

WELCOME!

**Welcome to Today's Workshop
on Pay-As-You-Throw: Benefits
& Challenges**

TODAY'S AGENDA

- PAYT Basics & Case Studies
- PAYT - Town of Canterbury's Experience
- Break
- PAYT Next Steps & Logistics
- PAYT Group Discussion
- Q&A

Pay-As-You-Throw: Benefits & Challenges



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Northeast Waste Management
Officials' Association (NEWMOA)

June 25, 2015

NH DES Workshop

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



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



Project Promoting PAYT

- ▶ Case studies of 11 communities
- ▶ “Fair Pricing Strategies” brochures
- ▶ Template Program Guide - resident handout
- ▶ Outreach fact sheet for general public
- ▶ 4 regional meetings with government officials
- ▶ Presentations to 3 regional solid waste conferences
- ▶ This workshop!




Workshop Outline

- ▶ Part 1: PAYT Basics & Case Studies
- ▶ Part 2: Canterbury's Experience
- ▶ Refreshment Break
- ▶ Part 3: Next Steps & Logistics
 - Findings, Issues & Messaging
 - Getting Started & Pricing Strategies
 - New Resources
 - case studies, informational brochures, fact sheets
- ▶ Part 4: Group Discussion



PAYT Basics

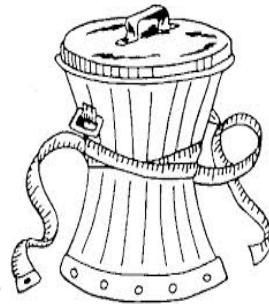
Pay-As-You-Throw

- ▶ Residents pay according to the amount of trash they generate for disposal
 - generate less = pay less
 - generate more = pay more
- ▶ Pay for service  a utility (e.g. water or electricity)
- ▶ Flexible - towns can design their system
 - residents pay per bag, container, or weight

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 Town Budget

- ▶ How much depends on the rates the town decides on:
 - fees can cover all costs associated with trash & recycling, including operating the transfer station or curbside system
 - or just some of the costs, such as hauling & disposal



PAYT @ Transfer Stations

- ▶ Special bags (or stickers or punch-cards)
 - many communities have 2 or 3 sizes (for example, 15, 32 & “contractor”) & fees
 - financial control issues
 - requires convenient sale locations
 - some administrative costs to manage
 - can apply to private haulers too
 - possible to implement without using them



PAYT & Curbside Pickup

- ▶ Special bags (or stickers)
- OR
- ▶ Containers



KEY: Trash collectors must leave all improper trash at the curb (or have a way to bill for it)

PAYT & Curbside Pickup

► Special bags (or stickers) – easiest option

- many communities have 2 or 3 sizes (for example, 15, 32 & “contractor”) & fees
- financial control issues
- requires convenient sale location
- some administrative costs to manage



can put bags in containers if

PAYT & Curbside Pickup



► 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

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 p



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

Case Studies

Community Summary

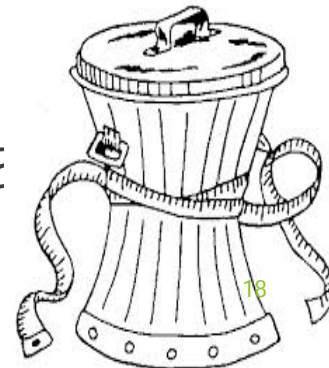
► Contacted 14 small communities with PAYT

► Most have 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 (\$2)

► Some have curbside:

- 1990's: Plainfield & Hinsdale (\$2)



Curbside: Vernon, VT

- ▶ Population: 2,206
- ▶ Adopted PAYT July 1, 2014
 - added curbside recycling
- ▶ Fees cover all costs
- ▶ Require special bags
 - \$2.00 / 15 gallon
 - \$3.00 / 30 gallon



Curbside: Vernon, VT

► PAYT Results:

► Disposal ↓

~195 tons 3rd Q 2013 to 86 tons 3rd Q 2014

► Recycling ↑

~28 tons 3rd Q 2013 to 57 tons 3rd Q 2014



Transfer Station:

Piermont, NH

- ▶ Population: 709
- ▶ PAYT since 2001
- ▶ Fees usually cover all costs
- ▶ Require special bags
 - \$2.50 / 33 gallon
 - sold at Town offices & local general store



Transfer Station: Piermont, NH

PAYT Results:

► Disposal ↓

~220 tons/yr. before to 99 tons in 2013

► Recycling ↑

~50 tons/yr. before to 98 tons in 2013



Transfer Station:

