

## 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 UBP 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)).



224 Church Street  
Mail to: PO Box 1075  
Lyndonville, VT 05851

(802) 626-3532 or (800)-734-4602

[www.nekwmd.org](http://www.nekwmd.org)

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.

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

**If you would like assistance implementing a UBP system, contact:**

**Josh Kelly, ANR-DEC, Solid Waste Program (802) 522-5897 or [josh.kelly@state.vt.us](mailto:josh.kelly@state.vt.us)**

**Paul Tomasi, NEKWMD (802) 626-3532 or [director@nekwmd.org](mailto:director@nekwmd.org)**

*"We went to a PAYT [pay-as-you-throw system] because it includes everyone and everyone has an interest in increasing recycling and reducing waste management costs. This is the only system that rewards individuals for their efforts to reduce their costs by recycling and composting."*

Gregory Noyes, Selectman,  
Town of Canaan

# Fair Pricing Strategies for Trash in the Northeast Kingdom

**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)

*"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,  
Town of Canaan

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. Unit-based Pricing (UBP) is another name for a variable rate pricing system.<sup>1</sup> This document describes how UBP works and the experiences of communities in the Northeast Kingdom 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. UBP programs are different; they charge residents for waste disposal based on the amount they throw away. UBP is a system that is:

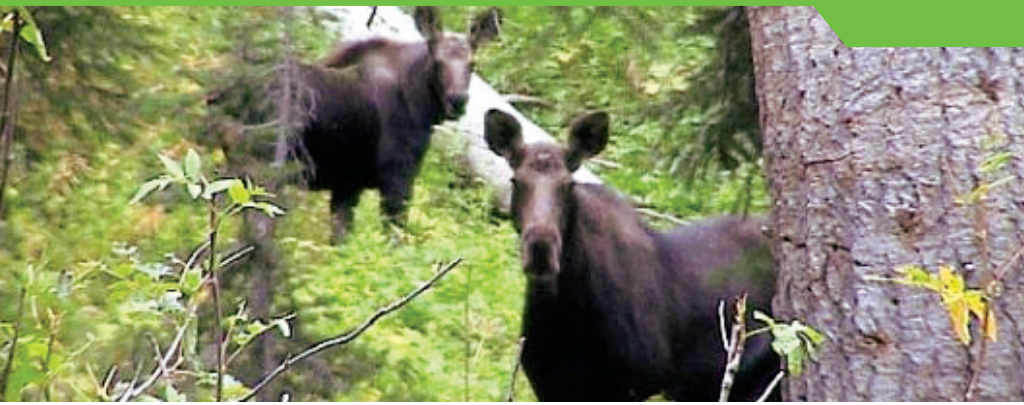
- **Fair:** residents pay only for as much trash service as they need, and those that produce less are not subsidizing those that produce more.
- **Economical:** communities can structure the program to be cost-neutral, with revenues off-setting costs, so trash services are no longer a cost in a town's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

## UBP 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 and therefore, residents are no longer paying 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.

1. Unit-based pricing systems are known by other names, including: Save Money and Reduce Trash (SMART), pay-as-you-throw (PAYT), pay-per-bag, and pay-per-throw.





## How Does UBP Work?

UBP 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 UBP:

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

- Can work with both transfer station and curbside pick-up systems.
- Requires bags/stickers to be available for sale in convenient

locations. 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. Would be helpful if there was an educational handout that could be left with the improper trash.

## Newark, Vermont Population 581

The Town of Newark adopted a 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 are \$2 for up to 15 gallons; \$3 for up to 33 gallons, and \$5 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.

**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 then 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 UBP 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 added fee. Municipalities and private trash haulers can factor in the costs associated with recycling services into the UBP fees that they charge for trash services.

## Advice from Experienced Communities

Communities that have implemented UBP 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 covering the costs (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 in order 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 that is dropped-off.



## Canaan, Vermont Population 972

In 2008, the Town switched from a tax-payer supported curbside pick-up system to a transfer station-based “pay-as-you-throw” (PAYT) system. For years the cost of trash and recycling management kept increasing, but was hidden because it was funded by income from property taxes. The Town paid for waste disposal and recycling for both businesses and households. In 2006, Canaan formed a Solid Waste Review Committee to study waste management issues and make recommendations. The Committee learned that towns with a transfer station and PAYT system had the lowest overall costs and the Town adopted that system based on the Committee’s recommendations.

All households use the transfer station and recycling drop-off is free. Local businesses can bring their recyclables to the transfer station, but must contract on their own for waste management. The Town sets fees so income covers at least half the cost of operating the transfer station, including labor, recycling and disposal, with the town budget funding the rest. Fees are evaluated each year. The current fee is \$1.70 per 30 gallon bag. Residents must use specific bags that can be purchased at the town offices, the local convenience store, and the local grocery store.

Program results include:

- Town-wide (household and business) trash disposal was cut in half from 535 tons/year to 258 tons/year.
- Canaan went from hauling 9.5 tons of trash from households and businesses to the landfill every week to hauling 12.5 tons of household trash once a month.
- Average waste management costs in the town budget decreased from approximately \$114,000/year to approximately \$57,000/year, of which about 40 percent is offset by bag sales.

Town officials believe their PAYT system works well and recommend that all towns form a Solid Waste Review Committee to gain an understanding of costs and options. They have not seen an increase in illegal dumping.