the number of bags to which the nexus fee will apply, which is a subset of total disposable bag use in the city.

The study also projects future bag usage based on several assumptions. First a baseline projection is established based on natural growth in bag use due to population growth in the city. From there, extensive research was done on the impact of a bag fee/tax on bag reduction. Based on our research

and discussions with city staff, reduction factors are determined and then applied to modify projections of bag use (to which the fee will apply).

Cost Components

The next major elements are the costs to be included in the nexus fee calculation. The following cost components are included in the calculation and discussed in detail in the body of the report:

- City costs to implement and administer the fee and program
- Other public costs for recycling (Boulder County Recycling Center and the Center for Hard to Recycle Materials (CHaRM))
- Costs to retailers to implement the program
- Cost to mitigate externalities (provided as an optional cost factor)

FEE CALCULATION

To derive the city cost portion, a four-year period is used and a weighted average cost per bag is derived. The weighted average city portion of the fee is estimated at $.146 per bag. This is derived based on four-year estimated city costs of $2.2 million and a projected four-year total number of affected bags of 15.3 million. Added to that cost factor is the cost per bag to cover plastic bag contamination at the Boulder County Recycling Center and bag recycling at the Center for Hard to Recycle Materials (CHaRM). Finally, the cost per bag to cover the retailers' costs is included. The total calculated fee is $.198 per bag. A summary is provided in Figure 1. See the body of this report for detail on the calculations.

Figure 1. Summary of Disposable Bag Nexus Fee

		Four-Year Totals / Wtd Avg
CITY COSTS	Total City Costs	$2,222,079
BAG USAGE	Estimated # Bags Subject to Fee	15,264,693
FEE CALCULATION		
City	City Cost per Bag	$0.146
Other Public	County Recycling Ctr Cost per Bag	$0.002
	CHaRM Cost per Bag	$0.006
Retailer	Retailer Cost per Bag	$0.044
Total Fee	City of Boulder Bag Nexus Fee	$0.198

An optional fee component is calculated to reflect externality costs, which adds an additional $.001 per bag. With this cost factor, the total bag nexus fee would be $.199 per bag. See Figure 2.

Figure 2. Summary of Disposable Bag Nexus Fee Option with Externalities

Total Fee	City of Boulder Bag Nexus Fee	$0.198
FEE CALCULATION WITH EXTERNALITIES		
Externalities	Estimated Externality Cost per Bag	$0.001
Total Fee	City of Boulder Bag Nexus Fee w/Externalities	$0.199

USES OF THE REVENUE GENERATED BY THE FEE

Proceeds from fee revenue will be used for implementation and administration of the program. City cost estimates identify specific activities including:

- Developing and implementing the policy;
- Purchasing and distributing reusable bags;
- Designing and implementing an outreach and advertising campaign;
- Development of educational campaign and materials;
- Designing and producing commercial/public service announcements; and
- Developing and producing store signage.

Costs recovered for impacts on county recycling facilities will be used to offset the impact from disposable bags in the waste stream handled at the Boulder County Recycling Center and recycled at CHaRM.

The retailer portion of the fee will be remitted to retailers (or retained by retailers, depending on how the program is set up) to cover their costs of implementation.

If the externality portion of the fee is adopted, those revenues should be used to purchase carbon offsets and to fund stream clean-up programs in the city.

OTHER CONSIDERATIONS AND RECOMMENDATIONS

Other considerations and recommendations are discussed in the report including:

- Compliance: Acknowledgment of potential non-compliance by retailers and recommendations for assessments at regular intervals to determine and address non-compliance.
- Rebound Effect: Experience from some localities indicate a rebounding increase in disposable bag usage after the initial reduction due to implementation of a bag fee or tax. We address this and provide recommendations on ways to counteract this effect including ongoing outreach (particularly in the second year of implementation and beyond) and regular, annual inflationary adjustments to the fee.
- Fiscal Implications: While revenue will be generated from the fee, revenue from the city's trash tax may decrease with reduced bag use.

STUDY BACKGROUND

The City of Boulder is developing an ordinance to reduce disposable checkout bag use in Boulder. On May 15, 2012, City Council voted to move forward with an ordinance placing a fee on both plastic and paper checkout bags at food stores.[3] In order to determine the appropriate level and uses of the bag fee, the city issued a Request for Proposals (RFP) to hire an independent consultant to complete a *Disposable Bag Fee Nexus Study*. TischlerBise has been retained by the City of Boulder to conduct the study.

The City Council's preferred approach is to place a fee on both plastic and paper bags at all food stores (approximately 45 businesses). The purpose of the *Disposable Bag Fee Nexus Study* is to determine[4]:

1. The appropriate types of costs to be offset by fee proceeds,
2. The appropriate fee amount to be charged to consumers to reduce bag use,
3. The recommended portion of the fee to be retained by businesses, and
4. Any guidance on appropriate uses of the fee proceeds by the city beyond directly offsetting costs incurred in the administration of the ordinance.

OVERVIEW OF NEXUS FEES

The disposable checkout bag nexus fee can be thought of as a type of user fee. A user fee is often imposed as a result of a public need to regulate activities, typically related to public health, safety, and welfare. User fees represent the purchase of a privilege or authorization. Local governments historically have made extensive use of these fees to recover costs for such activities as restaurant inspections, building permits, and marriage licenses.

The use of user fees has increased in recent years as local governments are faced with diminishing resources as well as a need to address certain behaviors. One example of a behavior-change effort is from a locality in Pennsylvania that implemented a "false-alarm prevention" fee. Police officers in

[3] See http://www.bouldercolorado.gov/LEAD/bags for background on the issue and city supporting documentation.

[4] City of Boulder, "Consultant Scope of Work" (RFP issued)

this community were spending an inordinate amount of time responding to false alarms. To address this, the locality imposed an additional fee for "excessive false alarms" charged on a progressively increasing scale as the number of false alarms increase. The intent of this fee is to not only cover the costs to the Police Department but to change behavior in the community.

Another analogous type of fee is an impact fee. Impact fees are one-time payments made by new development, which are used to construct system improvements needed to accommodate infrastructure demands from new development. An impact fee represents new growth's fair share of capital facility needs. Impact fees are subject to legal standards, which require fulfillment of three key elements: need, benefit, and proportionality.

The City of Boulder utilizes both user fees and impact fees for a range of purposes. The city now desires to implement a bag fee that will reflect the impact of bag use on public entities and retailers. To support this effort, the following sections of this report outline the methodology, information, and calculations used to derive the disposable checkout bag nexus fee.

STORES TO BE REGULATED

Boulder City Council voted to move forward with an ordinance placing a fee on both plastic and paper checkout bags at food stores only. The fee will not apply to produce bags, newspaper bags, or any other kind of food packaging bags. At this time the ordinance will not apply to restaurants. There are currently approximately 45 food stores in the city that will be affected.

Several options were considered by city staff regarding the types of stores to be regulated under a disposable bag fee. Ultimately, it was recommended that the fee apply only to food stores at this time for the following reasons. This fee option:

- Targets a majority of bag use in Boulder while maximizing clarity of the ordinance;
- Avoids confusion for businesses around who must comply; and
- Minimizes city resources required for administration, enforcement and monitoring of exemptions and threshold levels.[5]

Furthermore, in the city staff report outlining bag reduction options, staff notes: "Including additional business types will have a diminishing impact, as more city resources would be needed to apply an ordinance to many more businesses that distribute fewer bags. Staff also believes that addressing disposable bag use in food stores will have a "trickle down" effect on encouraging reusable bag use in by residents at all retail stores."[6]

[5] From City of Boulder, City Council Agenda Item: "Consideration of a motion providing direction on options for reducing disposable checkout bag use in Boulder," May 15, 2012.
[6] Ibid.

FEE COMPONENTS

The Nexus Fee is comprised of several components that can be viewed as building blocks in calculating the fee:

1. Current estimate of bag usage in the city and the estimate of the current number of bags to which the fee will be applied
2. Future projection of number of bags to which the fee will be applied (including a baseline projection and reductions due to fee implementation)
3. Costs incurred by the public sector
4. Costs incurred by retailers
5. Costs for externalities (*option*)

The approach in calculating the fee is to project costs and bag usage (with assumed reductions due to the imposition of the fee) over a four-year period. Because first-year costs are generally higher due to one-time implementation requirements, only using estimated costs in the first year would artificially increase the fee. Therefore, the approach is to derive a weighted average using projections over the first four years of the program. Detail is provided in the following sections including annual assumptions and the four-year weighted average.

BAG USAGE

CURRENT ESTIMATES OF DISPOSABLE BAG USE

Current estimates of disposable plastic and paper checkout bag usage in the City of Boulder was estimated by city staff. Given that there is no current tracking of bag use, TischlerBise and city staff requested and obtained limited information from local grocery stores. TischlerBise and city staff met with representatives from major grocers and followed up with data requests. Based on the information provided by the grocery stores and other research[7], city staff determined a current estimate of disposable paper and plastic bag use to which the fee would apply. Estimates are shown in Figure 3. This estimate reflects a subset of total disposable bag usage in the city (estimated at 66 percent of total bag usage). This number is used as the baseline figure reflecting the number of bags to be regulated by the fee.

Figure 3. Estimate of Current Number of Disposable Plastic and Paper Bags in City of Boulder to which the Fee Will Apply

	Plastic	*Paper*	*Total*
Large Grocery Stores	10,800,000	2,160,400	*12,960,400*
Medium Grocery Stores	300,000	480,000	*780,000*
Small Grocery Stores	215,000	115,000	*330,000*
Convenience Stores	270,000	0	*270,000*
Total	***11,585,000***	***2,755,400***	***14,340,400***

Source: City of Boulder (store names are suppressed for confidentiality reasons)

Projected Disposable Bag Use

These baseline estimates are then used to project natural growth in disposable bag use based on projected population growth and average number of bags per capita (to which the fee will be applied). Based on the above current bag estimate of 14.3 million grocery and convenience store bags and the current city population estimate of 99,069, an average of 145 bags per capita is derived (reflecting the number of bags to which the fee will apply, which is a subset of total bag usage in the

[7] See "Resources Consulted" at end of this report.

city).[8] Without imposition of a bag nexus fee, bag usage at grocery and convenience stores in the city is projected to increase as shown in Figure 4.

Figure 4. Projection of Number of Disposable Plastic and Paper Bags in City of Boulder to which the Fee Will Apply Due to Natural Growth (*with No Fee*)

		Projected Natural Growth with No Reductions			
	Pre-imp.	***1***	***2***	***3***	***4***
	2012	***2013***	***2014***	***2015***	***2016***
City of Boulder Population Projection[1]	99,069	99,676	100,288	100,903	101,521
Estimate # of Bags Subject to Fee[2]					
City of Boulder Estimated (2012)[3]	14,340,400				
Bags per Capita (Subject to Fee)	145				
Projected Growth in Bags (if No Fee)		14,453,089	14,541,712	14,630,879	14,720,593

1. City of Boulder Dept. of Community Planning and Sustainability, "2012 Projections by Subcommunity"
2. Reflects a subset of total bags in circulation
3. City of Boulder

Imposing a nexus fee on disposable plastic and paper bags will decrease disposable bag usage in the city. The next logical question is, "By how much?" TischlerBise and city staff conducted research on the effects of bag fees/taxes on the reduction of bag use. This section describes the results of our findings.

First, TischlerBise researched the literature on bag fees/taxes and bans with a particular emphasis on the level of reduction in communities that have imposed these types of regulations. The research is summarized in Figure 5.

[8] It has been estimated that supermarkets account for 60 percent of total disposable bag use in a community. (See City of Boulder, City Council Agenda Item, May 15, 2012.)

Figure 5. Bag Reduction Experiences[9]

	Store/Government	*Fee/Tax*	*% Reduction*	*Time Period*	*Notes*
[1]	Marks and Spencer (UK)	$0.08	83%	1 year	Fee imposed 2008 (converted to $US)
[1]	99 Cents Only Store (Santa Monica)	$0.03	50%	2 months	
[1]	IKEA (Burbank)	$0.05	50%	1 year	Plastic bag for $.05 or purchase blue bag for $.59.
[1]	IKEA (UK)	$0.05	95%	not reported	Plastic bag for $.05 or purchase blue bag for $.59.
[2]	Denmark	$0.03	66%	not reported	Tax on Plastic
[2]	Denmark	$0.12	66%	not reported	Tax on Paper
[2], [3]	Ireland (2002-2007)	$0.19	*see note*	leveled	Initial decrease at 90-95%; leveled at 60-70%
[2], [3]	Ireland (2007-current)	$0.28	*see note*	1 year	additional decrease of 22% (from leveled %)
[2]	Taiwan	$.03-.10	65%	not reported	Flexible fee
[4]	Washington, DC Government	$0.05	75-80%	1 year	

[1] From "City of Santa Monica Nexus Study," R3 Consulting Group, January 2010 (see footnotes)
[2] From "City of San Jose Single-Use Carryout Bag Fee Fiscal Analysis," Herrera Environmental Consultants, July 2010 (Euro converted to $US)
[3] AP EnvEcon Limited, "Regulatory Impact Analysis on proposed legislation to increase levies on plastic shopping bags and certain waste facilities." Prepared for the Ireland Dept. of the Environment, Heritage, and Local Government; Nov 2008. (Euro converted to $US.)
[4] From City of Boulder, City Council Item: "Consideration of a motion providing direction on options for reducing disposable checkout bag use in Boulder," May 15, 2012 (see footnote 11 and Attachment E).