Northfield, MA

- ▶ Population 3,032
- ▶ PAYT since 2005
- ▶ Fees cover hauling/disposal
- ▶ Require special bags
 - \$1.50 / 33 gal. bag
 - \$0.75 / 15 gal. bag



Transfer Station: Northfield, MA

PAYT Results:

- ▶ Trash cut by 40%
 - 795 tons in 2004 » 460 tons in 2006
- ▶ Hauling/disposal costs cut by 40%
 - \$30K » \$18.5K (6 month period)



Transfer Station: Newark, VT

- ▶ Population: 581
- ▶ PAYT since 2013
- ▶ Do not require special bags
- ▶ Contractor operates – paid by fees only
 - \$2 / 15 gallon
 - \$3 / 30 gallon
 - \$4 / “contractor”



Transfer Station: Newark, VT

PAYT Results:

- ▶ Removed all costs from Town budget
- ▶ Disposal ↓
33.39 tons to 14.4 tons
(4th Q 2012 vs 4th Q 2013)



Vermont law prohibits
the disposal of the
following materials in
landfills [10 V.S.A. Section 6621]:

Wet-cell batteries, after July 1, 1990,
Waste oil, after July 1, 1990,
White goods [large appliances],
after Jan. 1, 1991,
Tires, after January 1, 1992.

For information on proper disposal, please
contact your local solid waste management
district or the Vermont Recycling Hotline:
1-800-932-7100.

\$ 2 \$ 3 \$ 4



Transfer Station: Canaan, VT

- ▶ Population: 972
- ▶ PAYT since 2008
- ▶ 50/50 split: fees & Town
- ▶ Require special bags
 - \$1.70 / 30 gallon
 - sold in packs of 10 at town offices & local stores



Transfer Station: Canaan, VT

PAYT Results:

► Costs ↓

\$114,000/yr. to \$57,000/yr.

(of which 40% covered by bag sales & bulky waste fees)

► Disposal ↓

535 tons/yr. to 258 tons/yr. (households & businesses (H&B))

► Hauling ↓



So Where is the Trash

Going?

▶ Out-of-town trash no longer smuggled in

▶ Smarter purchasing

▶ New/increased

- organics composting
- recycling
- donation for reuse

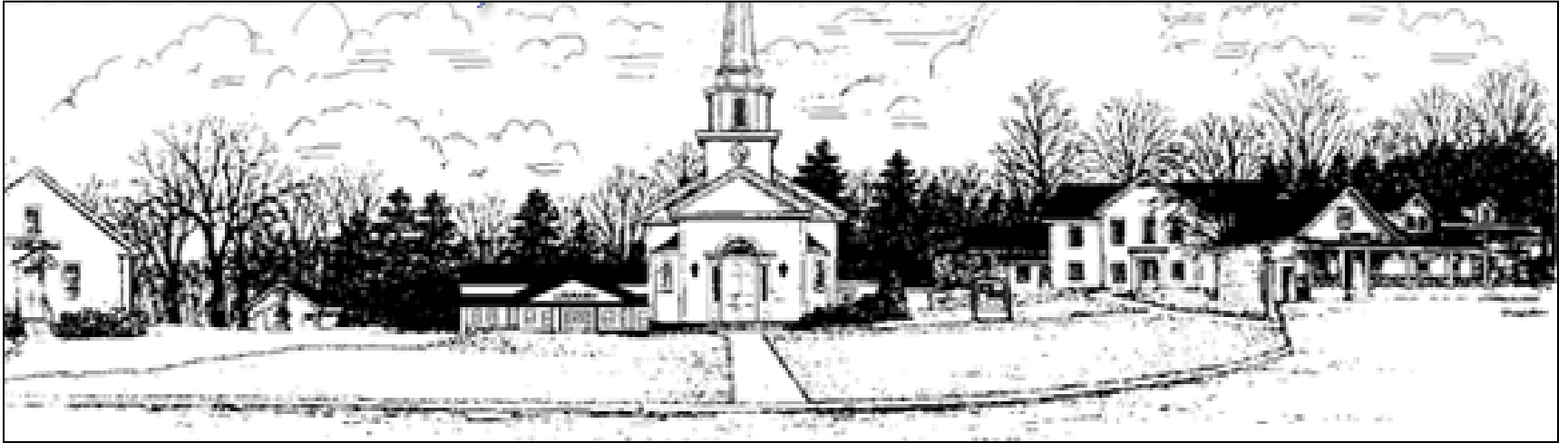
▶ Alternative disposal

- commercial dumpsters
- work, friends/relatives in other towns



Canterbury's Experience

Adrienne Hutchinson
Canterbury Transfer
Station Manager



Canterbury, NH

PAYT Program

Solid Waste Program Details:

- 2,300 Residents
- “Mandatory” recycling-1989
- PAYT –October 2006
- Source-Separation & Multi-Stream: Paper & OCC mixed loose, Baled UBC, Baled 1&2 Plastic Bottles, Steel Cans loose, PGA Glass loose, Rigid Plastic Pilot Program (1st year)
- Owns & Operates 1 mini-baler, 1 Trash Truck, 1 Electric Glass Crusher
- 1.5 days per week operational, 3 PT Employees
- Container and Paper Recycling are FREE, fixed prices for Demolition Debris, Electronics, Freon Units, & Bulky Items

Obstacles Canterbury Faced:

- Public perception of PAYT as “Another Tax”
- Skepticism over stated benefits of PAYT
- Skepticism of individual cost for residents/families
- Anticipation of Increased Illegal Dumping
- Timely Implementation
- Enforcement

Addressing the Obstacles

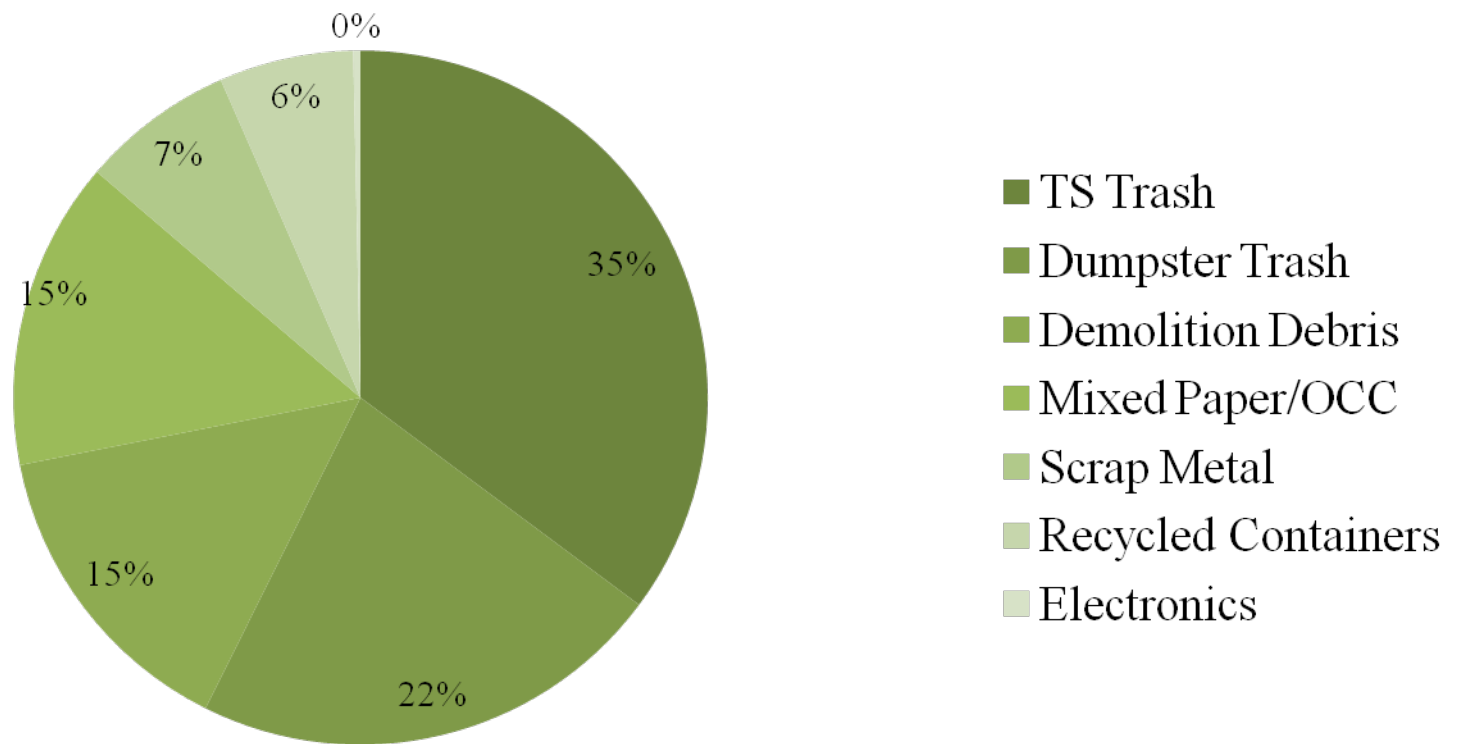
- Two public information sessions with NRRA Representative
- Printed materials explaining the program
- Public Q & A Session immediately preceding the town vote
- Positive verbal campaign stressing the “Fair and Equitable” nature of PAYT
- Explanation of the rising costs of solid waste disposal and the future tax implications

Continuing to Address the Obstacles...

