

Recycling

First of Three Parts

Best Practices for Pay-As-You-Throw—Understanding the Options

Les Evans

MUNICIPAL SOLID WASTE AND PUBLIC WORKS OFFICIALS AROUND THE country have been hearing the term “pay-as-you-throw” (PAYT) for years, but it may not always be clear just what it means, how it works, and how to put it in place effectively. When it comes to pay-as-you-throw, doing what it takes to get the program right is just as important—if not more so—than making the decision to adopt the program in the first place. With that critical need in mind, this three-part series of articles will aim to fill in those gaps, sharing details about the best practices for PAYT programs.

This month, we will explore the various options for PAYT that communities should consider. Next month, we will address the key planning steps municipal leaders need to take to make their PAYT programs as effective as possible. Finally, in September, we will look at the key success factors among well-implemented PAYT programs, and common pitfalls to avoid.



For all their benefits, tag-based pay-as-you-throw programs can pose enforcement challenges.

Photo courtesy of WasteZero.

Under the traditional MSW payment model, residents pay a flat fee to dispose of their waste. These fees can often be “hidden” in utility or property tax bills. This system gives residents little incentive to reduce the volume of their waste and divert items from the waste stream toward productive uses such as recycling and composting. By contrast, PAYT programs are “unit-based,” allowing residents to pay for the amount of waste they dispose of. Making people aware of—and responsible for—the cost of their garbage gives them incentives to throw away less, recycle and compost more, and make purchasing choices that reduce their waste volume.

Because “pay-as-you-throw” is an umbrella term for programs that can take

many different forms, the first step for any community weighing the decision to move to this system is to understand the different options available to them. We will discuss five: cash, overflow, variable-rate carts, tags and bags.

Cash

Programs that ask residents to pay a set fee in cash for each bag they dispose of at a convenience center or transfer station were the original PAYT system. Cash-based programs certainly offer equitability to residents—people who create less garbage pay less to dispose of it. And because there is a cost associated with each bag, these programs also give residents incentives for waste reduction and diversion.

Cash programs can be effective, but they do have their drawbacks. They have inherent operational and accounting inefficiencies, as cash—often in the form of coins—must be collected, counted and deposited. They also put convenience center attendants at risk of theft due to the often large amounts of cash they have on hand. In addition, there have been cases of attendants themselves stealing as much as several thousand dollars from the cash collection.

Overflow

Another approach to PAYT that many communities use is the overflow program. In this system, residents’ municipal solid waste fees cover everything they can fit into a certain size cart, and they have to pay extra to dispose of anything that does not fit into the cart. Overflow programs can be useful in collecting revenue from the minority of residents who regularly fill their carts beyond capacity, but given the large size of many carts (often up to 96 gallons), many residents do not often reach the point where they need to resort to overflow—making it difficult for overflow programs to achieve their waste reduction and diversion goals.

Variable-Rate Carts

Variable-rate carts are another pay-as-you-throw option that communities can consider. Under these programs, residents choose from among different sizes of carts—frequently 35, 65, and 96 gallons—paying more for the larger carts and less for the smaller ones. One benefit of this system is that it offers some of the inherent equity that is a hallmark of PAYT. However, variable-rate cart programs can be expensive, with high start-up costs to purchase new equipment, and they can be operationally complicated as communities deal with the ongoing logistics of distributing different cart sizes, accounting for them and maintaining multiple sizes of carts.

Perhaps most important, variable-rate cart programs often do not achieve communities’ waste reduction and diversion goals. This happens in part because residents usually opt for the cart size that fits their existing waste disposal patterns rather than changing their habits to further reduce waste. In addition,

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the units of measurement across multiple cart sizes are too large to capture even some meaningful changes in waste volume.

Another side effect of some variable rate cart programs that can limit their effectiveness is the phenomenon of "snow-coning." In an effort to save money, some residents will opt for the smallest (and lowest-priced) cart and then overstuff it, with bags of trash piled on top like the scoop of ice on a snow cone. Some municipalities combine an overflow program with variable rate carts to alleviate this problem, but that often adds greater complexity and still usually fails to meaningfully reduce waste volume.

Tags

Tags or stickers are another PAYT option for communities. These programs measure waste by the bag, with residents purchasing special stickers or twist ties that they affix to garbage bags in sizes and weights specified by the municipality. Tag-based systems provide equitability for residents, and they do a good job of measuring waste in small units that more accurately reflect residents' disposal patterns, creating incentives for waste reduction and diversion.

The main challenge with tag programs is that enforcement can be challenging, which limits their effectiveness. For one thing, communities with automated collection cannot practically use a tag-based system, due to the need to closely inspect each bag as it is collected. In addition, it can be difficult for collection crews to detect bags that are larger or heavier than permitted, that have split stickers, and that are untagged but hidden beneath bags with the proper tag. With tag-based systems, collection crews are often left with a choice between collecting slowly and detecting non-compliance or collecting quickly but letting unpaid-for waste get collected.

Bags

Bag-based pay-as-you-throw programs generally offer the greatest range of benefits with the fewest drawbacks. In the bag-based system, residents dispose of their waste in specialized bags approved by the municipality and clearly marked with the municipal seal or other unique instructions or information. These programs are fair, with residents paying only for the trash they dispose of without having to subsidize the habits of their more wasteful neighbors. As a result, they provide the necessary incentives for residents to reduce, reuse and recycle.

Bag-based programs are operationally simpler than other programs, requiring no changes to existing collection systems. They are less expensive because they do not require the purchase of new equipment. They are also easier to enforce, due to the readily identifiable nature of the bags, even in communities that use automated collection systems. Perhaps most significant, they can be highly effective in reducing waste and in driving up recycling rates, provided they are implemented correctly.

Selecting the right kind of PAYT system to match a community's unique needs is the first step toward putting a successful program in place. In the next two articles in this

series, we will discuss the other key elements of planning and implementation.

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