As shown above, reductions range from 50 percent to a high of 95 percent. Variables that affect the reductions include the amount of the fee/tax as well as the time that had elapsed since the fee/tax was implemented.

In the "City of San José Single-Use Carryout Bag Fee Fiscal Analysis" report[10], a set of assumptions was made assuming an estimated reduction in bag use that is responsive to fee levels. In the study's scenario of a fee on both plastic and paper single-use bags, the assumed reductions of use correspond to the fee level as follows:

Figure 6. Example of Assumed Reductions in Bag Use

Fee/Store Charge Level	*% Reduction in Bag Use*
$.10	63%
$.15	71%
$.20	83%
$.25	85%
$.30	87%

Source: Herrera Environmental Consultants, "City of San José Single-Use Carryout Bag Fee Fiscal Analysis," July 2010.

[9] The examples here are to illustrate the range of effects on reducing bag usage as opposed to a survey of tax/fee amounts. A range of efforts and fee/tax levels have been implemented globally and in the United States to reduce disposable bag usage. For example, several communities have banned disposable bags outright and many others have implemented fees and taxes at varying levels, occasionally in conjunction with a ban. Two such examples are from the cities of Aspen and Carbondale (Colorado), both of which banned disposable plastic bags and placed a 20 cent fee on paper bags. One good resource for tracking efforts in the United States and internationally can be found at: http://www.dep.state.fl.us/waste/retailbags/pages/mapsandlists.htm.

[10] Herrera Environmental Consultants, July 12, 2010.

Finally, the price elasticity of the fee level should be considered. The experience in Ireland with a nationwide bag tax illustrates several pricing phenomena.[11]

- After the initial bag tax was implemented in Ireland in 2002 at 15 cents ($0.19), bag usage decreased to 22 to 24 bags per capita (an estimated decrease of 90-95 percent from pre-tax levels). By 2006-07, bag usage had rebounded upward to approximately 37 bags per capita.

- This "rebounding" effect has been attributed in part to inflationary effects. The 15 cent tax levied in 2002 was worth 13.4 cents by 2007 due to inflation.

- After the tax was increased to 22 cents ($0.28) in July 2007, it was estimated that demand fell an additional 22 percent from the last previous high usage down to 28 bags per capita.

- Finally, based on Ireland's experience of an increase from a 15 cent to a 22 cent tax, an analysis was conducted as part of a larger study for the Irish Department of Environment, Heritage, and Local Government (DOEHLG) (2008) to determine what the price elasticity of demand is. That is, ***What is the relationship between an increase in the tax levy to a decrease in demand for plastic bags?*** The analysis was based on what the study authors identified as a "large levy increase" as opposed to small changes in the levy (inflationary increase or decreases).

    - The DOEHLG study found that an increase of 10 percent above the current 22 cent tax levy would decrease demand by 7.2 percent; an increase of 15 percent would decrease demand by 10.8 percent and so forth. See table below for results from the analysis.

[11] The information in this section is from AP EnvEcon Limited, "Regulatory Impact Analysis on proposed legislation to increase levies on plastic shopping bags and certain waste facilities." Prepared for the Ireland Department of the Environment, Heritage, and Local Government (DOEHLG); November 2008.

Figure 7. Price Elasticity of Demand of Bag Tax Increase: Scenarios based on the Ireland Experience[12]

% Increase in Levy from 22 cent (Euro)	*% Decrease in Quantity Demanded*
10% (24.2 cents)	7.18%
15% (25.3 cents)	10.76%
20% (26.4 cents)	14.35%
30% (28.6 cents)	21.53%
50% (33 cents)	27.35%
70% (37.4 cents)	50.22%
130% (50.6 cents)	93.28%

Source: AP EnvEcon Limited, 2008, Table 5.8.

Further discussion of how these pricing effects can be addressed by the City of Boulder is provided in the "Other Considerations" section of the report.

Based on the above research and discussions with city staff, assumptions regarding the percentage reduction in bag usage (to which the fee is applied) for the City of Boulder are: 50 percent in Year 1, followed by 75 percent in Year 2 and plateauing at 85 percent in Years 3 and 4. See Figure 8 for projected reductions in bag usage.

Figure 8. City of Boulder Bag Usage Assumptions with Reductions Due to Fee Implementation

	1 *2013*	*2* *2014*	*3* *2015*	*4* *2016*	*Four-Year Total/ Wtd Avg*
Est. # Bags Subject to Fee (Natural Growth w/ No Reductions)	14,453,089	14,541,712	14,630,879	14,720,593	58,346,273
Reduction % (Due to Fee)	50%	75%	85%	85%	74%
Estimated # Bags Subject to Fee	7,226,544	3,635,428	2,194,632	2,208,089	15,264,693

Source: City of Boulder; TischlerBise

[12] The authors note: *In each of these scenarios, the elasticity of demand is assumed to remain at -.72, which is the estimated elasticity of demand for the only large increase in the levy from 15 cent to 22 cent. While this is a somewhat restrictive assumption, the elasticity is based on the best available data and its use is intended as a demonstrative tool to indicate how price inelastic responses to levy increases may impact on quantity demanded. It should be noted that as the actual levy increases, the expected response becomes more uncertain.* (AP EnvEcon, p. 111.)

COST COMPONENTS

The next major element is the costs to be included in the nexus fee calculation. The following cost components are included in the calculation:

- City costs to implement and administer the fee and program
- Other public costs for recycling (County Recycling Center and Center for Hard to Recycle Materials (CHaRM))
- Costs to retailers to implement the program
- Cost to mitigate externalities (provided as an optional cost factor)

CITY COSTS

City costs are included assuming a full cost-recovery model. Costs estimated to implement the program as well as to administer on an ongoing basis are included. Specific city costs are assumed for policy development, implementation, administration, and enforcement.

Costs include:

- Supplies including purchase and distribution of reusable bags for various purposes including at rental properties and hotels; and for low-income populations.
- Outreach and marketing including development of educational campaigns and materials; advertising direct costs; creation of signage for stores.
- One-time costs for the nexus fee study and stakeholder meeting expenses.
- One-time cost to create the "return" for retailers to report fee collection.
- Staff time for policy development, implementation, administration, and enforcement.

City costs are summarized in Figure 9. City staff provided detailed estimates of projected costs based on their experiences to date with this and other comparable programs. As noted above, costs include direct costs for supplies and personnel, one-time expenses, and indirect costs reflecting allocation of costs from other overhead departments that will be affected by program implementation and ongoing administration. Also included is a contingency cost to account for any unidentified costs that may occur. Total city costs over the first four-year period are estimated at $2.2 million.

Figure 9. Estimated City Costs

		Year 1	Year 2	Year 3	Year 4	Four-Year Total
Policy Development & Implementation [1]						
Supplies, Outreach, Marketing, Etc.[2]		$950,000	$375,000	$232,500	$196,000	$1,753,500
Personnel		$121,357	$18,165	$4,512	$4,512	$148,546
Other (Nexus Study; stakeholder meetings)		$19,620	$0	$0	$0	$19,620
Indirect Cost[3]	*6.6%*	$70,710	$25,949	$15,643	$13,234	$125,535
Subtotal		*$1,161,687*	*$419,114*	*$252,655*	*$213,746*	*$2,047,201*
Policy Administration [4]						
One-time Start-up Costs		$1,965	$0	$0	$0	$1,965
Administration and Enforcement		$1,999	$1,999	$1,999	$1,999	$7,995
Indirect Cost	*3.2%*	$127	$64	$64	$64	$319
Subtotal		*$4,091*	*$2,063*	*$2,063*	*$2,063*	*$10,279*
Contingency	*8.0%*	$93,262	$33,694	$20,377	$17,265	*$164,598*
TOTAL CITY COSTS		***$1,259,040***	***$454,871***	***$275,095***	***$233,073***	**$2,222,079**

1. Primarily handled by the Dept. of Community Planning & Sustainability (CPS).
2. Approximately 50% is for bag giveaways with the remainder for advertising and educational campaigns.
3. Reflects cost allocation for CPS (not calculated on "Other" costs).
4. Primarily handled by the Dept. of Finance
Source: City of Boulder, TischlerBise.

The above city costs are used to derive the city's portion of the bag nexus fee, which is provided in the "Fee Calculation" section.

OTHER PUBLIC COSTS

Two recycling facilities are affected by plastic bags in the waste stream—the Boulder County Recycling Center and the Center for Hard to Recycle Materials (CHaRM). Both facilities are run by a non-profit entity (Eco-Cycle). Plastic bags in the waste stream affect both facilities and Eco-Cycle provided cost estimates for this analysis, specifically on the costs to their operations and infrastructure due to plastic bags.

Staff from the County Recycling Center identified four main impacts from plastic bags:

1. The need to stop the sorting lines to clean screens during the day.
2. Sorting staff need to hand-pick the plastic bags out of the recyclable stream.
3. Handling costs for baling and moving trash allocated to bags.
4. Disposal and transportation costs specific to plastic bags.

County Recycling staff estimated labor and operations costs specific to the above impacts. Cost estimates are shown below in Figure 10. Because this is a cost that is incurred today from existing plastic bag usage in the County, the cost per bag is not dependent on future implementation of the nexus fee or reductions in bag use. Nor is the cost dependent on existing revenue generation. The approach is for full cost recovery of the direct costs from plastic bags.

As shown below, the cost per bag is calculated based on the estimated impact at the Boulder County Recycling Center and the estimated number of plastic bags in the *County* waste stream. The resulting cost per bag is $.002 ($182,640 annual costs / 120 million plastic bags used countywide). This cost will be added to the total nexus fee.

Figure 10. County Recycling Center Costs

	Cost/ Day	Cost/ Year
County Recycling Cost Estimates: Current Impacts from Plastic Bags [1]		*240 Days per Yr*
Day labor screen cleaning cost	$28	$6,720
Night labor screen cleaning cost	$56	$13,440
Labor sorting cost	$336	$80,640
Labor handling cost	$45	$10,800
Machine processing cost	$240	$57,600
Disposal cost	$36	$8,640
Transportation cost	$20	$4,800
Total Cost (Countywide)	*$761*	*$182,640*

County Bag Estimate	
Tons of Disposable Plastic Bags Discarded by County Residents (2010)[2]	781
Conversion factor (lbs/plastic bag)[3]	0.013
Number of Plastic Bags Discarded by County Residents (2010)	120,153,846
Cost Impacts per Plastic Bag at County Recycling Center	
Total Annual Cost Impact Due to Plastic Bags (Countywide)	$182,640
Number of Plastic Bags Discarded by County Residents (2010)	120,153,846
Cost per Bag (Countywide)	**$0.002**

1. Boulder County Recycling
2. *Boulder County 2010 Waste Composition Study*, as cited in City of Boulder, City Council Agenda Item, "Consideration of a motion providing direction on options for reducing disposable checkout bag use in Boulder," May 15, 2012.
3. City of Boulder, City Council Agenda item, May 15, 2012

The other facility affected by plastic bags is the Center for Hard to Recycle Materials, or CHaRM. This facility processes plastic film including plastic bags. Eco-Cycle staff provided estimates of the number of bags processed at the facility and cost estimates of the current portion of their expenses attributable to plastic bags. Results are shown in Figure 11.

The same approach is taken for CHaRM as is done for costs incurred at the Boulder County Recycling Center. That is, the cost to recycle plastic bags in the county is not dependent on future implementation of the nexus fee or reductions in bag use. (As bag usage decreases, so should recycling costs for plastic.) The approach is for the nexus fee to recover costs for plastic bag recycling.

Per Eco-Cycle, CHaRM handled 82,606 pounds of plastic film in 2011. Of that amount, 12,000 pounds is from business accounts and therefore not plastic bags. The remainder (70,606 pounds) is from plastic bags, which equates to 5.4 million bags per year.

