

*Andrew Klein*

<b>FROM</b>	NAME & TITLE	Andrew Kleine, Chief
	AGENCY NAME & ADDRESS	Bureau of Budget and Management Research Room 432, City Hall (410)396-4941
	SUBJECT	City Council CCB 13-0241 – Plastic and Paper Bag Surcharge

CITY of  
BALTIMORE  
**MEMO**



DATE: July 1, 2013

**TO**  
Honorable President and  
Members of the City Council  
C/O Karen Randle  
Room 409, City Hall

City Council Bill 13-0241 – Plastic and Paper Bag Surcharge places a surcharge on various distributions of paper and plastic bags at the rate of \$0.25 per bag.

**Analysis**

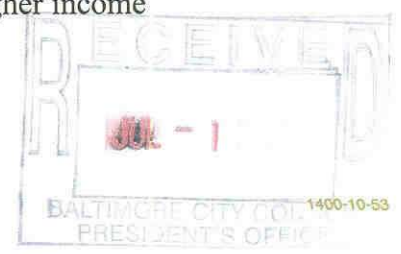
This tax will reduce the use of petroleum in the production of the bags; reduce landfill usage and eliminate litter on both land and in the bay. The US utilizes 100 billion plastic bags a year or 324 bags per person (Wall Street Journal 6/12//09). Several local governments such as Montgomery County, Md., Washington, D.C., and Toronto have implemented grocery bag taxes, while San Francisco and San Jose have prohibited the use of plastic bags altogether.

Experience in Ireland (which implemented a 15 cent per bag tax, later increased to 22 cents) indicates that there will be an initial 70% - 75% reduction in grocery bag usage when a bag surcharge is enacted.

Washington, D.C. implemented a \$0.05 bag tax in Fiscal 2010, bringing in \$1.5M (9 Months) in revenue. In the following two full years the city raised \$1.8M in revenue for Fiscal 2011 and \$1.6M in revenue for Fiscal 2012. A study of Washington, DC's bag tax by the Beacon Hill Institute found that with 80% compliance, bag usage was reduced between 61-67%. Currently, Washington is experiencing the "Rebound Effect" where bag usage begins to increase as residents become accustomed to the rate. Sensitivity/elasticity analysis indicates Washington D.C. will need to raise the rate to 8 cents in the next year to retain existing levels of bag usage reductions.

This tax is an avoidable tax designed to change citizen behavior. As noted above, studies have shown that plastic bag usage is reduced by 60-75% when a fee is imposed on the bag. Secondary advantages accrue from this tax in that it corrects a negative externality created when plastic and paper bags are improperly discarded and find their way into streets, storm sewers, rivers, landfills, and harbors. The social cost of the negative externality, cleaning up the bag refuse, is offset by the tax resulting in a better approximation of the full cost of using plastic and paper bags.

The tax is horizontally equitable but when behavior is not modified the tax tends to be regressive, placing a heavier burden on lower income citizens than higher income



citizens. This bill substantially negates the regressivity by exempting WIC recipients and other participants in low income programs. The tax will increase the cost of the basic necessities for those who fail to bring their own bag or who are not exempted.

The tax also places an additional burden on retailers who are required to collect the tax. In the District of Columbia, retailers are given \$0.01 of the \$0.05 tax to cover administration costs.

Finally, the Beacon Hill Institute reported minor negative economic impacts related to the Washington, DC bag tax. Such impacts would likely be magnified with a higher bag tax.

**Citizen Impact:**

Citizen Impact of Proposed Plastic/Paper Bag Tax						
	Average Usage	Proposed Charges per Bag				
Bags per Person		\$0.05	\$0.10	\$0.15	\$0.20	\$0.25
Weekly	6	\$0.31	\$0.62	\$0.93	\$1.25	\$1.56
Monthly	27	\$1.35	\$2.70	\$4.05	\$5.40	\$6.75
Annual	324	\$16.20	\$32.40	\$48.60	\$64.80	\$81.00
Bags per HH						
Weekly	15.6	\$0.78	\$1.56	\$2.34	\$3.12	\$3.89
Monthly	67.5	\$3.38	\$6.75	\$10.13	\$13.50	\$16.88
Annual	810.0	\$40.50	\$81.00	\$121.50	\$162.00	\$202.50

**Fiscal Impact**

The Department of Finance estimates that a plastic and paper bag tax at 25 cents per bag would generate in the range of \$6.5 million in revenue in the first full year of implementation, net of start-up costs. The two critical factors in this estimate are the rate of compliance by retailers and the percentage reduction in bag usage. The estimate summarized in the table below uses compliance and bag reduction rates from Ireland, which has the closest per bag rate to what is proposed in the bill. Because of the limited experience with bag taxes in cities like Baltimore and complete lack of data on a \$0.25 per bag tax anywhere in the world, the department cautions that its revenue estimate is highly uncertain.

Estimated Revenue from Bag Tax			
	Year 1	Year 2	Year 3
Bags /Capita	324	324	324
Population	621,000	621,000	621,000
Compliance	80%	80%	80%
Bag Reduction	71%	71%	71%
Exemption Adjust.	60%	60%	60%
Bags	28,007,597	28,007,597	28,007,597
Rate	\$ 0.25	\$ 0.25	\$ 0.25
Revenue (12 Months)	\$7,001,899	\$7,001,899	\$7,001,899
Administrative/Capital Cost	\$450,000	\$100,000	\$100,000
<b>Net Revenue Increase</b>	<b>\$6,551,899</b>	<b>\$6,901,899</b>	<b>\$6,901,899</b>

### **Recommendation**

The department recommends that the Council consider an initial tax rate of \$0.05, in line with the rates in Montgomery County and Washington, DC. At this rate, the tax would generate a significant reduction in bag usage and predictable revenues, and could be adjusted in the future to offset any rebound effect. It would also minimize any potential negative economic impacts.

The department requests that the effective date of the bill be amended to six months from the time of passage to allow for the development of a collection system. This is likely to impact several thousand merchants, requiring the City to design and implement a new collection system.

CC: Harry Black  
 William Voorhees  
 Angela Gibson