

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](http://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.html](http://archive.epa.gov/wastes/conserve/tools/payt/web/html/toolkit.html)

Act 148, Vermont’s Universal Recycling Law website: [www.anr.state.vt.us/dec/wastediv/solid/act148.htm](http://www.anr.state.vt.us/dec/wastediv/solid/act148.htm)

Northeast Waste Management Officials’ Association PAYT website: [www.newmoa.org/solidwaste/projects/smart](http://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](http://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](http://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>

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](http://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)



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](http://www.newmoa.org)).



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[www.windhamsolidwaste.org](http://www.windhamsolidwaste.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.

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Photo courtesy of Gary King

*“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 exceeded our expectations.”*

Mike Courtemanche, Chair,  
Vernon Recycling Committee

Fair Pricing Strategies for Trash in the Windham District

Photo courtesy of Gary King

Vermont’s Universal Recycling Law (Act 148) requires that all municipalities and private trash haulers implement a “variable rate pricing system” by July 1, 2015 that applies to the collection of municipal solid waste (MSW) from all residences in Vermont. Pay-as-you-throw (PAYT) is another name for a variable rate pricing system.<sup>1</sup> This document describes how PAYT works and the experiences of local communities that have already adopted it.

Many towns use property taxes and/or a flat fee to fund the management of waste generated by their residents. PAYT programs are different; they charge residents for waste services based on the amount they throw away. PAYT is a system that 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 cost-neutral, 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 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.

*“Seventeen of Franklin County’s (MA) 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 and tax-payers.”*

Jan Ameen, Executive Director,  
Franklin County Solid Waste  
Management District

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](http://www.newmoa.org/solidwaste/projects/smart/Canaan_Case_Study.pdf)

1. Pay-As-You-Throw (PAYT) systems are known by other names, including: Save Money and Reduce Trash (SMART), Unit-base Pricing (UBP), pay-per-bag, and pay-per-throw.





### How Does PAYT Work?

PAYT is flexible, with many variations implemented 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 pick-up 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 pick-up route clean. An educational handout left with the improper trash is helpful.

### 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 are \$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.

**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) is double the base fee.
- Involves administrative costs to bill residents each month or quarter for their container size and 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 container they regularly pay for.
- At transfer stations, the attendant must determine and collect the appropriate charge depending on the size of the container used.

A key component of PAYT is providing easy and accessible recycling to residents. Vermont’s Universal Recycling law (Act 148) requires that all facilities that manage trash, such as transfer stations, also offer recycling and cannot charge a separate fee for it. Universal Recycling also requires that all trash collection haulers provide parallel pick-up of recycling at no separate fee. Municipalities and private trash haulers can factor in the costs associated with recycling services into the PAYT fees that they charge for trash services.

### Advice from Experienced Communities

Communities that have implemented PAYT suggest the following to 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 to enable the town 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, then 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 \$3-4 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.



Photo courtesy of Gary King

### Northfield, Massachusetts Population 3,032

Northfield implemented PAYT at its transfer station in October 2005 to reduce solid waste management costs for the town, reduce the volume of materials entering the waste stream, and increase recycling rates. 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. When PAYT was adopted, approximately 70 percent of Northfield’s households used the transfer station. Today, almost 80 percent of households bring their trash and sorted recyclables to the transfer station where recycling is free, and the fee for trash is \$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.

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.

### Hinsdale, New Hampshire Population 1,548

When Hinsdale’s landfill needed to be closed in the late 1990s, the Town adopted a “Pay-per-Bag” system to pay for the closure costs. Hinsdale operates a transfer station and provides curbside pickup for residents and decided that all residents must use special blue bags for their trash. The bags are sold at the transfer station, the Town offices, and several local stores. Recycling drop-off at the transfer station and curbside pick-up of recycling are free for residents. Current fees are \$1.00 for 15 gallon bags and \$2.00 for 30 gallon bags, which generates over \$85,000 per year in revenue. Once the cost of closing the landfill is paid off, the Town plans to use the fee revenue to offset the cost of operating the transfer station and curbside service.