Costs are estimated at $34,000 per year to process plastic, which is reduced to reflect that portion attributable to plastic bags (85.5 percent). In addition, Eco-Cycle staff indicates a one-time capital cost of $40,000 for a plastic bag baler, which is annualized over a ten-year period to reflect the useful life of the equipment. The combined annual cost is estimated at $33,061 due to plastic bags. The cost per bag is then calculated based on this estimated annual cost at CHaRM divided by the estimated number of plastic bags handled at the facility. The resulting cost per bag is $.006 ($33,061 annual costs / 5.4 million plastic bags). This cost will be added to the total nexus fee.

Figure 11. CHaRM Costs

Plastic Bag Estimate					
Pounds of Plastic Handled at CHaRM per Year[1]				82,606	
Less Pounds of Plastic from Business Accounts (non-Plastic Bags) Handled at CHaRM[1]				12,000	*% Plastic Bags*
Pounds of Plastic Bags per Year				*70,606*	*85.5%*
Conversion factor (lbs/plastic bag)[2]				0.013	
Number of Plastic Bags Processed Annually				5,431,231	
CHaRM Cost Estimates: Current Impacts[1]	*One-Time Cost*	*Total Cost/ Year*	*% Allocated to Plastic Bags*	*Total Cost/Year for Plastic Bags*	
Annual Operating Cost for Plastic Recycling		$34,000	85.5%	$29,061	
Capital Equipment Cost for Plastic Bag Baler[3]	$40,000	$4,000	100%	$4,000	
Total Costs	*$40,000*	*$38,000*		*$33,061*	
Cost Impacts per Plastic Bag at CHaRM					
Total Annual Cost Impact Due to Plastic Bags				$33,061	
Number of Plastic Bags Processed Annually				5,431,231	
Cost per Bag				**$0.006**	

1. Eco-Cycle
2. City of Boulder, City Council Agenda item, May 15, 2012
3. Annualized over 10 year useful life

RETAILER COSTS

It is anticipated that retailers will incur costs to implement the nexus fee. Retailer costs are somewhat more difficult to estimate because of confidentiality concerns and proprietary information. TischlerBise and city staff interviewed several city grocery store representatives[13] and city staff followed up to try to obtain information on direct anticipated costs from the proposed ordinance. Some of the costs that retailers indicated they are likely to incur are:

- Initial implementation and ongoing costs for training for cashiers and managers on the new requirements,
- Initial and ongoing marketing to customers on the fee on plastic and paper bags,
- One-time technology changes to computer systems to handle the new fee and enable tracking,
- Compliance costs for tracking and reporting fee collections, and
- Other ancillary effects such as increased time to pack reusable bags.

The intent of the city ordinance is for the food stores that are subject to the fee to retain the retailer portion of the fee.

To calculate the retailer portion of the fee, TischlerBise researched other localities' bag fee programs, specifically to determine retailer costs and portions retained by retailers, as well as received some information on impacts to City of Boulder food stores. Findings from this research are presented in Figure 12.

[13] Throughout the process, meetings and/or phone interviews have been held with representatives from Safeway, King Soopers, Whole Foods, Alfalfa's, Target, Sprouts, 7 Eleven, India's Grocery, and the Rocky Mountain Food Industry Association.

Figure 12. Retailer Costs for Implementation

	Total Fee Imposed	Retailer Cost per Bag for Implementation
[1] Santa Monica Study	*	$0.095
[2] City of Seattle	$0.20	$0.050
[3] City of Washington, DC	$0.05	$0.010
[4] City of San José	**	$0.047
[5] City of Boulder Sample Retailer	tbd	$0.018
Average		***$0.044***

* *Ordinance is for ban on plastic bags and minimum $0.10 fee on paper bags*

[1] Retailer estimate; from "City of Santa Monica Nexus Study," R3 Consulting Group, January 2010

[2] "City of Seattle Disposable Shopping Bags Green Fee and Expanded Polystyrene Foam Food Container Ban Frequently Asked Questions," Seattle Public Utilities and Seattle Climate Action Now, June 2008.

[3] "Bag Law Details," City of Washington, DC.

[4] TischlerBise analysis; reflects 3-year weighted average of estimated costs derived from figures in "City of San José Single-Use Carryout Bag Fee Fiscal Analysis," Herrera Environmental Consultants, July 2010

[5] Retailer provided estimate based on estimated implementation costs; (information not considered wholly representative of local grocers but included to derive an overall estimated average).

** *Ordinance is for ban on plastic bags.*

In consultation with city staff, it was determined that the average of the above figures provides a reasonable estimation of the impact to retailers of the proposed disposable bag fee. Since direct costs were only obtained from one Boulder grocery store, it is not necessarily representative of all grocery stores in the city. Therefore, data from this establishment is included in the overall average calculation but cannot be used as the citywide figure. Given the above data, the retailer cost per bag to cover the cost of implementation is calculated at $0.044.

EXTERNALITIES

A final cost component is to capture the cost of externalities from disposable bag use. An externality is an unintended or secondary consequence that is not captured through prices and where affected parties do not have a choice in the transaction. The classic example of a negative externality is pollution generated by factories causing a detrimental effect on the surrounding environs.

The externalities as related to disposable bag use in the city are included in the calculation to capture life cycle greenhouse gas emissions from plastic and paper bags, the impact on local water infrastructure, and the overall impact on water usage from disposable bags. These costs are presented as an *option* for inclusion in the fee because these costs are more difficult to quantify.

City staff provided information on the amount of greenhouse gas emissions attributable to plastic and paper bags in the city and the cost to offset those impacts (through the carbon offset program, Colorado Carbon Fund[14]). Based on these costs, a cost per disposable bag can be derived based on the current number of disposable bags to which the fee will apply.

Impacts to the city's water infrastructure are also included in this element of the fee. Program costs related to disposable bags for the city's "Stream Teams" are estimated at $500 per year. A cost per disposable bag is calculated based on this cost estimate and the current number of applicable disposable bags in the city. Results are provided in Figure 13. (It should be noted that the cost per bag is taken out to the fifth decimal place (as opposed to the third from above) due to the costs involved.

A third externality component is the cost of water use from plastic and paper bags. To offset the impact of water usage from disposable bags used in the city, city staff provided information on the amount of water used per plastic and paper bag along with the costs to offset that usage (through the water offset program, Water Restoration Certificates[15]). Based on these costs, a cost per disposable bag can be derived based on the current number of disposable bags to which the fee will apply.

[14] See http://www.coloradocarbonfund.org
[15] See http://www.b-e-f.org/water/cert

Figure 13. Estimated Externality Costs

GREENHOUSE GAS (GHG) EMISSION COSTS		
Plastic bags		
CO2 equiv per 100 million bags	3,097	tons
CO2 equiv for 2011 applicable bags in Boulder	359	tons
Paper bags		
CO2 equiv per 100 million uncomposted bags	7,621	tons
CO2 equiv for 2011 applicable bags in Boulder	210	tons
Total 2011 CO2 equiv for Boulder bags	569	tons
2011 Offset Cost per Metric Ton (Colorado Carbon Fund)	$20	
2011 Estimated Offset Cost for Disposable Bag Use in City of Boulder	$11,376	
Estimated Number of Applicable Disposable Bags	14,340,400	
GHG Cost per Disposable Bag	***$0.0008***	
WATER INFRASTRUCTURE COSTS		
Estimated Cost to Stream Teams per Year	$500	
Estimated Number of Applicable Disposable Bags	14,340,400	
Water Infrastructure Cost per Disposable Bag	***$0.00003***	
WATER USE COSTS		
Plastic bags		
Water use for 1,000 plastic bags (milligrams)	31,150,000	mg
Water use for 1,000 plastic bags (gallons)	9	gal
Estimated Number of Applicable Disposable Bags	11,585,000	
Water use for 2011 applicable bags in Boulder	99,449	gal
Paper bags		
Water use for 1,000 paper bags (milligrams)	3,895,000,000	mg
Water use for 1,000 paper bags (gallons)	1,073	gal
Estimated Number of Applicable Disposable Bags	2,755,400	
Water use for 2011 applicable bags in Boulder	2,957,579	gal
Total 2011 water use for Boulder bags	3,057,028	gal
2011 Water Offset Cost	$3,057	
(BEF Water Restoration Certificates)		
Estimated Number of Applicable Disposable Bags	14,340,400	
Water Use Cost per Disposable Bag	***$0.0002***	
GRAND TOTAL EXTERNALITY COST PER BAG	***$0.0010***	

Source: City of Boulder

FEE CALCULATION

The factors discussed throughout this report are used to calculate the disposable plastic and paper checkout bag nexus fee. The cost layers of the fee are:

- City costs per bag
- Other public costs per bag (for County Recycling Center and CHaRM)
- Retailer costs per bag
- An optional fee element is also presented layering on externality costs per bag.

The calculated disposable bag nexus fee is based on the costs identified and the estimated annual number of bags to which the fee will apply.

To derive the city cost portion, a four-year period is used and a weighted average cost per bag is derived. City costs are repeated from Figure 9 and are estimated at $2.2 million over four years. Bag use reduction factors are as described in this report (repeated from Figure 8). Based on these assumptions, the weighted average city portion of the fee is $.146 per bag as shown in Figure 14.

Figure 14. City Portion of Disposable Bag Nexus Fee

		Year 1	*Year 2*	*Year 3*	*Year 4*	*Four-Year Totals / Wtd Avg*
CITY COSTS	***Total City Costs***	*$1,259,040*	*$454,871*	*$275,095*	*$233,073*	***$2,222,079***
BAG USAGE	Est. # Bags Subject to Fee (No Fee)	14,453,089	14,541,712	14,630,879	14,720,593	58,346,273
	Reduction % (Due to Fee)	50%	75%	85%	85%	74%
	Estimated # Bags Subject to Fee	*7,226,544*	*3,635,428*	*2,194,632*	*2,208,089*	***15,264,693***
FEE CALCULATION						
City	***City Cost per Bag***	*$0.174*	*$0.125*	*$0.125*	*$0.106*	***$0.146***

The other elements of the nexus fee as described in this report are added to the city portion to derive the total fee per bag of $.198. Results are shown below in Figure 15.

Figure 15. Disposable Bag Nexus Fee

		Year 1	Year 2	Year 3	Year 4	Four-Year Totals / Wtd Avg
FEE CALCULATION						
City	*City Cost per Bag*	$0.174	$0.125	$0.125	$0.106	**$0.146**
Other Public	*County Recycling Ctr Cost per Bag*	$0.002	$0.002	$0.002	$0.002	**$0.002**
	CHaRM Cost per Bag	$0.006	$0.006	$0.006	$0.006	**$0.006**
Retailer	*Retailer Cost per Bag*	$0.044	$0.044	$0.044	$0.044	**$0.044**
Total Fee	*City of Boulder Bag Nexus Fee*	$0.226	$0.177	$0.177	$0.158	**$0.198**

An optional fee component includes the cost for externalities, which adds an additional $.001 per bag. With this cost factor, the total bag nexus fee would be $.199 per bag. See Figure 16.

Figure 16. Disposable Bag Nexus Fee Option with Externalities

		Year 1	Year 2	Year 3	Year 4	Four-Year Totals / Wtd Avg
Total Fee	*City of Boulder Bag Nexus Fee*	$0.226	$0.177	$0.177	$0.158	**$0.198**
FEE CALCULATION WITH EXTERNALITIES						
Externalities	*Estimated Externality Cost per Bag*	$0.001	$0.001	$0.001	$0.001	**$0.001**
Total Fee	*City of Boulder Bag Nexus Fee w/Externalities*	$0.227	$0.178	$0.178	$0.159	**$0.199**

USES OF THE REVENUE GENERATED BY THE FEE

Proceeds from fee revenue will be used for implementation and administration of the program. City cost estimates identify specific activities including:

- Purchasing and distributing reusable bags;
- Development of educational campaign and materials;
- Conducting outreach activities;
- Developing and implementing policy;
- Designing and implementing an outreach and advertising campaign; and
- Designing and producing commercial/public service announcements.

Costs recovered for impacts on recycling facilities will be used to offset the impact from disposable bags in the waste stream handled at the Boulder County Recycling Center and CHaRM. These can include both operation (personnel and operations) and capital impacts (as described in this report).

The retailer portion of the fee will be remitted to retailers (or retained by retailers, depending on how the program is set up) to cover their costs of implementation.

If the externality portion of the fee is adopted, those revenues should be used to purchase carbon offsets and to fund stream clean-up programs in the city.

OTHER CONSIDERATIONS

Compliance

It is possible that there will be less than 100 percent compliance from retailers affected by the nexus fee in the city. This may affect the calculations herein. However by assuming a plateauing reduction factor of 85 percent, a cushion is provided to help account for non-compliance. However, TischlerBise recommends evaluations at regular intervals to determine the level of compliance as well as to check on assumptions and estimates used to establish the nexus fee.

