Pay-As-You-Throw: Benefits & Challenges



Jennifer Griffith 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



NEWMOA is an equal opportunity provider & employer

NAWA

Trash Talk

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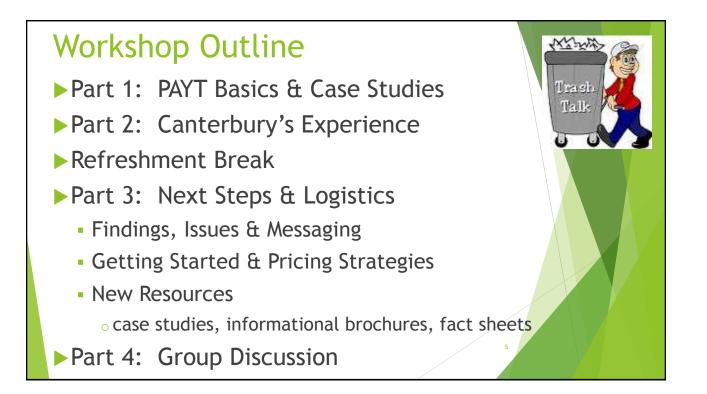
Project Promoting Pay-As-You-Throw (PAYT)

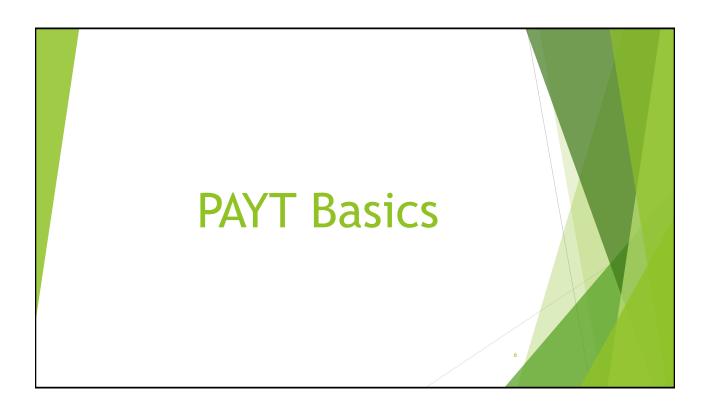
Vermont:

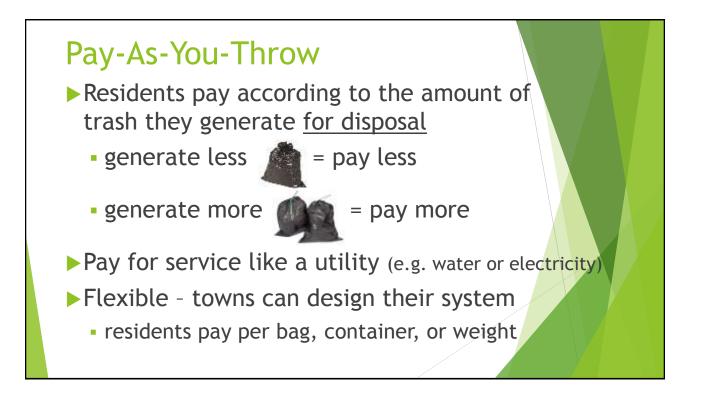
- Northeast Kingdom Waste Management District
- Windham Solid Waste Management District
- Department of Environmental Conservation
- New Hampshire:
 - Upper Valley Lake Sunapee Regional Planning Commission
 - Department of Environmental Services

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!
- All materials posted: www.newmoa.org/solidwaste/projects/smart







Pay-As-You-Throw Is...

A system that saves \$\$ in town budgets

- waste management typically 5th largest cost (after schools, police, fire, and public works)
- reduces amount of trash managed
 o usually 40-50%
 - o 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 <u>must</u> 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 locations
- some administrative costs to manage
- can put bags in containers if problems with animals

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 "extra" trash



- 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



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 (\$1.70)
- Some have curbside:
 - 1990's: Plainfield & Hinsdale (\$2)
 - recent: Vernon (\$3)

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

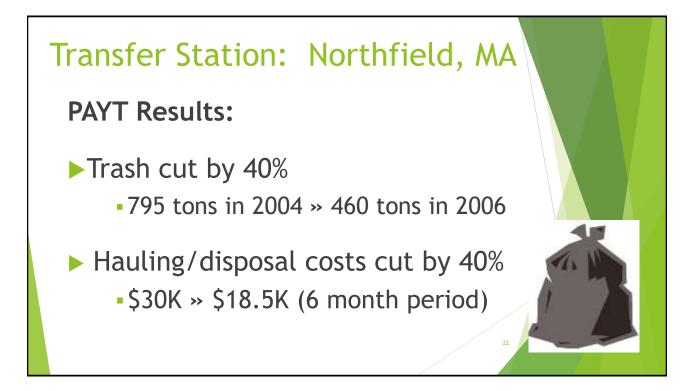
Transfer Station: Piermont, NH

PAYT Results:

