

## BOARD OF ALDERMEN

ITEM NO. D(2)

### AGENDA ITEM ABSTRACT

MEETING DATE: January 16, 2007

**SUBJECT: A PRELIMINARY REPORT ON THE POSSIBILITIES AND IMPLICATIONS OF IMPLEMENTING PAY-AS-YOU-THROW.**

<b>DEPARTMENT: PUBLIC WORKS DEPT.</b>	<b>PUBLIC HEARING: No</b>
<b>ATTACHMENTS:</b> A. Resolution B. Orange County Waste Sort	<b>FOR INFORMATION CONTACT:</b> George Seiz 918-7427 Antonio Baxter 918-7426

#### Purpose

The purpose of this agenda item is to provide the Board of Aldermen with a preliminary report on the possibilities and implications of implementing a Pay-As-You-Throw (PAYT) program for single family residential waste collection in the Town of Carrboro.

#### Information

PAYT systems can take several forms; pay-by-the pound, pay-by-the varying cart size, or pay-by-the bag/tag (sticker). The Solid Waste Division of the Public Works Department currently uses fully automated trucks to pick up garbage. The term “fully automated” comes from the truck’s ability to mechanically pick up and empty garbage carts via a mechanical arm which is guided by the truck’s operator. Only one person is required to operate fully automated trucks and that person never has to leave the truck to load garbage. This type of vehicle and method of collection has proven to be very practical and efficient for the Town. A PAYT system must be compatible with fully automated collection.

On-board truck scales are not effective for curbside residential scale PAYT systems. They are used on some larger commercial front loading trucks, but the technical problems around accuracy of weighing and tracking individual carts have not been satisfactorily solved. Pay-by-the pound systems are relegated to stationary applications at solid waste convenience centers. The other two approaches to PAYT- modified bag/tags (stickers) or volume/variable sized carts are the most widely used and are both potentially compatible with fully automated trucking.

#### **PAYT Cart System**

In some cart PAYT systems (City of Eden), residents maintain a standard cart and are assessed a fee for the volume of waste disposed. The residents cart is marked with a color coded sticker to indicate level of service chosen. Staff is assigned to monitor and check carts volumes. Implementing this type of cart PAYT will complicate enforcement for the Town. Staff will have to be assigned to inspecting residents carts to ensure that they are compliant with their chosen volume. Inspecting carts for subjective volume compliance will likely draw resident

dissatisfaction and disagreement. In the variable cart system, residents select the appropriate size cart (30, gallon, 60 gallon, or 95 gallon) for their disposal amount. Enforcement is simplified because residents are using a standardized container; however, the logistics of implementing a system of this type becomes very complicated (and perhaps costly) because of the need to purchase, store, delivery/re-delivery, and estimate the number of various size carts for residents. A billing system needs to be implemented to accommodate both these options. Experience in other communities such as the City of Eden shows that the cart PAYT is a better fit for communities that already had a billing system in place prior to implementation.

### **PAYT Bag Sticker System**

A sticker/tag PAYT system is normally used with a manual collection system whereby stickers are placed on the bags at the curb and then solid waste personnel pick up the individual bags. As stated earlier, in a fully automated system, the operator does not leave the truck to pick up garbage. While not compatible with a fully automated system a sticker/tag PAYT could possibly be modified, but has significant drawbacks. No billing system is required, but enforcement will be impractical. Staff will have to be assigned to inspect carts to ensure residents are placing stickers on their bags. The possible re-handling while doing inspection reduces efficiency and increases potential hazard exposure, which the carts and fully automated trucking were designed to decrease. Currently residents are encouraged to bag all solid waste they put in carts, but for a sticker system it would be mandatory. The production of stickers and additional labor for administration and enforcement will add costs to the solid waste program and minimize financial savings. Stickers would be sold at Town Hall, grocery stores, convenience stores, and other community locations. Town staff is not aware of any municipalities using such a modified sticker/tag PAYT.