Rebound Effect

As noted elsewhere in this report, some localities have experienced a "rebound effect" in disposable bag usage after initial implementation of a bag fee or tax. This can be attributed to both behavioral factors—getting used to the fee/tax, forgetting to bring reusable bags, etc.,--as well as inflationary effects. Without adjusting bag fees/taxes over time, the real cost to the consumer essentially decreases over time due to inflation thus perhaps making the fee/tax easier to absorb financially.

Therefore, TischlerBise recommends the following items to counteract the rebound effect:

- *Continued marketing, education, and outreach* on the program particularly in the second year of implementation and beyond.

- *Adjusting annually for inflation*. As noted above, without adjusting for inflation on an annual basis, the value of the fee essentially decreases (assuming inflation occurs and not deflation). An inflationary factor can be applied to the fee based on annual changes in the Consumer Price Index (CPI). There are several indices reported as part of the CPI program. It is recommended that the City of Boulder use the national CPI-U (reflecting all urban consumers) for its annual update.[16] The city ordinance establishing the disposable checkout bag fee should indicate the specific CPI and timing for annual updates.

- *By Year 3 to 4, TischlerBise recommends an evaluation of fee revenue, bag usage, and costs reflected in the fee*. The intent will be to determine the efficacy of the program as well as

[16] See http://www.bls.gov/cpi/cpi1998d.htm for further information on available indices and use for escalation.

measure the rebound effect. Per the Irish experience, it may be necessary to increase the fee by an additional amount to counteract the rebound effect if the city were inclined to move beyond cost recovery for the fee to an approach that attempts to influence behavior.

Fiscal Implications

The city will receive revenues from the bag fee. However, a related decrease in revenues may be experienced from the city's Trash Tax. The city currently receives revenue from a Trash Hauler/Recycling Occupancy Tax on Recycling and Trash Hauling, which is paid by haulers to the city. In Fiscal Year 2012, the city budgeted $1.7 million from this revenue source (1.7 percent of the General Fund budget). With reduced bag usage, this revenue stream may decrease, however it is not known by how much and since bags are relatively light, the reduction in revenue is likely to be minimal.

RESOURCES CONSULTED

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ATTACHMENT C

COMPILATION OF PUBLIC FEEDBACK

Email Comments Received After First Reading:

Julia Stephens, Boulder: A quick note to express my views on the bag fee. I support it. Thanks for moving forward on this.

Kirk Vincent, Boulder: I am opposed to the Disposable Bag Fee for several reasons. First, in general I am opposed to "punishment taxes." I think that the plastic bag problem is fairly trivial, in the big picture, and a fee will frequently annoy residents, retailers, and visitors alike. In addition non-grocery stores would not be involved, and poor people will pay more for groceries. Why would the City annoy the residents, when other options are available? It would be better to ban plastic bags, in favor of paper bags which are not a problem, and/or encourage the retailers to offer a 5 cent discount for bringing their own reusable bag.

Web Comments Received through Sept 21, 2012:

In support of the fee on paper and plastic bags

Diana Maggiore, Rollinsvile: Bold bold Boulder: make a statement. I support a bag fee for plastic and paper bags and any disposable packaging at large! Boulder Go for it! Show the world you care to set the right trend!

Ken Oatman, Boulder: Please enact the ordinance assessing the fee on plastic bag usage. Reusable bags should be encouraged and I am always saddened by plastic bags stuck in our beautiful trees.

Landon Hilliard, Boulder: I strongly favor the fee for single-use bags. It will affect habitual behaviors and reduce unnecessary waste. It should be applied to all users regardless of one's position on the economic ladder. This proposal should not be considered extreme given that a clear example of success has been made by Vitamin Cottage where the dispensation of ALL bags has been discontinued. I'm a regular shopper there and have adjusted easily. In fact I patronize Vitamin Cottage in part because of its progressive policy of waste reduction. Likewise in City of Boulder we have an opportunity to move closer to a Zero-Waste future. Thank you for your consideration.

Lynne Buhlig, Boulder: I am writing to encourage you to adopt the disposable bag program for Boulder and I support charging 20 cents per bag. This is an excellent plan and is a gentle nudge to those who don't remember to bring their own bag when shopping. For lower income residents who forget to bring a bag I support reusing cardboard boxes or other containers that the store receives its merchandise in as Vitamin Cottage does. It's time for a change and very soon the whole town will be in the groove! Thank you, Lynne Buhlig.

Sage Willox, Lafayette: Please help discourage disposable bag use by implementing a charge for bags. At first it will sting but it won't be long before people will start bringing their own bags.

Andrea Rose, Boulder: I am a Boulder resident and taxpayer. I am in full support of EcoCycle and the Proposed bag tax. I am old enough to remember when plastic shopping bags were not available in grocery stores. There was less pollution and less waste. Plastic bags and producing waste are not an entitlement regardless of age or socioeconomic status. I have trained myself to bring my own bags shopping with me for the past 20 years and I will tell you that anyone can do it. I am so glad to hear that Boulder is taking direct action to curb waste and improve the quality of our air and water. Thank you for reading my comments.

Iris Elron, Boulder: It would be a step forward to make it harder to use disposable bags. Boulder has been a leader in enviromentally friendly policies. This one is one more step for setting a new standard in the right direction.

Tom Moore, Boulder: I see no reason for lactic/paper takeout bags at the grocery store. Petroleum and forests are not infinite. Neither is the space in the dumps. They contribute to the roadside trash. I've been using reusable for years.

Karl Hanzel, Boulder County: I totally support a 20 cent fee on paper and plastic bags ... 'should have been in place long ago.

ATTACHMENT C

Iris Horowitz, Boulder: I've been living in the wonderful city of Boulder for 6 years now and I'd like to share my support of your 20-cent disposable single-use checkout bag fee. I think it will do so much to curb the unnecessary waste and pollution caused by both plastic and paper bags and that it help us reach our community's Zero Waste goals. Thank you for taking this issue as far as you have and for your time in reading this message!

Janice Lippard: I support the 20 cent bag fee proposed.

Michael Marks, Boulder: This is such a simple and relatively benign solution that just makes sense. It is almost no financial burden but if it doesn't reduce unnecessary waste (which it probably will) at least it will put a bit of money in the general fund.

David Mosberger, Boulder: Hi I support adding incentives to encourage the use of reusable bags. A fee of $0.20/bag seems reasonable to me especially if coupled with a program to distribute reusable bags at low cost. We have been shopping with reusable bags probably for 3+ years now and never looked back. It's not a burden. The reusable bags actually work better because they're sturdier and you need fewer of them to pack the same amount (i.e. fewer trips to load/unload groceries). Perhaps the city could consider offering discounts on wheeled shopping bags. Those are great when shopping for groceries on foot. Here is one model: http://bit.ly/SF0Jzq but there are many others.

Laurie Gibson, Boulder: I am very much in favor of the proposed bag fee.

John Malenich, Boulder: I fully support the $0.20 plastic bag fee. I would even more support a full ban on plastic bags since paper bags are an option.

Vicki Bynum, Boulder: I strongly support a ban and fee for plastic and paper bags. Our landscape and landfills are choking with them. Our water and soils are now polluted with plastic bags. There is no reason we should be throwing away petroleum based one use bags and packaging into our soils OR wasting again precious resources trying to recycle them. Other communities have adopted the disposable bag fee with success. If you don't care about the environment just think of all the money we could save from this too!

Sally Cullerton, Boulder: Please please please establish the $.20 fee on both plastic and paper bags. I would have preferred a ban on plastic bags but fully support this. As I understand there will be an educational program and I support that.

Jennivieve Harper, Lafayette: Excellent idea and the wave of the future to begin looking at the true cost from start to disposal/cleanup of everything we do and create and consume. That's A. B is that this is NO BIG DEAL to do without disposable bags or pay their true cost. We have lived in three places that do this: France Spain and now Maui. Absolutely no disposable bags--but at the register they all have large reusable's for purchase at 50 cents to a buck---believe me you don't forget your bags often at this cost and often I'd just walk out of the store carrying non bagged items or dump them in my purse or back pack. Even walmart in Maui just puts those reusable bags on their existing rotating bagging holders and while I'm sure people beefed at the beginning everyone just folds the whole process into their routine---and then you wonder why we didn't always do it that way. If I were the stores I'd get on the bandwagon get a bunch of reusable bags that advertise their store and hand those out for free the first month of this new law whenever someone doesn't have their own bags. After that everyone will know. Good luck and don't back down! If the negative feedback outweighs the positive which I can't imagine
happening you could always offer a year's trial of it and see how the majority feels after the experiment- -by then everyone will forget their objections!

J. Knowlton, Boulder: Wonderful idea - it's long overdue. It would be even better to ban plastic altogether and charge for paper.

Cathy Conery: Saw your name was in the paper today re: the fee on plastic bags. I went to a number of meetings on the topic and was disappointed to see a fee rather than a ban implemented. At the last meeting I attended, there was very clear support for the ban, but that was not the choice made. I think the 20 cent fee is absolutely necessary to deter use of plastic bags. I fee of 2 cents or 5 cents would do virtually no good. Hope you can pass this along to whoever it might be relevant for.

Lisa, Aurora: Although I'm not a resident of Boulder I want to say I fully support the fee on bags. In fact I would like to see the plastic grocery bags banned statewide but baby steps...
Hope this passes then maybe Aurora would be more motivated.

Eli Weber, Boulder: I fully support the 20 cent fee on disposable plastic bags. I hope it is extended to all disposable bags in the city. I applaud the city's effort to transition away from a disposable economy and as a taxpayer would be willing to pay additional taxes to pay the full costs of what we consume. I would even pay additional taxes on gasoline water etc if it was shown that the price we pay doesn't represent the true costs associated with the commodity's usage.

Art Breymaier, Boulder: I can't believe we are still debating this. Please give out free bags to lower income folks and make buying a plastic bag cost 1.00 in six months. That will make people remember to bring their bags! Are we also banning styrofoam I hope? Just read the study by TischlerBise; what a great job thorough and concise please use them in the future. Many thanks to everyone who is working on this.

Zdenka Smith, Boulder: Thanks I like the plan to charge 20c at grocery stores for both paper and plastic. Then one can encourage other merchants to consider problem of plastic sacks..

Paige Doughty, Boulder: I would just like to add my support for this progressive move by the City. I am all for the fee and will be happy to pay it if I ever forget my own reusable bags.

JoAnn Thomas, Boulder: Yes! Please pass this ordinance. Coincidentally I just watched the documentary Bag it and wished our community would ban single use bags. Thank you for looking into it.

Mindy Zahner, Boulder: I support and I'm in favor of passing the Bag Free proposal. I don't currently bring my own bags but that's due to pure laziness on my part. If we have a fee in place for bags it simply sets the standards higher and a penalty for not taking personal responsibility for our environment. Boulder is a beautiful place to live and has always lead by example for other communities to follow! This is a wonderful opportunity for Boulder!

Heather Collins, Boulder: In the least there should be a fee on plastic and paper bags. Some stores already do not offer plastic or paper anymore (Vitamin Cottage). Lucky’s and Alfalfa's offer paper but not plastic. I support a fee for paper/plastic bags.. hoping it would be banned though. Educational outreach programs encouraging the use of reusable bags is something that should also be done.

Allison Smith, Boulder: It is absolutely imperative that we reduce bag usage here. Boulder is already very environmentally friendly so why not continue this effort? The idea of reusable bags makes disposable bags seem extremely wasteful and useless. It is simply so easy to pack a reusable bag and the thought of wasting such an immense amount of bags because we can't bring our own is saddening. Please fight for this cause because it will easily reduce waste and protect the environment.

Alyson Miller, Boulder business owner (Lafayette resident): I support bag fee generally but the one consideration I wish would get more attention is some type of program to recycle/offer multiple-use bags to people for whom this will be a hardship. I agree with the recent letter-writer to the Camera who said that the fee will add to the misery-index of low-income residents. It doesn't have to if we pool multiple-use bags and make them available to those who need them. I'd support and help promote a program with a centralized drop-off of donated canvas
and cotton bags - which can be re-distributed to local stores for shoppers who need a reusable shopping bag.

In opposition to the fee on paper and plastic bags

Anne Burkholder, Boulder: Do not implement the 20 cent bag fee. The cost is too high to impose on the citizens of Boulder. If you want to address the issue focus on education to encourage reusable bags instead of charging a fee.

Mary Downton, Boulder: I understand and support the fee on plastic bags because of the long-term pollution problems they create. But I oppose the fee on paper bags which degrade quickly and are not a pollution problem. I use the paper grocery bags as garbage bags. Without them I'd have to buy plastic trash bags which would just perpetuate the problem of plastic bags in the environment!

Gary Behlen, Boulder: Mayor City Council Advisory Boards and staff before you implement another activist initiative consider some of the possible consequences that your actions may cause. From my point of view it seems that this proposal to implement a 20-cent fee on grocery bag is something that feels good but has little real benefit. I am against the proposal to set this fee.

