

Summary of Disposable Bag Fee Nexus Study

September 2012

Introduction: As a result of community input and City Council direction, city staff 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. 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 was retained by the City of Boulder to conduct the study.

The purpose of the Disposable Bag Fee Nexus Study is to determine:

1. The appropriate types of costs to be offset by fee proceeds,
2. The appropriate fee amount to be charged to consumers, and
3. The recommended portion of the fee to be retained by businesses.

Approach: Boulder City Council voted to move forward with an ordinance placing a fee on both plastic and paper checkout bags at food stores (grocery and convenience) 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 approximately 45 food stores in the City that will be affected.

Fee Calculation: The factors used to calculate the disposable plastic and paper checkout bag fee include city costs to administer the ordinance, other public costs (incurred by recycling centers), and implementation costs to retailers, with the optional inclusion of costs to mitigate externalities, such as greenhouse gas emissions. The proposed bag fee is based on the annual costs over a four year period and the projected amount of bags distributed in future years. The formula is:

$$\text{Related Costs/Bags Used} = \text{Fee per Bag}$$

All elements (excluding externalities) of the nexus fee are shown in the table below, bringing the proposed fee per bag to \$0.198.

Cost Layer	Weighted Average Over Four Years
City costs	\$0.146/bag
Other public costs per bag (ChaRM, Boulder County Recycling Center)	\$0.008/bag
Retailers' cost	\$0.044/bag
Total fee	\$0.198/bag

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

A summary of the table above can also be found in Figure 15 on page 24 of the draft fee nexus study.

Fee Components: The bag 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 baseline projection and reduction due to fee implementation);
3. Costs incurred by public sector;
4. Costs incurred by retailers; and
5. Costs for externalities (option).

Public Sector Costs: The following public sector cost components are included in the calculation and discussed in detail in the body of the report:

- Developing, implementing and administering the ordinance, purchasing and distributing reusable bags, providing store signage, and designing and implementing an educational outreach campaign;
- The impact of plastic bag contamination at the Boulder County Recycling Facilities and the cost to recycle plastic bags at the Center for Hard to Recycle Materials (CHaRM);
- Externality impacts (optional) including the purchase of carbon offsets for annual bag use and the funding of stream clean-up programs in the city.