- Ordered too many bags initially; plastic bags degraded and caused quality issues.
- Local stores wanted a discount on bags to increase their profit; the town refused and some local stores still won't carry them. Other stores wanted to be the only POS locations.
- Volunteers were given too much responsibility: poor follow-through in some areas. Too many keys and too many people, led to inaccurate inventory and loss issues.
- Program is still not understood by some: resident education is an ongoing responsibility.
- Compliance is an ongoing issue: Surveillance and police involvement have been utilized in extreme circumstances.

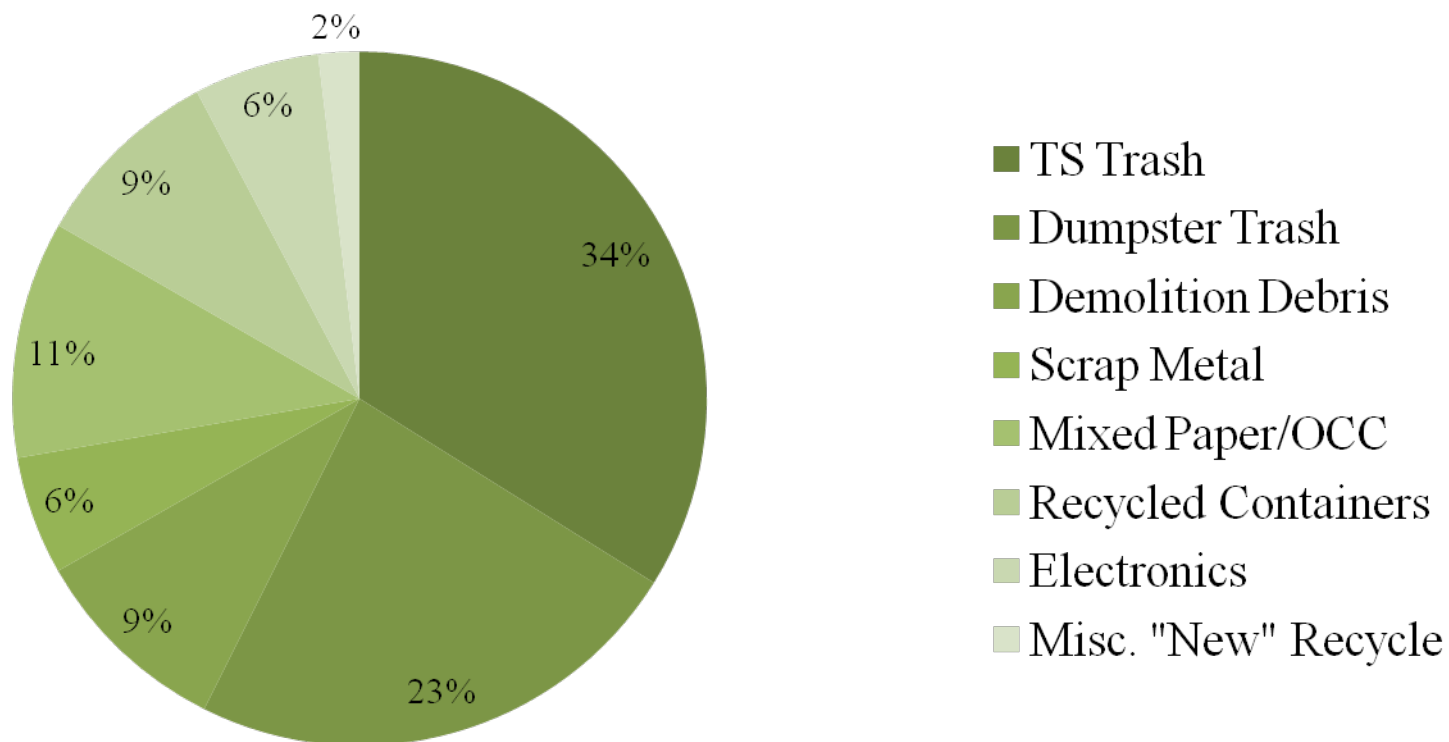
Before Pay-As-You-Throw

2005 Waste Stream



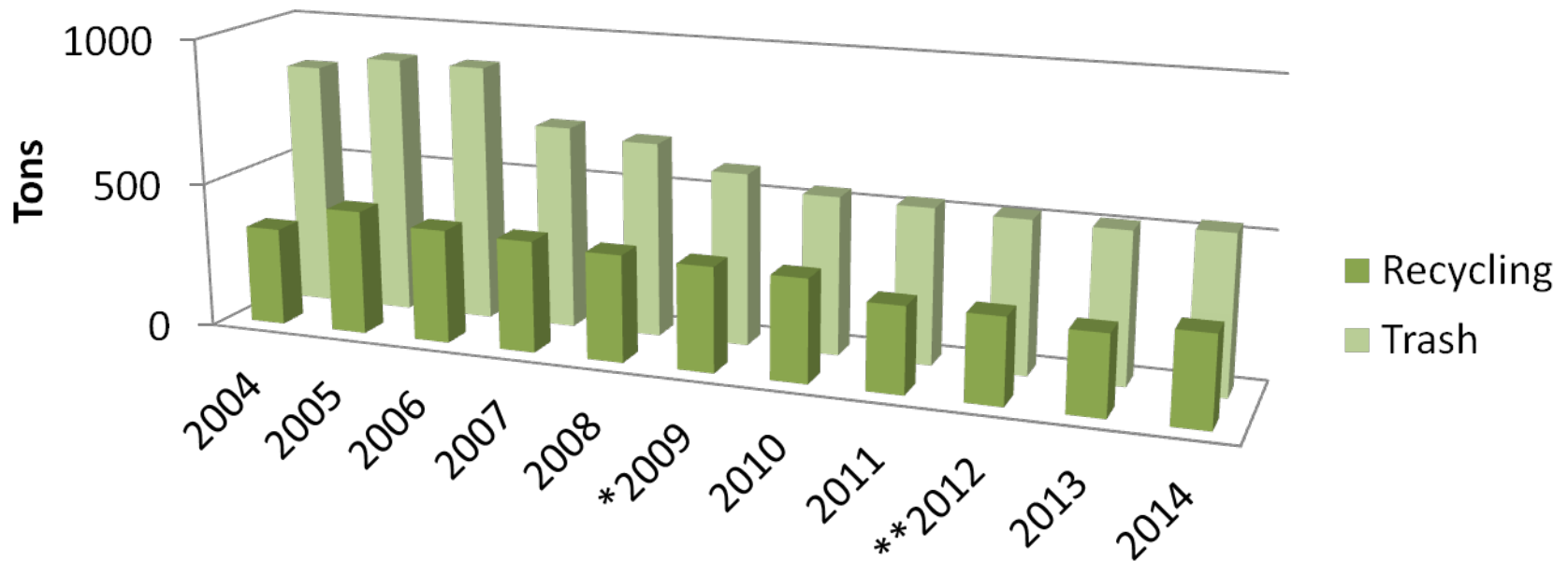
Eight years after PAYT

2014 Waste Stream



Trash vs. Recycling Progression

Trash & Recycling by Weight



* Increased bag prices from 0.75/1.50 to \$1 /\$2 **New bag manufacturer/new bag style

What Has PAYT Helped Canterbury Accomplish?

- Cut solid waste tonnage 40% in 8 years
- Increase recycling participation
- Increase recycling rate from 28% to 48% at the drop-off facility
- Decrease trips to the WCC incinerator by 50%
- Offset operational costs of the solid waste department, cutting total costs by 75% since 2005; from \$107,000 to \$27,000 raised via taxation

What does the future hold...

For the first time in eight years Canterbury's Solid Waste generation has increased. The previous two years saw only 1.5% and 1.8% decreases in solid waste, with almost 50 privately contracted dumpsters generating 40% of the solid waste Canterbury creates. To continue to increase recycling and decrease solid waste, the town must increase the monetary incentive to recycle.

Discussions have included increases to bag prices and/or the administrative fees charged for private dumpsters, as well as the possibilities of requiring permits(\$\$) for private waste haulers, and/or a Solid Waste Flow Ordinance.