### **Recycling**

Communities with PAYT in place have reported increased recycling, however, we need to be aware that Orange County has a mature recycling program. According to information provided by Orange County Solid Waste, the Town of Carrboro may only see a reduction of 150 to 225 tons of recyclables if a PAYT is implemented. Reducing recyclable waste by these amounts would reduce the landfill tipping fees by about \$6,900 and \$10,350. Some waste reduction may also be possible as a result of PAYT. Yard waste was eliminated years ago. It must be noted that the Town is currently recycling at a good percentage when compared to Orange County communities. (see attachment exhibit 3.9)

### **Summary**

Implementation of a PAYT Program in our current fully automated collection system is limited to either pay-by-the volume/cart, or pay-by-the bag/tag (sticker). As shown in the table below, assuming collection costs remain consistent for the solid waste program, both forms of PAYT would add administrative costs to the solid waste program. The financial savings gained from lower tipping fees will be exceeded by these costs.

According to research conducted by Town staff in 2003, it will cost a minimum of \$2500 to hire MUNIS representatives to assess the adequacy of the existing billing system for a residential

solid waste fee at this time. The report also noted that approximately one person per 3,150 household would be needed for performing billing and collections functions. Currently, there are about 3,700 residential collection points. An additional employee would be needed in either Management Services or Public Works to perform this billing and collection service. Approximately \$25,000 per year will be needed for operational costs (postage, paper, bill format).

A modified sticker PAYT will require production and distribution of garbage bag stickers. The annual cost for producing stickers will be approximately \$5,000. There will also be an estimated additional \$3000 added for the cost of administering and distributing the stickers. Enforcement will be needed to ensure compliance. Solid Waste would need to assign staff for inspecting residential trash for compliance. The cost for adding this enforcement duty to a current staff member would be approximately \$11,000 (1/4 FTE ). As noted earlier, enforcement with this type of system is somewhat impractical and staff has concerns about implementation.

Enforcement of delinquent accounts or bags without stickers is an issue to be considered. Enforcement actions can include but is not limited to: charging penalties and interest, and cutting off services. The establishment of policies and procedures would need to be in place to ensure the uniform and equitable treatment of all customers. Handling customer complaints may involve request to adjust fees or services, and there would need to be clear policies and procedures for handling complaints.

Another important issue for consideration is how PAYT could affect neighboring jurisdictions. An additional 150 to 225 tons will be diverted to the recycling program. While saving the Town money in lower tipping fees, this will inadvertently pass on costs to the County's recycling program as trucks pack more frequently and more labor is required. Orange County solid waste staff also notes in previous research that there may be a shift of unrecyclable waste to the recycling bin, which causes a greater burden on recycling collectors to enforce proper recycling when people try to avoid some waste costs. Waste shifting to other types of customers or other jurisdictions could occur. With the high number of unlocked and unsecured waste containers throughout the community, the problem may become widespread and possibly adding additional costs for enforcement.

### Cost Analysis

<b>CART PAYT*</b>		<b>STICKER PAYT*</b>	
MUNIS Consult**	\$2,500	Stickers/Distribution	\$8,000
Admin. Cost	\$25,000	Enforcement	<u>\$11,000</u>
New position (billing/collection)	\$49,300		\$19,000
Enforcement	<u>\$11,000</u>		
	\$87,800		
Increased Program Costs		Increased Program Costs	
	\$87,800		\$19,000
Reduction in Tip Fees	\$6,900-\$10,350	Reduction in Tip Fees	<u>\$6,900-\$10,350</u>
Net Annual Increase	\$77,450-\$80,900	Net Annual Increase	\$8,650 - \$12,100

\*Assumes solid waste collection costs remain consistent to current costs

\*\*There may be a one-time software purchase, cost may be significant

Neither PAYT system discussed increases the level of solid waste collection service, and perhaps some citizens may consider the sticker PAYT a reduced level of service because of the need to put all trash in bags prior to placement in their cart and the need to purchase and place stickers on their bags.

### **Fiscal Impact**

Added cost for the Cart PAYT range from \$77,450-\$80,900 per year.

Added costs for the Modified Sticker PAYT range from \$8,650-\$12,100 per year.

### **Recommendation**

It is recommended that the Board of Aldermen accept the report.