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

Jennifer Griffith
Northeast Waste Management Officials’ Association (NEWMOA)
November 6, 2014 in Townshend, Vermont

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
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 ≈ 80 bags (32 gal)
- Many communities have 2 or 3 sizes
  - (15 gallons, 32 gallons & “contractor”)
- Typical fee for all costs ≈ $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
    o maximum 32 gallon bag/container per week
  ▪ PAYT fee for all trash above base amount
    o fee must cover at least its hauling & disposal cost
    o 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 that 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 ≈ $100/ton
  - State fee = $6/ton
  - $1.33 per 32 gallons (1 ton ≈ 80 bags)

- Hauling costs
  - Labor ≈ $240/day
  - Gas/vehicle ≈ $60/day
  - Service 150 residences/day
  - Calculate based on half of current trash amounts
    - 2 bags/house now => 1 bag/house after PAYT
  - $300 / 150 bags = $2 per 32 gallons

- Hauling & disposal: $1.33 + $2.00 = $3.33/32 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

Jennifer Griffith, Project Manager
NEWMOA
129 Portland Street, 6th Floor
Boston, MA 02114
(617) 367-8558, ext. 303
jgriffith@newmoa.org