I don’t think that fees are a bad idea when used for a related service. I also think that the people of the community have the right to choose to tax themselves for specific purposes. And I think that environmental stewardship is a noble goal for the community. But I think placing a 20-cent fee on all disposable grocery bags is a bad idea and not vetted.

Some of the concerns and consequences I have are with the legal argument of fee vs. tax the fairness of the 20-cent fee and the method used to set the fee.

I assume that your legal staff has review the fee ordinance but it sure seems to be a tax. Hopefully we do not have to defend a lawsuit against the City similar to what Aspen is now going through. Fees are used to pay for a related service what service are we getting? I now get a free bag from the grocery store if I forget my reusable bag. Why am I now paying the City a 20-cent per bag? I also pay for trash removal why am I now paying extra for a disposable bag to the recycle center?

Why is it just for grocery bags and not the bags at the hardware store retail stores or coffee shops? It also seems to me that this 20-cent per bag cost hurt the lower income children students and middle class who at this time can least afford it. Why wouldn't they just go the Louisville Lafayette or Longmont to shop?

According to the Tischler report it stated that the nexus fee is to create an effective financial incentive to change behavior is this not a tax like alcohol or cigarette tax? How does this retain consumer choice and convenience (trying to carry 15 different items out of the store without a bag)?

How does this not cause confusion for local small business? And it seems to add additional staff and resources for the City for a small benefit. Why are we paying for the City to administer the fee program? How did Tischler come up with the $2.2 million total cost of the bags and spending $1.1 million in the first year? WOW

I now reuse the disposable bags the grocery stores now give us why is the City going to spent time and funds giving us reusable bags and providing us with an education campaign?
Please do not pass this ordinance; it will cause more problems than benefits.

Gary Behlen
2750 Vassar Drive

Gloria Brown, Boulder: Take a bold step and ban them completely. Many cities states and countries have done just that. Whole Foods Vitamin Cottage and Alfalfa's do not use plastic. It's not a big deal! I believe there are too many people who don't care about 20 cents when they are spending $100 con groceries.

Robert Rowe, Boulder: I'd like to see a complete ban on plastic bags. While they are (occasionally) useful especially as a cyclist (keeping items dry protecting paper products electronics etc) there are more sustainable ways of dealing with those situations.

Bill Elliot, Boulder: I am OK with either a fee or ban on (non-recyclable) plastic bags but feel no action should be taken with paper bags. Plastic is cluttering our oceans and waste sites NOT paper.

Marilyn Zimmerman, Boulder: To Boulder City Council:
I have been a homeowner in Boulder for 39 years & consider myself an environmentalist much concerned about the degradation of our planet...

However I believe that the 20c per bag fee being proposed is too extreme. We need to ENCOURAGE people to shop in Boulder rather than drive them out of the city to shop elsewhere!!.

I would suggest a more gradual phase-out program at 1st starting with only a 5c fee per PLASTIC bags only... I use 100% RECYCLED paper bags made of 100% RECYCLED materials with a 10c refund for reusing the bag & I reuse my paper bags. These bags are from Whole Foods...DO NOT discourage such proactive products & methods by taxing them now!!!

I also shop at Vitamin Cottage that does not provide plastic or paper shopping bags but does provide boxes for people to use instead. That is another option.

Please do NOT go overboard with an overhaul program. Use of 100% RECYCLED PAPER BAGS should NOT be penalized...

Furthermore TWO DAYS is NOT SUFFICIENT TIME TO RESPOND!!! And how about including a tele. # for people who do NOT have computers or are not able to use one??? Don't discriminate against them... I appreciate your consideration of my viewpoint!!!

Harold Sears, Boulder: I do not support a bag ban or fee. I strongly prefer educational efforts rather than force to change public behavior. Two points seem important: First shopping bags constitute a small problem in terms of quantity of both resources used and waste generated. It is an even smaller problem in the context of all public or government issues. I am disappointed to see our current public officials wasting their time and our resources on this relatively insignificant matter. Second it is inappropriate for city government or for society as a whole to micro-manage individual behavior in this nannyish way. We should be looking for ways to eliminate unnecessary laws not creating new fussy complicated inconsistently applied barriers to a happy peaceful life. Is this statement an over-reaction? Each prohibition is a gnat buzzing around eyes and ears. Taken all together they make up a significant but unnecessary intrusion.

Virginia Ross, Boulder: Is it an unintended consequence or does the city of Boulder really not care if their proposed bag fee will probably lower profit at local grocery stores and collection of city taxes? I know that if the bag fee goes into effect my friends and I will do our major grocery shopping outside Boulder. Outlawing plastic bags as the students suggested would be no problem but I use the paper bags for a number of secondary uses--line waste paper baskets wrap packages for mailing let children draw on them make masks etc. etc.

Evert Brown, Boulder: I agree with the writer who said 5cents a bag is incentive 20 cents is bullying.

Louise Padden, Boulder: This is an all stick and no carrot approach and it's offensive.
Give a 20 cent credit and people will happily bring bags. Provide boxes like Costco and Vitamin Cottage does it lowers the stores disposal costs and provides a way to haul groceries.
Provide compostable shopping bags that would do double duty. No one has addressed how often to wash reusable bags or publicized the health issues. It's not fair to the stores that will be allowed to continue to use plastic bags. I use grocery plastic bags to hold my trash under the sink. Now I'll have to pay to buy bags that will be thrown away using more energy to manufacture transport and sell them. Either ban them entirely or be more proactive in why people shouldn't use them. I haven't seen a pro ad in years.

Fred Caccese: I am 100% against a Bag Fee for the following reasons: 1) It won't significantly reduce the use of plastic gags 2) It is merely another form of taxation 3) Even at 20 cents a bag it will cost the city thousands of additional dollars a year to implement at a time that the city has no money to spare. Boulder citizens already use the bags minimally. At grocery stores back East milk is double bagged in plastic. If customers have to pay for bags I think some of them will have their groceries put back into the cart at the register and then wheel them out to their cars. Without bags the grocery stores will not know what has been paid for and what is being stolen.

Wade Colclasure, Boulder: This is an unnecessary and low value tax. Further it is not the city council's responsibility to change the 'culture' of the community.

Robert Dullien, Boulder: Plastic bags seem to be the larger issue as compared with paper. Let's leave paper bags out of this discussion. Grocers and others who provide plastic bags to customers for free do that for a good reason: bags are essential for containing things to carry to a vehicle or to one's home or business. Try taking home 10 fresh trout without a bag. Or an assortment of small items. The real issue is whether government should be involved in this matter and if yes how. To me the 20 cent fee seems absurd as collecting it and all the administrative details will likely cost quite a bit. Will the amount be indexed to inflation? And why only have a fee on bags? Why not other things stores provide for free to customers - parking spaces free entry to the store product samples in little cups with plastic spoons shopping carts. If you start with bags where will this silly taxation end? Government can mitigate the plastic bags issue in other ways. Please have your consultant look into those. Don't hurt the customer; that will cause economic problems for the city.

Ben Nilsson, Boulder: Please consider how dirty some of these bags will be after the ordinance is in place for several years. Who knows where some will have been before going to the store. Customers will start requiring stores to clean counters before placing their bags there. We already have a problem but it wiki only get bigger.

Bob Radocy, Boulder: Adding a bag fee (TAX) to plastic and paper bags at grocery stores is not a good idea... please abandon it. Especially with paper bags which are used for many other purposes in our household like containing plastic aluminum and paper waster for recycling. This is not worth the effort or the cost to Boulder and its citizens. We do not need more government intervention entering our lives in this manner adding costs of living etc. especially on such low priority issues. Stop this action NOW!

Margie Belcastro, Boulder: The logistics of sanitation is a concern when banning plastic bags 1. chemicals drano to rat poison should be kept separate from food bags for this use or the next! @ Juices from meat also need a plastic bag. 3 People don't wash bags every time some never.4 are we to ask food handlers/cashiers to use disposable gloves for each customer? Safeway no longer reimburses for own bags but i usually bring my own. Plastics I do use get a reuse when clean.
Please do not legislate and charge for personal choice!!

Ilona Hagenbrok, Boulder: I have never commented on an Boulder issue but I must protest requiring people to pay a fee. Why not just ban plastic bags and be done with it? Please don't force people to pay thereby allowing corporations to externalize overhead once again. Many other municipalities (Santa Monica Long Beach Pasadena Portland Kauia Hawaii to name a few) simple ban plastic bags outright. And why charge 20 cents for paper bags which are completely recyclable? Again this seems to create another profit center for the supermarkets. I urge you to rethink the ordinance. At least don't require us to pay for paper bags! BTW I have been using my own bags for 15 years. Thanks very much.

Robert MacRae, Boulder: Why ban paper bags? They are recyclable and useful for many household purposes. I use them to dispose of cat litter and to carry recyclable materials to the dumpster that our condo development uses. If I have to pay 20 cents for bags for these purposes I suppose I will since I really don't know of a practical substitute. I fully agree with the concern about plastic bags. They are an environmental nuisance. This is not true of paper bags. The concern that the Council expresses about them is simply one of frugality – reusable bags rather than disposable ones. If that is truly your concern - to enforce some sort of moral standard on people - then perhaps you should be honest about it and ban all disposable shopping bags from all retailers.

Alan Wasserman, Boulder: We are going to spend over 2 million dollars on this and tax people $.20 per bag. Let the girls from Fairview High pay for it! All to reduce only 4% of the landfill? Wouldn't it be wiser to promote more recycling at much less cost. My wife and I recycle all of our bags and if it was easier to do more people would follow suit. Positive reinforcement works better. Just what we need another city agency to fund. Who verified the amounts the study suggested. How much money was wasted on this study? Just because you paid for it doesn't mean its accurate.What if $.20 is too low and the program is losing money? Who will make up the difference? The city government is just accepting the figure without independent verification? Another alleged solution in need of a problem..

Kim, Boulder: I can honestly say that this action is among many other sincerely stupid ideas (Boulder creating its own utility) that make my husband and I consider moving out of Boulder.
Short of moving what this will encourage me to do is drive my car outside of Boulder to go shopping. Sure I'll still spend small amounts of money here or there but when I have a big list of items I'll head out of town and spend more of my money in another town and county - and I even have and use my reusable grocery bags.

Joe, Boulder: Another completely stupid libtard idea. Of course the PlanKlan council is all over it. How about fixing the roads.

William Van Matre, Jamestown: Call it what it is! Tax not fee! Also I can shop in Longmont. You do know that it is the same distance from here. If you don't want us shopping in Boulder just say so and we will stay away. Also the paper bags are recycle-able. So don't include them in your tax. We also re-use both before we discard them. There is a health issue with re-use bags that are not washed. So do your home work and quit being a Nanny.

Amber, Boulder: First of all I think that the bag fee is wrong and the city council shouldn't have voted for it to begin with. Sounds like all they did was listen to a bunch of students not the community. This is just Boulder being the over-bearing environmental watchdog as usual. Normally it takes the city council forever to decide on something but for some reason (I expect they wanted brownie points with students and private garage companies) this was rammed through with lightning speed. So much city money is being spent to investigate what amounts to an insanely small percentage in the garbage stream. Poor poor garbage companies they have to sometimes stop their machines because of plastic bags. Really?? We want to penalize citizens to make a company happy that gets PAID A LOT for what they do? So what about the plastic bags or paper bags dispensed at the Farmer's markets or restaurants for leftovers or take out or clothing retailers??? Why don't those bags count? And hey have you thought about the plastic bags we put our fresh produce in...where while you stop this insanity? Also 20 cents is INSANE!! Take a look at other places and what they charge...what happened to the 2-5 cents originally looked at? Even Maui (which is much more expensive than Boulder) only charges 5 cents. Please please city council don't have a knee-jerk reaction and force such a large amount (and to some of us those extra cents really count)onto your citizens. Also let's be realistic about the very real health concerns about reusing bags. I'm for reusing bags up to a point but I'm not going to use the same bag so many times that I have to start washing it out. Water is expensive too you know.

ATTACHMENT C

Steve Haymes, Boulder: Plastic shopping bags are NEVER single use bags for me. I use them to line my kitchen and bathroom trash cans clean my cat litter box and keep in my car for holding dirty hiking boots. I also use canvas shopping bags from King Soopers too. Due to other City of Boulder policies I do very little shopping in Boulder any more other than getting groceries. If Boulder implements a 20 cent fee/tax for these bags then I will take my remaining grocery shopping to Louisville and Superior. Steve Haymes 38 year Boulder resident.

