

"In the first year the PAYT system cost the Town \$290 to run the transfer center versus \$30,000 plus per year beforehand. Since we started the PAYT program in 2001, we have saved over \$250,000. There have been ups and downs along the way, but we have been very happy with PAYT."

Wayne Godfrey Transfer Station Manager Piermont, NH

A family that generated 3 bags of trash a week found they could easily recycle a lot of what they buy and now have only 1 bag of trash a week

Canaan, Vermont case study: www.newmoa.org/solidwaste/projects/ smart/Canaan\_Case\_Study.pdf Many towns use property taxes and/or a flat fee to fund the management of waste generated by their residents. Pay-As-You-Throw (PAYT) programs¹ are different; they charge residents for waste disposal based on the amount they throw away. This document describes how PAYT works and the experiences of local communities that have already adopted it. PAYT is:

- Fair: residents pay only for as much trash service as they need, and those that produce less are not subsidizing those that produce more.
- **Economical:** communities can structure the program to be costneutral, with revenues off-setting costs, so trash services are no longer a cost in a town's budget.
- **Incentive-based:** towns maximize waste reduction and increase recycling by the most effective means available.

### **PAYT ALSO:**

- Holds the line on tax increases:
   eliminates or significantly reduces
   the cost of waste services in a
   town's budget, enabling them to
   reduce their tax rate or allocate the
   savings to other areas.
- Removes free-riders: eliminates
   the incentive for non-residents to
   "smuggle" their trash into town to
   take advantage of "free" disposal so
   residents no longer pay to manage
   trash from non-residents.
- Provides freedom of choice: no one has to change their waste habits, but what good New Hampshire Yankee is going to pay for what they can recycle for free?

- Gives residents control over their costs: disposal costs can be reduced by:
  - Reusing and recycling as much as possible,
  - Composting kitchen scraps and yard waste, and
  - Purchasing goods in recyclable packaging.
- Improves the environment and public health: less waste goes to landfills and valuable resources are conserved through reuse, recycling, and composting.

<sup>1.</sup> Pay-as-you-throw (PAYT) systems are known by other names, including: Save Money and Reduce Trash (SMART), unit-based pricing (UBP), pay-per-bag, and pay-per-throw.



### **How Does PAYT Work?**

PAYT is flexible, with many variations used by communities around the US. Towns can design a system that works best for their situation. Overall, there are two main ways to implement PAYT:

Special bags or stickers that households must purchase and use for all their trash. Some considerations with this approach include:

- Works with both transfer station and curbside pick up systems.
- Requires convenient locations to purchase bags/stickers. Involves

- some administrative costs and oversight to manage the bags/stickers.
- Can eliminate the need for transfer station personnel to handle cash.
- Stickers allow residents to use their own disposable bags, but do not always adhere well, particularly in very hot, cold, or wet weather, and some residents can abuse a sticker system more easily than a special bag system.
- Curbside pickup staff can be reluctant to leave trash without the proper bag/sticker at the curb given the pressure to do a good job and leave the pickup route clean. An educational handout left with the improper trash is helpful.

Containers that residents use for trash disposal. Under this option, each household is allowed to put out one container per week of a certain size at a base price and pay more for larger or additional containers. Some considerations with this approach include:

- Most applicable to curbside pick up and most efficient when standardized containers are provided to residents.
- Experts recommend the base container size be no larger than 35 gallons and that the fee for a larger cart (e.g., 64 gallons) be double the base fee.
- Involves administrative costs to bill residents each month or quarter for their container size and to collect payments.
- Requires hauler to keep track of additional volumes left at the curb and to ensure that the charges are added to the bill for that resident. Another option for additional volumes is to require residents to purchase a special bag/sticker for the waste not in the regular container.
- At transfer stations, the attendant must determine and collect the appropriate charge for the size of the container used.

The key to PAYT is charging a fee for waste that is disposed of, but not for recycling. New Hampshire communities typically provide free recycling for residents, so implementing PAYT focuses on reducing the amount of waste put in the trash for disposal.

# **Unity, New Hampshire** Population: 1,530

Unity operated its own landfill until it was full and had to close in 2008. Knowing that they would be faced with significantly increased costs for disposal, the Town searched for methods to reduce the cost of operating the transfer station they were constructing. Town Meeting approved a PAYT system that was implemented when the transfer station opened. Recycling at the transfer station is free, and the fee for a 33 gallon bag of trash is \$2. Unity requires that residents use specific bags purchased by the Town and sold to residents at the transfer station. Fees collected from bag sales, combined with the income generated from recyclables, covers approximately 75 percent of the cost to operate the transfer station, including labor, hauling, and disposal. Town officials are pleased with their PAYT system and have not noticed an increase in illegal disposal.

