

Pay-As-You-Throw for Trash in the Windham District



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Northeast Waste Management Officials'
Association (NEWMOA)

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What is NEWMOA?

- ▶ Non-profit, non-partisan interstate association
- ▶ Solid waste, hazardous waste, waste site cleanup, & pollution prevention programs
- ▶ CT, ME, MA, NH, NJ, NY, RI, & VT
- ▶ Formally recognized by EPA in 1986
- ▶ More information at: www.newmoa.org



NEWMOA is an equal opportunity provider & employer

Project Promoting Pay-As-You-Throw (PAYT)

► Vermont:

- Northeast Kingdom Waste Management District
- Windham Solid Waste Management District
- Department of Environmental Conservation

► New Hampshire:

- Upper Valley Lake Sunapee Regional Planning Commission
- Department of Environmental Services

- Can help towns investigate & design PAYT systems



Pay-As-You-Throw

- Residents pay according to the amount of trash they generate for disposal

- generate less  = pay less

- generate more  = pay more

- Flexible - towns can design their system

- residents pay per bag, container, or weight

Regional Summary

- ▶ Contacted 14 small communities with PAYT & developed case studies
- ▶ Most are Transfer Stations:
 - 1990's: Concord, Dover, Piermont & Wilmington (\$2.50), Readsboro (\$1), Waterford (\$3)
 - 2000's: Unity (\$2), Orford (\$3) & Northfield (\$1.50)
 - Recent: Newark (\$3) & Canaan (\$1.70)
- ▶ Some are Curbside:
 - 1990's: Plainfield & Hinsdale (\$2)
 - Recent: Vernon (\$3)



Pay-As-You-Throw Is...

- ▶ **A system that saves \$\$\$ in town budgets**
 - reduces amount of trash managed
 - usually 40-50%
 - reduced hauling frequency & tipping costs = \$\$\$
 - per-unit fees cover most/all of costs
 - NOT an added cost - just changes the way residents pay for waste services



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Removes costs from the town budget



- ▶ How much depends on the rates the town decides on:
 - fees can cover all costs associated with trash & recycling
 - **Act 148 requires that fees cover (at least) hauling & disposal costs**
 - including state franchise fee

What is NOT Pay-As-You-Throw?

- ▶ Transfer station sticker on vehicle
- ▶ Punch-card that is canceled per-trip
- ▶ Fixed monthly fee for any amount of trash pickup



Bottom line: the amount paid must vary with the amount thrown away

Transfer Station: Piermont, NH

- ▶ Population: 709
- ▶ PAYT since 2001
- ▶ Fees cover all costs
- ▶ Require special bags
 - \$2.50 / 33 gallon
 - sold at Town offices & local general store
- ▶ Disposal ↓: ~220 tons/yr. before to 99 tons in 2013
- ▶ Recycling ↑: ~50 tons/yr. before to 98 tons in 2013



Transfer Station: Newark, VT

- ▶ Population: 581
- ▶ Removed all costs from Town budget
- ▶ Contractor operates - paid by fees only
 - \$2 / 15 gallon
 - \$3 / 30 gallon
 - \$4 / “contractor”
- ▶ Disposal ↓ 33.39 tons to 14.4 tons
(4th Q 2012 vs 4th Q 2013)



Transfer Station: Canaan, VT

- ▶ Population: 972
- ▶ 50/50 split: fees & Town budget
- ▶ Require special bags
 - \$1.70 / 30 gallon
 - sold in packs of 10 at town offices & local stores
- ▶ Costs: \$114,000/yr. to \$57,000/yr. (of which 50% covered by bag sales & bulky waste drop-off fees)
 - Disposal ↓ 535 tons/yr. to 258 tons/yr. (households & businesses (H&B))
 - Hauling ↓ 9.5 tons/week (H&B) to 12.5 tons/month (H)



Addressing Issues...