P. Papper, Boulder: I am writing in opposition to the proposed fee on bags. Are you really proposing that the city spend $2.2 million to implement the program to charge money for bags? This makes no sense. On Sept 14th a daily camera article also stated that the city should be careful about adding programs or increasing spending. If there is $2.2 million to spend couldn't it be used for something worthwhile like the library firemen policemen medical or other services for low income and disabled people? The list goes on and on.
Second I believe in being environmentally friendly. We reuse bags many times and then recycle them. The impact of reducing plastic by charging for grocery bags is minuscule compared to the amount of plastic that goes into packaging. Another concern is that many cloth bags that are distributed or sold are made in China and may contain lead. This becomes a health issue.
So please - don't spend our money this way - drop the idea!
Thank you for listening.

Alvin Wilson, Gunbarrel: If the plastic bags are going to cost twenty cents each I will drive to Walmart in Lafayette Costco in Superior or Longmont stores. With their discount prices I will recover the cost of gasoline. Also reusable shopping bags can be a source of contamination of the food. We should strive for cleanliness.

Marilee Wehde: Yesterday on Colorado Public Radio I heard that the Boulder City Council was considering a 20¢ fine on each plastic bag customers took from Boulder's grocery stores, and that the Council was encouraging citizen feedback.

I use plastic grocery store sacks, and then I use them for my trash bags. If I get too many trash bags, then I use cloth bags to keep in balance my supply and demand of the grocery store sacks.

Those people who use only cloth bags have to buy plastic garbage bags. Two grocery store plastic sacks full of garbage fit into one Glad kitchen trash bag. One empty Glad kitchen trash bag weighs 3/4 once, but it takes 4 empty Safeway bags to weigh 3/4 of an ounce.

This means that people who use cloth grocery sacks and buy their garbage sacks use exactly twice as much plastic product as those who use only those light weight grocery store sacks for their garbage.
If you are looking to reduce the total amount of plastic used in garbage bags by the residents of Boulder, you should be encouraging everyone to take their groceries home in the store sacks, and then use those sacks for their garbage.This will also appeal to college students and other non-rich Boulder residents.

One of the problems here is the superficial appearance of things. Boulderites just love to LOOK as though they are environmentally conscious by bringing their own sacks, while the box of heavier ply trash bags they have bought is inconspicuously hidden among their other purchases.

The fine is ridiculous, and serves only to make sure everyone uses twice as much plastic product for their garbage.
Thank you for your consideration,
Marilee Wehde

R. Dobransky, Boulder: STOP SPENDING MONEY ON BAG FEES.....
To ask the stores to stop using plastic is good for the environment however to demand the use of cloth/personal bags and charge for any other bag in against my civil rights.....
The HUG A TREE environmentalist people have over steped their bounds this time.....
ANY BAG MADE OF A DEGRADABLE MATERIAL (paperclothetc) should be acceptable and this nonsense of charging for other then cloth has got to stop...enough money has been wasted to date.....by this city and its extreme environmentalist council members...

ATTACHMENT C

STOP THIS FOOLISH ACTION..... OUTLAW PLASTIC and go back to work on important real issues...

R. Dobransky, Boulder: Sirs/Madame:
I have one very important question for this august committee on bag use in Boulder.....
WHAT A WAST OF TAX MONEY.....I have been a Boulder city tax payer for more then 40 years and have NEVER seen a more insane wast of city funds.....(To pay for a study to determine what to charge for the use of a bag...) I am not against reducing the use of plastic for bags to save space in the land-fills but to add paper to this action is insane.....
I am against charging a customer any amount of money for paper or any other bio-degradable
material... PLEASE DON't SPEND ANY MORE MONEY ON THIS STUPID PATH and make a statement for degradable bags and stand up and be counted for your intelligence not your insane Hug a Tree environmental leanings.....
NO CHARGE FOR DEGRADABLE BAG USE

Kay Schroeder, Boulder: I am 74 years old have lived in Boulder since 1970 and owned my home as long. I very much oppose the bag fee proposition and consider it another tax. And a very unreasonable one.

For the time I have been a resident here I and my family have done all we can to be good stewards of our environment and have attempted to comply with all the city initiatives to maintain our environment and resources. We compost. We do not waste. We maintain our property. We plan our car trips so as not to be wasteful of fuel or clogging the roads with pollution.
Moreover we re-use our plastic and paper bags. Most of them are used more than once if not more times.

This 20 cents fee (tax) is another miserable government over-reach where it is not appreciated. Since we use bags both plastic and paper this means we will need to buy boxes of such in order to handle our waste as we have in the past. And it seems to me you are selecting only one type of retail merchant (grocery stores and markets) for this tax. Please re-consider and drop your effort re. the bags and spend your time on correcting and maintaining the major concerns we have in our community and for which you were elected to consider.

Dennis Losey, Boulder: Have you people lost your minds??..in this economic depression you're proposing a charge for plastic or paper bags? I for one will not shop in Boulder AT ALL if this is adopted. I believe you could get this done if you give FREE Cloth bags our for 3 months.
QUESTION??..I assume I will be getting a $.199 tax credit for every bag that's not used in Boulder? I prefer a check please.

Joanne Arnold, Boulder: Holy Moly, Folks. You have forced me to make my life so green I can
hardly afford it anymore. And I fear there is more to come. Now you propose I pay 20 cents per plastic bag PLUS the huge city administrative costs associated with that, which I presume I will pay for with increased taxes. I do not want to pay carbon taxes; I long ago dissed Kyoto. I do not want to incur the shockingly high costs of municipalization, in spite of your underestimating the costs and overestimating the benefits. And truth be, I have always been a tree-hugger. But enough is enough. Please bag this costly plastic bag ban.

Lindsey: I want to know if the COB will try to tax bags that fresh bread comes in or even the bags that I place vegetables in or even the bags I put bulk items into? Will this new way of thinking lead the COB to tax tortillas & all Rudy's Breads? The problem is not bags; it is how they are dealth with. The kids that suggested this new legislation ought to be given jobs as crossing guards for prarie dogs! Incineration makes more & more sense!

Les Briggs, Boulder: I am very much against Boulder adding a charge for disposable bags. That's just adding another tax to fund another intrusive bureaucracy of which we already have too many. It will infuriate me if I have to pay this tax just because I forgot to grab my reusable bags (which I always try to use) from my car on my way into the grocery store!

Shirley Borkovec, Boulder: I can't believ e that you would impose this stress on families the elderly who are struggling to just feed their families. We use these bags for many different purposes because we cannot afford to buy garbage liners etc. The comment was that this was a community of people with means who can afford 20-cent bags. There are many low income families homeless people in Boulder although most of the population of Boulder would rather that we all disappear so Boulder does not look bad. There is no way I can afford to but the cloth bags or pay 20 cents for plastic. You claim to care about the environment-but you obviously do not care about the poor.

Tracey Stephens, Boulder: I feel that this initiative is unnecessary and trivial. As plastic bags make up only about 0.5% of the total waste stream a fee or ban on plastic bags will have minimal effect on waste reduction. It is symbolic only and has the potential to create a burden on consumers. Personally I re-use plastic bags to dispose of pet waste as do many others that I have noticed.

Therefore I will either continue to request plastic bags and pay the fee or I will have to purchase plastic bags for the purpose of pet waste disposal. Most people I know re-use their plastic bags for some purpose or another. I am also curious as to how long most re-usable totes last and how many plastic bags are equivalent to one re-usable tote. It may balance out pretty closely.

Robert Cluster, Boulder: Just speaking for myself if the City Council adopts this punishing tax of 20 cents per disposable bag I shall be voting AGAINST the extension of the CAP tax.
The pro tax proponents assert that this tax would help address larger council priorities such as shifting away from a disposable culture. Yes this Council of elite affluent out-of touch busybody snobs loves to engage in social and cultural engineering toward compelling others to adopt their politically and environmentally correct Boulder lifestyle. The way to do that is tax tax tax the masses. You want me to vote against the extension of the CAP tax? Then just enact the
new tax on disposable bags.

Sherrie, Longmont: One more reason not to go to Boulder. This proves what everyone knows everything is more expensive in Boulder.

Sunny Brown: Hello, I reuse my king soopers plastic bags at least once, if not 2 or 3 times. I use them for my garbage(I use one/week, that's all), to give away fruit from my trees, food from my pantry. If I do not have these, I would have to BUY plastic bags, especially for my garbage. Please consider this and let me have my safeway bags to reuse.

Lauren Correy, Boulder: If implemented this tax I will go to Longmont instead of Boulder to shop because the tax on paper bags irritates me. Longmont is just a little more out of the way. This will hurt business in Boulder. Also I am a caregiver for the disabled and elderly and I see the plastic bags put to all sorts of uses. The most notable is an elderly man who has to count his pennies to try to stay in his home every year so he can take care of his severely disabled wife and 40 year old son. He uses the plastic bags as a fee way to dispose of their diapers and it saves him a lot of money since trash bags cost more. Some people recycle these bags already just not in ways many people may consider.

Mike Forbes, Boulder: Bag fees really boulder? Its not very hard for me to drive over the hill to target in superior. You would rather have me driving over the hill to be able to shop with bags?
Explain the goodness to me of the ecoli outbreak on the school trip out west traced back to a reusable bag. I will never use reusable bags and never if you think you can legislate that well I'll drive over the hill. When will you require reusable bags for to go food? McDonalds Coffee shops dry cleaning? Where does it stop? When will paper cups be banned? Plastic milk jugs I guess that should be a reusuable container too. Why doesn't boulder focus on more important things that might increase revenue and be business friendly?

Richard Seals, Boulder: I think a .20 cent fee per bag is exorbitant. A lesser fee or establishing a place in the grocery store to return used bags for re-use is a better idea. There are folks in our county who are struggling just to buy food much less having to pay for plastic bags to carry food home .

Dan Guesman, Boulder: Please stop wasting money and time on this silly proposal!

Ken McLaughlin, Boulder: I think the ban/fee on paper bags is misguided. Although resources go into making paper bags they are made from renewable resources and decompose. Additionally they are useful as collectors of garbage leaves etc. If people don't have these bags for use they will likely buy plastic garbage and leaf bags thereby increasing the use of plastic. The real problem is the use of plastic bags. There is no need to treat both types of bags equitably. Plastic is bad and should be banned. Stores already provide rebates for use of reusable bags as a positive incentive but it is regressive to charge fees for paper bag use. just ban plastic please!

Tom Taetsch, Boulder: The City of Boulder needs to stop ramming these kinds of regulations down our throat like this. If the City was REALLY interested in getting public input on this issue then they would treat this bag fee like what it truly is -- a BAG TAX! And the way you handle taxes is by putting a tax measure on the ballot. This is something that should be decided on by the entire electorate ... not just some envirofascist bureaucrats and/or council members!

Hugh Waltn: hi i RECENTLY SUFFERED A STROKE, THEREFORE CARRYING GROCERIESIS DIFFICULT. NOY TRADITIONAL PLASTIC BAGS TO CARRY MY GROCERIES. THRY CARRY MOE STFF ANF THE HADLES ARE GREAT FOR ME SINCE MY LEFT HANF IS MESSEDUP. AND HAVING TO PAY MUCH MORE IS A HARDSHIP FOR MR AS I CAN'Y WORK MEDICAL EXPENSES ARE HIGH/HEY THE BAGS ARE NOT MUCH, BUT IT ALLL ADDS UP. SO LET SAFEWAY KEEP GOING WIYH THE BAGSAND CHARGE LESSD CAUSE $0.20 ECH IS A LOT COULD BE

$1PER SHOPPING TRIP. WHY MAKE MY LIFE HARDER THAN IT JUST GOT, WHICH IS A LOT HARDER.MANY PEOPLE WILL FIND THE CURRENT BAGS MUCH MORE EFFECTIVE. YOU GUYS DON'T HAVE ALL THE SOLUTIONS OFTEN YOUR SOLUTION HAVE UNINTENDED COSEQUEVSESES,

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Robyn Kube, Boulder: I am opposed to the proposed bag fee but support a ban on plastic bags. If the goal is to keep plastic bags out of landfills then there should not be an added charge for paper bags. I use paper grocery bags multiple times for groceries (until they wear out) for my under-the-sink non-compostable and non-recyclable garbage and to dispose of used cat litter. If these paper bags were no longer available then I would have to buy plastic bags to use for the garbage and cat litter. This would not only be an added expense but would unnecessarily add more plastic bags to the landfills. Also the collection of the fee creates another burden and cost for the stores. As I understand it the City anticipates off-setting some of these costs by rebating some of the money collected to the stores. This seems highly inefficient and essentially amounts to a double fee. It is also possible that some stores will cease providing either paper or plastic bags as a means of avoiding the costs of collecting the fee. Since this seems to be the real goal of the program then a far more direct and much less costly way of achieving that goal would be an outright ban of the bags. But I would again like to emphasize that I think paper should be treated differently than plastic because paper bags can be used to dispose of many types of refuse that must go to landfills and is biodegradable. The only substitute would be plastic bags which the City desires to keep out of landfills.

