## Northfield, Massachusetts

Population 3,032

Northfield implemented PAYT at its transfer station in October 2005. The Town decided to design their system so that bag sales cover disposal costs, and the Town's budget pays for operating the transfer station and hauling the trash to the landfill. In 2014, the fee for trash was \$0.75 for a 15 gallon bag and \$1.50 for a 33 gallon bag. Northfield requires that residents use bags purchased by the Town and sold to residents at the Town offices and at local merchants. There is no fee for recycling.

### Results:

- The amount of trash disposed of was reduced by over 40 percent from 795 tons in 2004 to 460 tons in 2006.
- Disposal costs for the six month period of January to June were reduced from \$22,800 in 2005 to \$14.533 in 2006.
- The number of times trash needed to be hauled to the landfill was cut almost in half, along with the cost to the Town from \$7,176 for the period of January to June 2005 to \$3,872 for the same period in 2006.

Northfield did not notice an increase in illegal disposal.

"Seventeen of Franklin County's twenty-three towns with trash service have implemented PAYT. The towns with PAYT all have a higher recycling rate and have reduced their municipal budgets by tens of thousands of dollars. PAYT is a winning program for communities

Jan Ameen, Executive Director, Franklin County (MA) Solid Waste Management District

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: www.newmoa.org/solidwaste/projects/smart. Project Partners have included:

- Northeast Kingdom Waste Management District (NEKWMD) Vermont
- Upper Valley Lake Sunapee Regional Planning Commission (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)



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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The views expressed in this document do not necessarily reflect those of NEWMOA, USDA, the Project Partners, or the NEWMOA member-states.

## Vernon, Vermont

Population 2,206

The Town of Vernon implemented PAYT for its residential curbside trash pickup service July 1, 2014. Residents must purchase special bags that are sold at the Town offices and a local store. Fees were designed to cover all the costs associated with trash and recycling and, in 2014, were \$2.00 for 15-gallon bags and \$3.00 for 30-gallon bags. When PAYT for trash began, Vernon added single stream curbside pickup of recyclables. Prior to PAYT, Vernon residents used drop-off bins located at the Town garage for source separated recyclables and organics. Both of these options remain available.

#### Results:

- The amount of trash disposed was cut by more than half: from approximately 195 tons for the 3rd quarter of 2013 to 86 tons for the 3rd quarter of 2014
- The amount of recyclables collected doubled: from approximately 28 tons in the 3rd quarter of 2013 to 57 tons for the 3rd quarter of 2014
- The cost of contracting for trash, recycling, and organics services is offset by bag sales that generated over \$27,000 in the 3rd quarter of 2014

Town leaders are very satisfied with the new system and report it is working well. They have not experienced an increase in illegal dumping.

and tax-payers."

"When you compare our last budget with the old system and our current budget, it is clear as night and day PAYT is the way to go. Every town can adopt a PAYT system that fits their town. We had to make adjustments along the way. We would never go back to the old system."

Gregory Noyes, Selectman, Canaan, VT

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





Fair Pricing Strategies for Trash

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) programs<sup>1</sup> 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 rural 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 many people may decide they would rather recycle than pay for disposal.

- Gives residents control over their costs: disposal costs can be reduced by:
  - Reusing and recycling as much as possible,
  - Composting kitchen scraps and vard 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.

1. 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 pickup 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.

Mike Courtemanche, Chair, Recycling Committee, Vernon, VT

exceeded our expectations."

"PAYT has removed the cost of trash management from Vernon's budget and we've added single-

stream recycling at no added cost

to the Town. The transition has

gone smoothly and results have

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 pickup 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. Most communities typically provide a free recycling option for residents, so implementing PAYT focuses on reducing the amount of waste put in the trash for 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 pickup 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 adopted PAYT at their transfer station in 2001. In 2014, the fee for trash was \$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. There is no fee for recycling.

#### 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.

## **Additional Information**

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

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.

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

# Newark, Vermont Population 581

The Town of Newark adopted at pay-per-throw system at their transfer station in 2013. Most Newark residents use the transfer station to manage their waste and recycling. A contractor operates the transfer station and is paid only the fees collected. Fees in 2014 were \$2 for up to 15 gallons; \$3 for up to 33 gallons, and \$4 for large "contractor" size bags or containers. The Town does not require the use of a special bag. The transfer station contractor determines the size category and collects the fee. There is no fee for recycling.

Program results include:

- The amount of trash disposed was cut in half from 33.39 tons for the 4th quarter of 2012 to 14.4 tons for the 4th quarter of 2013.
- The cost of operating the transfer station, including recycling and disposal costs was completely removed from the town's budget.

Town leaders are very satisfied with the new system and report it is working well. They have not noticed an increase in illegal dumping.