- ▶ It's a New Tax
 - educate on current cost of waste management in tax rate
 - lower tax rate by amount that PAYT will remove from budget
 - or clearly explain how “freed up” tax money will be spent
 - could be eliminating/reducing the need to raise taxes to pay for something else



Fair for residents

- ▶ pay only for what you use
- ▶ those producing less trash aren't subsidizing those that produce more
- ▶ can choose to lower your cost by:
 - smart purchasing choices (i.e., buy products in less packaging)
 - recycling / reusing
 - composting - kitchen scraps & leaf/yard



Addressing Issues...

- ▶ Unfair For Low-Income Residents
 - everyone has opportunities to reduce waste & their costs
 - senior citizens tend to generate small quantities
 - it might be a new cost for renters
 - consider a subsidy - but not unlimited
 - 1 reduced price bag/sticker each week



Addressing Issues



- ▶ **Illegal Dumping Will Be a Problem**
 - NONE of the 14 towns reported increased problems
 - lots of other studies show the same thing
 - problems existed before PAYT - mostly bulky
 - if problem - quick enforcement at program start

Pricing Strategies

- ▶ Towns with Transfer Stations
- ▶ Towns Providing Curbside Service
- ▶ Private Subscription Haulers

Towns with Transfer Stations

PAYT @ Transfer Stations

- ▶ Usual options:
 - special bags
 - stickers - affix to bag provided by resident
 - punch-cards - one space per bag/container
- ▶ Requires convenient sale locations
- ▶ Small administrative costs for town:
 - purchase bags/stickers/punch-cards
 - sell - directly and/or to local merchants
 - keep track of inventory
 - manage \$



PAYT @ Transfer Stations



- ▶ Without bag/sticker/punch-card
 - residents use their own bag or container & operator collects \$
 - computerized cash register with receipts - helps accounting
 - OR contract out operation: collected fees only payment
 - Newark, VT & Orford, NH

Determining the Minimum Fee



- ▶ Total fees collected must cover cost of hauling & disposing all the trash
- ▶ Per ton costs - example:
 - Tipping fee ≈ \$100/ton
 - Hauling ≈ \$20/ton
 - State fee = \$6/ton
- ▶ 1 ton ≈ 80 bags
 - 32 gallon bag ≈ 25 pounds
- ▶ **\$1.58 per 32 gallons**
- ▶ Assumes everyone pays fee for every bag

How about allowing free bags?



- ▶ **Reduced** fees appropriate for those in need
- ▶ Total fees collected by the town need to cover the cost of hauling & disposing of all the trash collected by the transfer station
 - Offering reduced fees to a lot of households means others need to pay a higher fee

Covering More Than Hauling & Disposal



- ▶ Decide what to add & convert to per ton trash
 - Operator labor costs?
 - Town's administrative costs?
 - Per-capita district assessment?
- ▶ **Calculate based on 1/2 current trash tonnage**
- ▶ Convert to per volume: 1 ton \approx 80 bags (32 gal)
- ▶ Many communities have 2 or 3 sizes
 - (15 gallons, 32 gallons & "contractor")
- ▶ Typical fee for all costs \approx \$3 per 32 gallons
 - If everyone pays for all their trash!



More on Transfer Stations

- ▶ Act 148 allows an “Hybrid” approach
 - base level of service paid by town
 - maximum 32 gallon bag/container per week
 - PAYT fee for all trash above base amount
 - fee must cover at least its hauling & disposal cost
 - Slide 6 example = \$1.58 per 32 gallons
- ▶ Another option: end town-provided service



Next Steps for Communities

- ▶ Determine type of system
 - bags vs. containers
 - 1 size vs. multiple sizes
- ▶ Determine how much want fees to cover
 - all trash & recycling costs
 - most costs
 - just hauling & disposal
 - capital expenses
 - hybrid