Miguel Zavala- Allen, Boulder: I am opposed to this fee.
1. It's a regressive tax. I am very fortunate to bat no eyelid when paying $0.99 $1.99 or $2.99 for a reusable bag; but what about the low-wage earner? Life in Boulder is already expensive enough for him/her. We already must subsidize these market participants through housing and other community supplements. Now we are adding more fees to their checkout?

2. This further incentivizes commerce elsewhere. Our fair city already loses millions in meaningful revenue because of business driven out of our confines. Why provide any additional reasons for out-of- Boulder transactions? [further: why incentivize the Boulder resident to buy outside using bags obtained out of Boulder so that these bags may find Boulder their final resting place?]

3. It's intrusion. If people demand bags from retailers they bloody well should get them. Why do we need government to define right and wrong at checkout?

4. It doesn't work. Studies show that a dominant rebound effect occurs within months of implentation of such fees--with users often buying as many or more bags than were previously consumed.

As with most well-intended government mandates the answer is in the three Es: EDUCATION EASE and EFFORT. Paste the city with placards and demand that all bags have a message from the city posted onthem about bag consumption and the problems of litter. Make it easy for the consumer to recycle their bags with stations at every retailer. Of course all this is a different way of thinking than simply slapping a tax on each bag--but that's the aforementioned effort.
I challenge my city to do better and appreciate the forum to raise this voice.

Anonymous: it has been proven reusable bags spread bacteriaPlease do not impose this fee

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C.G., Boulder: This is a ridiculous proposed CHARGE! This is a TAX that you are trying to charge people whom shop locally in BOULDER! By imposing this per bag charge you will be penalizing Local Boulder Shoppers.
1) Several of the REUSABLE bags contain lead those that don't often breakdown with repeated use and fall apart. handles break holes break into the thin/loose weave of the fabric. So those bags you will give away for FREE will need to be handed out monthly! http://www.usatoday.com/money/industries/environment/2010-11-15-toxicbags15_st_N.htm
2) the bags will need to be washed to make sure they are not contaminated with harmful bacteria that can cause severe illness or even death as was the case with those cantaloupes a while back. The lethal bacteria was present on the outside of the fruit.
3) seniors and the elderly can not carry one or two HUGE HEAVY BAGS at a time the smaller packed individual bags are easier for them to carry with out injury.
4)I recycle my family recycles this is my choice it is not your right to impose this on me. Grocers charge what they do to pay for the shopping bags it is calculated in their budget we DO pay for these bags. I prefer to use my reusable bags but I also use the paper bags to contain our to be recycled items under the sink. I use the plastic bags to cushion during shipping when shipping gifts especially to senior family members who use the plastic grocery bags to contain their trash at home. I am SO disappointed that this is how you are spending your elected time in office...
Let it be a persons choice to recycle we already pay for that with WESTERN DISPOSAL... QUIT
MICROMANAGING THE PEOPLE
OF BOULDER!!! THIS IS NOT YOUR RIGHT!
http://www.nytimes.com/2010/11/15/nyregion/15bags.html

I can tell you I will be moving my shopping practices to another city. If you charge for shopping bags.

Clinton Heiple, Boulder: I use paper grocery bags from grocery stores for kitchen trash. I almost never use plastic bags from grocery stores to carry out purchases. I am sure the environment will be improved by using purchased plastic bags(NOT bought in Boulder and way cheaper than 20 cents each) for trash. Yet another reason not to shop in Boulder. Fortunately we have alternatives.

Susan Scott-Stevens, Boulder: Let's get the language straight: A FEE is something you pay for a service. A FINE is charge a penalty for doing something wrong. I am not issued a fee when caught with my dog off-leash but a fine. The Council is not proposing a fee on disposable bags [plastic and paper] --what service am I paying for? -- but a FINE of $.20 [Twenty Cents]. Put another way -- the Council is proposing to fine people who forget to bring a reusable bag with them every single time they purchase something from a grocery store or convenience store. This is not only unfair but expensive! If for example I forget to bring my reusable bags with me when I do my weekly shopping my grocery bill could go up by one or two dollars (possibly more given the proclivity of baggers to put many things in separate bags). Moreoever there is the initial cost of buying reusable bags -- each one of which costs considerably more than $0.20! You claim that the City will issue bags to people as part of an educational project. Tell me -- will there be a cap on the number of bags each household or person will receive? Will you also issue warnings that the bags must be washed or cleaned after each use in order to avoid contamination or disease? Give me break. If you must impose such a fine at least limit it to the use of plastic bags and not include paper ones.

Tim Pospahala, Boulder: This is just another way to suck more money out of people. These bags are already paid for by the merchant and passed to the consumer. It makes me sick you want to penalise people for using a bag to get there products home safely and conviently. It seems all this city counsel is made up greed and coruption. If you tax people on this you will have a numerous amount of law suits and that will lead to huge amounts of tax dollars wasted in court that could be used on redusing over population and conjestion. The people here don't want more homeless shelters high rise's and no place to park. What we do want is a way to get our goods homethe prices in this town are so high now we don't need another tax. People bring there own bags now a days or reused bags to use again. Don't even think about taxing bags you allready waste too much money on prairie dogs. If you wont to compare boulder to some other part of the world do Boulder a favor and move there and leave us alone. We don't need more taxes people and corruption.

Jackie, Gunbarrel: If you impose a 20 cent bag fee I will no support business in BoulderI will shop elsewhere

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Betina Mattesen: This is not the time to add to our grocery bills. This will hurt the poor disenfranchised and disorganized - and those of us who don't have big SUVs to haul bags around in. You will also be adding to our expenses as we will now have to buy garbage bags because of course many of us reuse plastic grocery bags for all kinds of purposes. Poor people live here too. Boulder is getting ridiculously elite.

Becky Korte, Boulder: Does no one pay attention to the fact that reusable bags are germ factories and do I have time to wash reusables everytime I go to the store? No. I personally recycle my plastic bags at my grocery store or use them for the cat litter. At .20 per bag it might cost me 2 bucks for my major shopping trips...does anyone really think that will stop people from using them?

Lauren Taylor, Boulder: I do not support a bag tax. I do support educating consumers so they can make many more environmentally sound decisions. The use of TAXATION measures does not MOTIVATE in the same way that EDUCATION can.

Dan Steuer, Boulder: I am not in favor of this fee. It will negatively impact people who try to use reusable bags and feels like just one more way that the city tries to tax its residents. I always use reusable bags but the tax seems to assume that all users leave their house go to the store then return. The reality is that people stop at the grocery store at all different points of their daily life and don't always have bags with them. Responsible people try to reuse the plastic bags when they receive them -- they serve as trash bags dog poop bags etc -- but we shouldn't have to pay the city a tax for something the store provides for free.

Martha Santoyo, Boulder: I personally think that this whole idea of charging for bags is crazy. People will do what they want. If they chose to bring in their own bags....let it be. Don't jam somtging down our throats. Boulder already jammed an environmental garbage separation (fo
Trash collection) s fee years back. They forced a fee increase for trash pickup. I had to buy a $20 trash can and special trash bags. Plus an increase in my bill. Tell you what...go finds thevtwo privileged kids who thought up this idea and ask them....get re Al. Dovthe pay bill..buy food..buy gas...or even work. I bet their parents pay for everything. They have no clue what it is like to survive. Plus..many times going to the market is not planned. All one worries about is getting home from work..stop at the market

and pick up food for the family. These two girls need to get into the real world and experience how expensive it is to survive. Many od us are on a fixed income. With foofvprices increasing everyvweek...this is an expense that could impact everyone. Bet these girls drive cars...maybe they would like to be charge a fee everytime the put exhaust into the air....oh yeah...let mom and dad pay for it. I vote no.

KD Baker, Boulder: Our household has always reused or recycled the plastic grocery bags.
Thus if a fee is placed on the use of these bags WE WILL SHOP FOR OUR GROCERIES OUTSIDE THE CITY OF BOULDER!! We will even go as far as outside boulder county to spend our money. NO FEES NO BANS.

Charles Thabault, Boulder: I disagree with the bag fee. Using incentives should be tried before punitive measures. Try refunding the 20 cents per bag to people who bring their own bags first and if that doesn't have an effect then punish. This number is more meaningful than the previous voluntary 5 cent refund. As has been noted the 20 cent fee will impact the less fortunate first. This is the opposite of the progressive effect Boulder is looking for. Furthermore where does this stop? We have an obesity problem; do we tax/fee milkshakes next?

Bob Radocy, Boulder: Bad idea to charge for bags especially paper bags. I strongly oppose this new nanny type government imposition on the lives of Boulder residents. And Why paper bags. They decompose and area useful for containing recyclable waste like smaller quantities of yard waste. They are a renewable resource. Stop wasting your time and out tax resources on these trivial issues and focus on more important tasks like economizing government spending. I will not vote for any Council-person who supports this new tax.

David Doroski, Boulder: DO NOT pass this bag fee proposal

Jane Swartley, Boulder: I'm not in favor of any fees but I am in favor of education especially in encouraging people to recycle their old plastic and paper. I think if reduction of plastic bags is enforced then also plastic containers should also be outlawed. Most everything sold in the grocery store is packaged in plastic. The carry-out bags are the least of it.

Ty Kirk, Boulder: I ride my bike to the grocery store. I need the plastic bags to get my groceries home. Then I use them as trash bags in my kitchen. Of course I don't buy packaged trash bags since I'm recYcling the bags I used to get my groceries home. I think the proposed law will be a big mistake.

Anonymous: I am outraged that the city of Boulder has decided to impose a fee on residents who wish to use disposable bags. I reuse all disposable bags I collect as trash bags or I donate them to a city department who provides them for the use of their patrons. I may just have to give my grocery shopping business to markets in surrounding cities. A few cemts more in gas is worth not having to deal with the hassle and cost of never getting disposable bags here in town.

Chris, Boulder: This rediculous. I hope this doesn't pass or I will just spend my money in Lafayette or Louisville.

Nancy Fitzgerrell: The most straight forward solution is to do away with both plastic and paper bags at stores but have reusable bags available for purchase. In bulk stores ought to be able to offer them for as little as 50 cents a bag. Costco does not provide plastic or paper bags and that does not deter people from shopping there. They reuse boxes but many people simply cart their purchases to their car to unload at home. Why mess with more complicated layers of bureaucracy by charging money some of which stays with the store and the rest to the city?

Ulla Merz, Boulder: I agree with eliminating plastic bags as a positive goal.I disagree with the administrative overhead and costs for educational outreach and studies by consultants to implement this program. Why not disallow plastic bags in these 45 stores identified. Allow the grocers to sell reusable bags with their logos on it for advertising reducing the cost of the bags to the consumer. If someone cannot afford the cost of a bag have the grocer hand out a token that consumers can get a reimbursement for the cost of the bag right in the store at a separate counter (for example where you buy cigarettes or customer service). There are also recyclable plastic bags that can be used. In the transition this would be an option especially for out of town tourists.
There has to be a way to reduce the implentation cost of $2200000. I feel there are better places to spend this precious money.
Thank you for your consideration.

George Craft, Boulder: I think charging a fee for plastic bags is a crazy idea! I once used reusable bags but gave that up when I found that City Council actually acknowledged some kids' half-baked idea. I use the plastic bags for many more things than the trip home from the grocery store. I have been hoarding them since this initiative came up so I have some to use in the future. So if

plastic shopping bags are outlawed or taxed (that's what it amounts to) I will simply have to spend money to buy plastic bags. The impact on the environment is neutral. The impact on me is massive inconvenience. BANNING BAGS - NO! NO! NO!

John Burdick, Boulder: I am very much opposed to this fee. I shop often and when I remember I bring my reusable bags. However I do not have enough when I do a large grocery shopping trip and it is not always known ahead of time when that will be. I have also had trouble with the self-checkput lane being able to properly check the weight of my bring-along bag: It thinks its an item that hasn't been scanned. I recycle all the plastic bags I get regardless of source and most grocery stores accept them for recycling. Further the amount of trash generated is exceptionally small by volume or weight compared to what else is discarded. It would make a lot more sense to teach/educate people about recycling the bags at the stores and possibly reusing them once more. And extending the fee to paper bags is really beyond reason. That is taking an idea and extrapolating it to non-sensibe. Why? The supposed problem is with the plastic not the paper. Just teach people and stop trying to control everything.

A. Tucker, Boulder: Western Disposal requires that our garbage is bagged before put in the trash cans. We have always re-used plastic grocery bags for this purpose. It seems crazy that I will now have to purchase brand new bags to throw out my trash when I can recycle a grocery bag. This does not add up from an environmental perspective.