## **Advice from Experienced Communities**

Communities that have implemented PAYT have the following suggestions for municipalities that are new to the program:

- Try to avoid collection of cash by transfer station attendants unless there is a mechanism to ensure that all fees are collected properly and equitably, and turned into the town. This could include using a computerized cash register that provides receipts. Or towns can contract out operation of the transfer station with the collected fees as the only payment (including managing recycling and disposal).
- Set fees high enough to save for future capital expenses, such as a compactor or curbside pick up vehicle.
- Advise businesses and others with commercial dumpsters to restrict access to minimize potential abuse.
- Set fees to be comparable with (or higher than) neighboring towns to remove the incentive to "smuggle" in trash. If fees are set to cover all of the costs, it will not matter if a town receives some trash from neighboring areas.
- The typical special bag size is 30 gallons, and a fee of about \$3 per bag should cover all transfer station costs (including labor, recycling, hauling, and disposal).

## Towns with transfer stations have additional options, including:

 Allow residents to use their own bags and/or containers, eliminating administrative costs. However, this requires the transfer station attendant to determine and collect the appropriate charge for all users.  Require residents to buy a punch-card instead of bags/stickers, with each space on the punch-card representing one bag of a specified size. Under this approach, the transfer station attendant cancels one space on the punch-card for each bag.



## Piermont, New Hampshire

Population: 709

Piermont had problems associated with residents and non-residents taking advantage of their property tax-based method of paying for disposal. The Town learned about PAYT, and the concept was presented to Town Meeting where it was approved and instituted at the transfer station in 2001. Approximately 80 percent of residents bring their trash and sorted recyclables to the transfer station where recycling is free. The fee for trash is \$2.50 for a 33 gallon size bag and \$2.00 for smaller bags. Piermont requires that residents use specific bags purchased by the Town and sold to residents at the Town Offices and the local general store.

#### Results:

- The amount of trash disposed was cut in half from approximately 220 tons a year before PAYT to 99.27 tons in 2013.
- The amount of recycling doubled from approximately 50 tons a year before PAYT to 98 tons in 2013.
- Fees collected from bag sales, combined with the income generated from recyclables, typically covers all of the cost to operate the transfer station, including labor and disposal.

Town officials are happy with their PAYT system and complaints are rare. They did not notice an increase in illegal dumping.

### **Plainfield, New Hampshire**

Population 2,241

When Plainfield's town dump closed in 1973, the community decided it did not want to build a transfer station or employ any waste management staff and instead would pay a contractor to provide curbside trash pickup to all households. By 1991, disposal costs were increasing, and the Town voted to charge residents a fee to alleviate budget pressures. The Town decided to require that residents purchase stickers and affix one for each 30 pounds of trash that they place at the curb. When the sticker program was introduced, Plainfield added free curbside pick-up of recyclables. The Town maintains the sticker fee to cover approximately 50 percent of the total costs. The current fee is \$2.00 per bag and generates approximately \$80,000 per year. Stickers are sold at several locations in town.

# Resources for Additional Information

*Pay-As-You-Throw:* An Implementation Guide for Solid Waste Unit-based Pricing Programs: www.mass.gov/eea/docs/dep/recycle/reduce/m-thru-x/pguide04.pdf.

Rate Structure Design: Setting Rates for a Pay-As-You-Throw Program: http://archive.epa.gov/wastes/conserve/tools/payt/web/pdf/rsdhandbook.pdf

Pay-As-You-Throw Toolkit: archive.epa.gov/wastes/conserve/tools/payt/web/html/toolkit.htm

Northeast Waste Management Officials' Association PAYT website: www.newmoa.org/solidwaste/projects/smart

Massachusetts Department of Environmental Protection Pay-As-You-Throw website: www.mass.gov/eea/agencies/massdep/recycle/reduce/pay-as-you-throw-payt.html

Connecticut Department of Energy and Environmental Protection SMART website: www.ct.gov/deep/cwp/view.asp?a=2714&q=324920&deepNav\_GID=1645

*US Environmental Protection Agency Pay-As-You-Throw website:* http://archive.epa.gov/wastes/conserve/tools/payt/web/html/index.html

For more information on PAYT, contact:

Dept. of Environmental Services Solid Waste Mgt. Bureau

(603) 271-2925 or solidwasteinfo@des.nh.gov

This document was developed by the Northeast Waste Management Officials' Association (NEWMOA) as part of its "Promoting 'Save Money and Reduce Trash' (SMART) Strategies to Increase Recycling of Solid Waste in Rural Communities" project. More information is at: www.newmoa.org/solidwaste/projects/smart. Project Partners include:

- Northeast Kingdom Waste Management District (NEKWMD) Vermont
- Upper Valley Lake Sunapee Regional Planning District (UVLSRPC) New Hampshire
- Windham Solid Waste Management District (WSWMD) Vermont
- New Hampshire Department of Environmental Services (NH DES)
- Vermont Department of Environmental Conservation (VT DEC)

"It was a lot of work to get PAYT passed in Unity, but it has been worth the effort. It creates an incentive for residents to reduce their costs by recycling more. The more trash you bring us, the more you pay."

Vanessa Keith Transfer Station Manager Unity, NH



NEWMOA is a non-profit, non-partisan interstate association whose membership is composed of the state environmental agency directors of the hazardous waste, solid waste, waste site cleanup, and pollution prevention programs in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont (www.newmoa.org).



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This material is based on work supported by the Utilities Program, United States Department of Agriculture. Any opinions, findings, and conclusions or recommendations expressed in this material are solely the responsibility of the authors and do not necessarily represent the view of the Utilities Program.

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