More Next Steps

- ▶ Determine fee structure
 - assess current costs: labor, hauling, disposal, recycling & capital expenses
 - estimate post-PAYT trash & recycling quantities & costs (include PAYT administration)
 - determine PAYT rate(s)
 - evaluate feasibility & modify as necessary
 - best to set similar/higher than nearby towns



Final Steps for Communities

- ▶ Plan for logistics
 - if bags/stickers/punch-cards, where will they be sold?
 - if containers, will they be provided?
 - how will fees be collected & managed?
- ▶ Submit draft plan to WSWMD for comment
- ▶ Publicize new system to residents
 - alert those with commercial dumpsters to restrict access
- ▶ Implement by July 1, 2015



Towns Providing Curbside Service

PAYT & Town Curbside Pickup



- ▶ Special bags (or stickers) - easiest option
 - requires convenient sale locations & some administrative costs
 - can put bags in containers if problems with animals
- ▶ Containers
 - different fees for different sizes
 - 32 gallon base size (or smaller) - 2X base fee for larger size
 - administrative costs to bill monthly/quarterly & collect
 - requires trash collectors to keep track of extra trash so additional fee can be charged
 - or require special bags/stickers for “extra” trash
- ▶ Trash collectors must leave all improper trash at the curb

Determining Curbside Fees



- ▶ Total fees collected must cover cost of hauling & disposing all the trash
- ▶ **Hauling includes pickup costs & transport to transfer station/landfill**
 - Labor & benefits
 - Vehicle operation & gas
- ▶ Basically, PAYT fees need to cover town contract \$
 - Determine current tons and contract \$
 - Example: 16 tons/week for \$120,000/year

Determining Curbside Fees



- ▶ Calculate based on half of current trash tons
 - 8 tons/week after PAYT
- ▶ Lower disposal cost, but curbside service still costs!
 - Is curbside recycling new or existing service?
 - Example: assume town contract \$ same under PAYT
- ▶ Fee calculations:
 - \$120,000/year = \$2,309/week
 - 8 tons/week ≈ 640 bags/week (32 gallon bag ≈ 25 pounds)
- ▶ **\$3.61 per 32 gallons**

Curbside - Details



- ▶ Act 148 allows an “Hybrid” approach
 - base level of service paid by town
 - maximum 32 gallon bag/container per week
 - PAYT fee for all trash above base amount
 - fee must cover at least its hauling & disposal cost
 - Slide 6 example = \$1.58 per 32 gallons
- ▶ Another option: end town-provided service

Private Subscription Haulers

PAYT & Private Haulers

- ▶ Act 148 requires that PAYT is implemented for all residential trash
- ▶ Fees must:
 - ▶ be based on weight or volume
 - ▶ be on each unit of trash (each bag or container)
 - ▶ cover cost of hauling & disposing of that unit of trash
 - disposing includes tipping fees & state franchise fee
 - **hauling includes pickup costs** (including labor) & transport to transfer station/landfill



Determining Subscription Fees

- ▶ Disposal costs
 - Tipping fee \approx \$100/ton
 - State fee = \$6/ton
 - \$1.33 per 32 gallons (1 ton \approx 80 bags)
- ▶ Hauling costs
 - Labor \approx \$240/day
 - Gas/vehicle \approx \$60/day
 - Service 150 residences/day
 - **Calculate based on half of current trash amounts**
 - 2 bags/house now \Rightarrow 1 bag/house after PAYT
 - \$300 / 150 bags = \$2 per 32 gallons



Determining Subscription Fees

- ▶ Hauling & disposal: $\$1.33 + \$2.00 = \$3.33/32 \text{ gal}$
 - \$14/month for 1 bag/container (32 gal) per week
- ▶ Can charge small flat fee - for example \$15/month
 - Administrative - billing & insurance
 - Recycling - tipping fees, if any
 - Same fee for everyone
- ▶ Example fee structure
 - \$29/month for 1 bag/container per week
 - \$43/month for 2/week
 - \$57/month for 3/week



Questions? Or Request Assistance



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