General Comments/Questions

Nancy Oncley, Boulder: I volunteer at a local food bank where both plastic paper and reusable bags are used to support a least 70 families a day. We encourage clients to bring their own bags and enter them in a drawing once a month for doing so however a significant percentage of our clients need bags for their groceries. How will a .20 bag charge benefit a nonprofit food bank serving families couples or individuals needing a hand? We rely on donations (including bags) to exist.

Giovanni Perrone, Boulder: After reading through most of the studies supporting material and comments available on this Web site (and related links) I am amazed at the magnitude of the effort associated with supporting a preconceived solution. I initially thought the solution of a $.20 fee/bag was ill conceived with little economic regard for consumers and suppliers. I'm convinced the immediate impact will be to discourage shopping in Boulder.
But now I feel a complete and full disclosure of the total cost associated with supporting the justification inactment and implementtion of this bag fee ordinanced should be revealed to all.

Joseph Prinster, Boulder: I do not understand why this is only limited to grocery bags. Grocery bags are the most recycled of all the plastic bags in our house. We definitely take re-usable bags to the food store but when we get grocery bags they always go in a bin and are re-used for trash bins or general carrying.Why not include garment bags? I NEVER re-use them. They are to big and too thin. Tax them too.Why not include small plastic bags from gift and specialty stores? I never reuse them either. To small and not functional. Newspaper bags? Those are reused to pick-up the dog droppings around the house.
This whole effort seems vaguely directed.
- Is it a revenue effort? In that case tax all the bags in town.
- Are grocery bags in some manner more of a political hot items with all the grocery stores in town?
- Why are only certain bags being taxed while all plastic bags contribute to the waste flow yet grocery bags are the MOST recycled bags in our household.

It seems like we are rushing to a decision. Why the hurry?

Jim Stevens, Nederland: Why not force the stores to have recycle bins in their store like Wal Mart offers or B&F in Ned? For $.20 per bag I will save money by driving through Boulder to shop at Superior or Longmont Safeway where I can also get gas.

Joe, Boulder: How about we get Macon to pay his taxes first. You all must be proud to work with someone who screwed the city out of $500k+

Bob Macrae: Hi,
You are listed as a contact regarding the proposed bag fees. So, perhaps, you can listen to my feedback on this issue. There are many of us in the city who do not have curbside trash and recycle service. Instead we haul our stuff to a dumpster located - in my case - about a quarter mile away. For this reason we cannot reasonably use garbage cans in our garages. I have found that the paper bags from the grocery stores work admirably for the purpose of carting recyclable material. So

we are reusing and recycling the paper bags which, I think, is entirely environmentally friendly. I have, by the way, room in my kitchen for only one large trash container which we use for organic waste.

Richard Keenan, Boulder: Since many bags are re-used for trash/waste disposal won't this just shift all those to bagsbeing purchased & used instead with no impact on the number of bags reaching the landfills? Wouldn't making bags easier to recycle make more sense as that would impact the other bags?

Anonymous, Boulder: The fee is too high and should be set at 5 cents per bag. There are free ways to educate the public (within water bill using Daily Camera etc.). How will the city determine who is in need for free bags? Also although I assume that the majority of plastic/paper bag usage is at grocery stores if the city is determined to do this it should implement it city-wide all retail establishments to level the playing field and not discriminate against grocery/convenience stores. So in summary:
5 cents per bag
no free handouts/paid education
every establishment that uses bags shoudl be covered

Max Schroeder, Boulder: I would like to suggest that what the city is now proposing is simply a bag tax justified as needed to reduce cost of disposal. Just call it that and place it on a ballot.
Passage of an ordinance exacting an additional fee on grocery store patrons will only serve to increase grocery costs thus hurting the poorest of the citizens in Boulder disproportionately.

Does the proposed ordinance apply a 20cent fee to each bag used or to once each shopping trip? In our home plastic bags we receive are used at least a second time prior to disposal as are any paper bags we receive. If an ordinance is passed and costs exceed those of purchasing regular trash recepticle liners won't patrons simply replace the plastic bags now being furnished at the grocery with those sold for that purpose? It is my understanding that the plastic bags currently being used are biodegradable as are paper bags. I doubt that any replacement recepticle liners have that quality.

One thing that should be considered is the relative sanitation that comes with using a fresh plastic or paper sack to bag groceries. Re-using bags over and over carries some risk of passing pathogens from one grocery item to another.

While the re-use and reduction in numbers of plastic grocery bags needs to be encouraged as does the use of re-usable cloth or paper bags I'm not sure that placing what might be considered an exhorbitant charge on plastic grocery and paper bags is the best answer. Requiring biodegradable materials be used might be a better solution.

Anonymous: Although I am late to this discussion I support a ban on plastic bags and a fee on paper bags as the method to help reduce the use of disposable plastic and paper bags within the city.

Patty Malesh, Boulder: I would rather have had a ban which was first proposed but a fee is better than nothing.

Lauren, Boulder: Have you ever tried to recycle a bag in Boulder? You take to to a store where they have a tiny bin jammed full of plastic bags so there is no room for yours. Maybe the city should develop a program to recycle the bags instead of fineing people like me who recycle their bags.

Cathy Allen, Boulder: Please don't go below .20 a bag. At this cost i still would not go back to my car for my permanent bag if i forgot to bring it into the store. I would say .50 might do it for me. I know the concern for the low income folks but the point is to discourage plastic bag use. If they were proposing a 2-5 cent fee per bag for them i doubt they would discourage use. Perhaps there would be some way of letting the public purchase these permanent bags at a reasonable cost and waive the fee for the first bag to the lower income folks. Those who don't want to purchase permanent bags can always save up plastic bags from the supermarkets now and from other retailers and use them. There really is no way someone who doesn't want to purchase a permanent bag would have to. So please please don't go under this 20 cents fee. I think it still isn't enough. I was in favor of an outright ban. That really is the only way i think it would work for me.

Patti Pansa, Boulder: I appreciate the concern for the environment that this proposed fee addresses. I and many of my friends already use reusable bags (reinforced totes and canvas) while shopping. My concern is that bag supply will be restricted and dog waste will increase as a result of this legislation.

ATTACHMENT C

Heinz Damberger, Boulder: We use reusable bags most and disposable ones some of the time so we have plastic bags for our garbage; we'll probably not change our ways and the $0.20/bag will act like a tax on us perhaps $8- 12/mth $100-140/yr. Perhaps one can buy small plastic trash bags for less than 20 Cents and we'll switch to that.

G. Paul Gilleland, Boulder: Do you understand that reusable bags have many germs and should be washed after each use? Do you really believe people will?

Carol Ford, Boulder: Since I reuse and recycle ALL my bags I will just pay the fee; otherwise I would just need to purchase such sacks for the tasks where they are needed. Reuseable sacks for groceries are gross.....they must be washed regularly to stay free of harmful organisms. Nope....won't use them for groceries!

Gary, Boulder: If you believe in democracy why not let voters decide?

Anonymous: Why replace a 5 cent disposable grocery bag with a 20 cent trash bag which you purchase? The disposable bag is just right for the kitchen trash and deteriorates quickly. The kitchen trash happens and why add 15 cents to the cost of disposable? Why add to the daily cost?

Jane Morrissey, Boulder: I consider myself to be environmentally concious and I do recycle the plastic bags I use to carry merchandise home. My main use for recycling the bags is to put gargage in them. My big question is....what are we supposed to do with our garbage??? Just toss it alongside the streets or throw it in the neighbors yards? Or do we BUY plastic bags to put the garbage in? We would STILL be using plastic.!! I certainly am NOT going to put garbage in fabric bags. Also what if we buy a large amount of merchandise all in one trip.....are we supposed to stuff five or six pieces of clothing into a fabric bag? If Boulder is the only town in the area charging 20 cents a bag you can be sure many of us will do our shopping in other cities. I think this plan better be given more thought.

Sally Lawrence, Boulder: The City Council is acting responsibly to a growing problem however my main concern is for lower income families. Depending on the amount of groceries purchased at one time this fee will definitely impact their weekly/monthly costs. I would like to know more about how you will implement the distribution of bags to this segment of the population. Also for the many foreign students and their families will you reach out to those folks?

As an avid recycler I've been using cloth bags for a number of years and recyle the newspaper bags and produce bags weekly. For many years my husband was an Ecocyle block/regional leader. Interestingly enough although he was faithful into his late 80's not one younger person has stepped up to take his place.

Educating the Colorado University student population which constitutes a very large number of consumers in Boulder should be a top priority. Young people coming from other areas of the country seem to have never heard of conserving and protecting the environment.

William Huston, Boulder: We currently recycle all of our plastic bags as you are now going to charge us we assume you will now give us a refund when we return the bags!
In the future if we were to switch to cloth bags cost may be an issue. But how would we keep the bacteria at bay? Would we have to wash them some how with boiling water and then run them through a hot dry cycle? We are both 70 years old and make one shopping trip per week and usually have 16- 22 grocery bags from Safeway and we make them double bag as they are so thin and tear easily. That means we use around 40 bags per week even at 5 cents per bag that is over a $100 per year cost to our fixed income.

Alison Anton: I would like to see a full ban on plastic bags (ultimately plastic AND paper) but to start a ban on plastic with a fee for paper. Thank you for promoting this study.

ATTACHMENT C

Comments from Bag Use in Boulder Public Meeting
Sept 20, 2012

Vivian Chen, Superior: I like it. They help the environment, and save the polar bears. I like the idea. I like the turtles./ I like the idea of the $0.20 fee because I think the higher the fee the greater the incentive to change behavior.

Tim Wagner, Boulder: Twenty cents is the minimum that should be charged for a disposable bag. I lived in Peru for two years. The poor there were not given free bags (in which to destroy their environment with). They made bags and baskets to take to the market; they used them for years. Don't let anyone tell you that this measure will be a hardship for the poor. To believe this is to believe that the poor cannot be resourceful.

Rob Steinway, Boulder: What do these cities have in common: Ethiopia, Bhutan, Rwanda, Tanzania, Bangladesh? Answer: all poor, third-world, developing countries? Yes, and they have shouldered the responsibilities of their environment and banned plastic bags. Can Boulder get up the backbone and rise to the level of responsibility that these "third world" countries have? That is the question! Just do it! The complainers will quickly fade. It is not necessary to wait a year or two to put this in place, the vendors can credit the stores for the unused bags. We can start next month if we can demonstrate a little vision and guts!

Anonymous: Love it! Should exempt EBT folks.

Becca Moser, Boulder: The $0.20 fee is a fee that will not only cover administrative costs and educational campaigns, but it will change behavior! I'm so glad Boulder will be taking this step to progress our environmental initiatives. Go Boulder!

Jane Harris: This is a great idea! I'm totally for it. Good job Boulder City Council.

Kris Moe, Boulder: We felt the Nexus Study weakly supported the $0.20 fee although we are all for the fee. We felt it would be easily attacked- particularly the advertising (educ.) part and the 185K for bags doing damage. We felt that if education expenses weren't laid out clearly i.e. if staff was paid for their time- but no new staff was hired it would be obvious musical chairs were being played with funds. We also thought the arguments about ambiguity supported a ban not a fee. We remain unconvinced a fee not ban is the way to go and the Nexus study felt more of a confirmation of our fears that Charm and Ecocycle are just looking for $.

Kira Headrick, Boulder: I like the $0.20 fee but I think that a higher fee would reduce bag use even more. I also think the Nexus study did not support the fee as much as it could have. This could lead to problems down the road if it is analyzed/attacked by people against the fee. I support a very high fee so as to have the highest possible effect in reducing plastic and paper checkout bags, and I also support the movement to an eventual ban on plastic bags and a fee on paper.

Ruthie Wu, Boulder: The fee itself is a good idea, however, the effects of the fee are ambiguous and not necessarily beneficial. For example, what will the public sentiment be if they are charged an extra $0.20 on the checkout bags and the funds are then not used for environmental reasons? The Nexus study lacked support and this does not convince me that a fee is better than a ban. Overall, the justification for a fee/fee is weak and needs to be strengthened while ensuring that funds will be put to good environmental use.

ATTACHMENT D

Life Cycle Analysis Studies

Studies on the life cycle impacts of disposable plastic and paper checkout bags can be found at the following links:

- The ULS Report: "Review of Life Cycle Data Relating to Disposable, Compostable, Biodegradable, and Reusable Grocery Bags"
  http://www.use-less-stuff.com/Paper-and-Plastic-Grocery-Bag-LCA-Summary.pdf

- Boustead Consulting and Associates: "Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper"
  http://static.reuseit.com/PDFs/Boustead%20Associates.pdf

- Hyder Consulting, issued by Sustainability Victoria: "Comparison of Existing Life Cycle Analysis of Shopping Bag Alternatives"
  http://www.sustainability.vic.gov.au/resources/documents/LCA_shopping_bags_full_report%5B2%5D.pdf