Findings, Issues, and Messaging

Findings: PAYT @ Transfer Stations

- ▶ Reduced amount of trash managed
 - usually 40-55%
 - reduced hauling frequency & tipping costs = \$\$\$
- ▶ Can implement 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



PAYT Implementation

Findings

- ▶ Towns vary on extent fees cover all costs to operate transfer station (e.g. staff & recycling)
 - fee that covers most/all costs: \$3 per 32 gallons
 - if want to cover all costs – set fees to save for future capital expenses
- ▶ Try to avoid collection of cash by transfer station attendant
- ▶ Set fees similar/higher than surrounding towns



PAYT Messaging

► 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

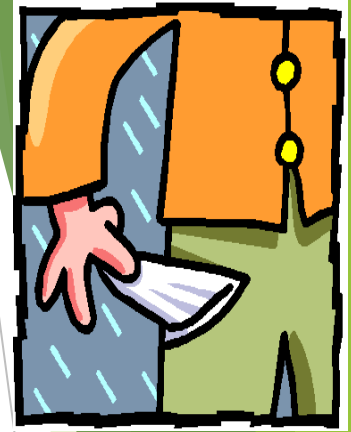


Messaging: Addressing

► Issues

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



Messaging: Addressing Issues

► Illegal Dumping NOT 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



Messaging: Addressing Issues

► It's NOT 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



Other Concerns/Views Expressed...

- ▶ Some communities with a lot of second homes like trash service in their tax base so it's subsidized by "out-of-staters"
- ▶ Composting will attract bears and other animals

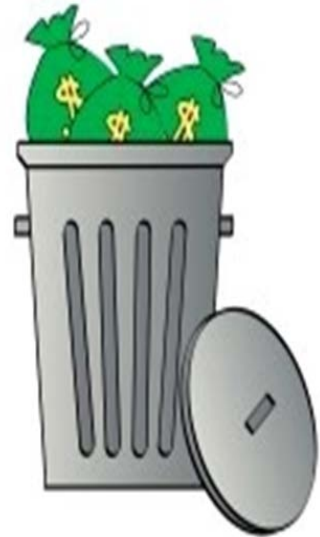
Getting Started and Pricing Strategies

Next Steps for

Communities

► Establish Solid Waste Committee

- understand current costs: labor, hauling, disposal, recycling & capital expenses
 - separate out costs in tax bills & town budget
- initiate ongoing public education/input process
- determine how much town wants fees to cover
 - all trash & recycling costs most



Logistic Considerations



- ▶ 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 \$

More Next Steps

- ▶ Determine fee structure
 - estimate post-PAYT trash & recycling quantities & costs (include PAYT administration)
 - determine PAYT rate(s) and modify if necessary
- ▶ Plan for logistics
 - where will bags/stickers be sold?
 - how will fees be collected & managed?
- ▶ Educate, educate, educate
- ▶ Obtain plan approval



Determining the Fee



- ▶ Fees usually cover at least cost of hauling & disposing all the trash
- ▶ Per ton costs - example:
 - tipping fee \approx \$100/ton
 - hauling \approx \$20/ton
- ▶ 1 ton \approx 80 bags
 - 32 gallon bag \approx 25 pounds
- ▶ \$1.50 per 32 gallons to pay for hauling & disposal only
- ▶ Assumes everyone pays fee for every bag

How About Allowing Free Bags?

- ▶ Limited free service or reduced fees appropriate for those in need
- ▶ But... offering free service or reduced fees to a lot of households means others need to pay a higher fee in order for collected fees to cover the desired costs



Cover More Than Haul & Dispose



- ▶ Decide what to add & convert to per ton trash
 - labor costs?
 - town's administrative costs?
 - capital expenses?
- ▶ 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 22 gallons 8 "contractor")

Vermont's The Place to Watch

- ▶ Act 148 requires PAYT for all residential trash starting July 1, 2015
- ▶ Applies to municipal and private service
- ▶ Must provide recycling with no visible fee
- ▶ Trash fees must cover at least hauling & disposal
 - except allows municipalities an "hybrid" approach



New Resources

► www.newmoa.org/solidwaste/projects/smart

- case studies of 11 communities
- fact sheets
 - template “Program Guide” for towns with PAYT
 - handout for the public to generate interest in PAYT
- “Fair Pricing Strategies” brochures
 - 3 location-specific



Questions?

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Group Discussion

- Towns that already have PAYT:
 - How did it come about?
 - What are the logistics?
 - How's it working?
 - Any advice for others?
- Towns without PAYT:
 - Was PAYT proposed in the past and turned down?
 - If yes - why did it not succeed? Could it be proposed again? What might help get it through?
 - If no - are you interested in pursuing PAYT now? What do you