- ► Disposal ↓
 - ${\sim}220$ tons/yr. before to 99 tons in 2013
- ► Recycling ↑
 - ${\sim}50$ 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: 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 <u>all</u> costs from Town budget
- Disposal ↓
 33.39 tons to 14.4 tons
 (4th Q 2012 vs 4th Q 2013)



Transfer Station: Canaan, VT

- ► Population: 972
- ► PAYT since 2008
- ▶ 50/50 split: fees & Town budget
- 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 ↓

9.5 tons/week (H&B) to 12.5 tons/month (H)

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
 - hire private hauler (typically minimal due to higher cost)

Canterbury's Experience

Adrienne Hutchinson Canterbury Transfer Station Manager



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 \$
 - o computerized cash register with receipts helps accounting
 - OR contract out operation: collected fees only payment
 Orford, New Hampshire & Newark, Vermont

PAYT Implementation Findings

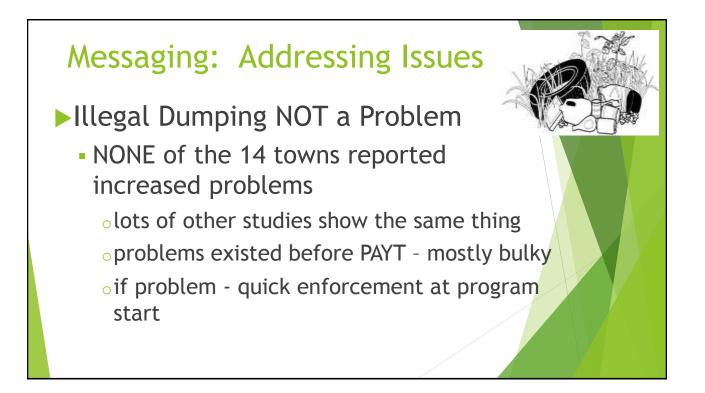
- Towns vary on extent fees cover all costs to operate transfer station (e.g. staff & recycling)
 - fee that covers most/all costs: \$3 per 32 gallons
 - if want to cover all costs set fees to save for future capital expenses
- Try to avoid collection of cash by transfer station attendant
- Set fees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

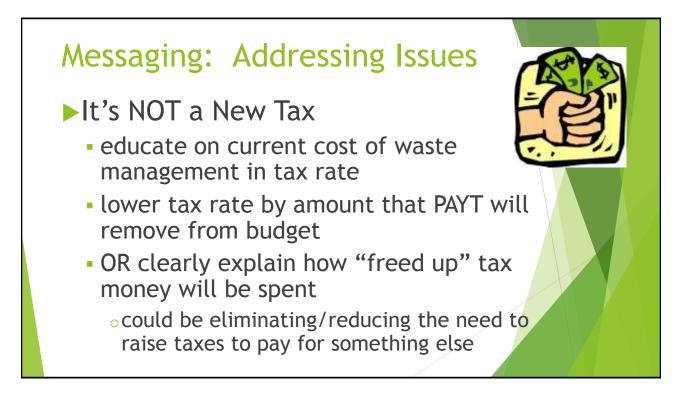
PAYT Messaging Fair for Residents pay only for what you use those producing less trash aren't subsidizing those that produce more can choose to lower your cost by: smart purchasing choices (i.e., buy products in less packaging) recycling / reusing composting - kitchen scraps & leaf/yard

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
 - \circ 1 reduced price bag/sticker each week











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 costs, just hauling & disposal, disposal only, capital expenses?
- determine type of system (bags vs containers, 1 size or multiple sizes)

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? Obtain plan approval Publicize new system to residents

Determining the Fee

- Fees usually cover at least cost of hauling & disposing all the trash
- Per ton costs example:
 - tipping fee ≈ \$100/ton
 - hauling ≈ \$20/ton
- ▶ 1 ton ≈ 80 bags
 - 32 gallon bag ≈ 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 <u>for those in need</u>
- 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, 32 gallons & "contractor")
- ► Typical fee for all costs ≈ \$3 per 32 gallons
 - if everyone pays for all their trash!

Vermont's The Place to Watch

- Act 148 requires PAYT for all residential trash starting July 1, 2015
- Applies to municipal <u>and</u> private service
- Must provide recycling with no visible fee
- ► Trash fees must cover <u>at least</u> hauling & disposal
 - except allows municipalities an "hybrid" approach
 - $_{\circ}$ base level of service paid by town
 - $_{\circ}$ maximum one 32 gallon bag/container per week
- Enforcement challenges

New Resources

www.newmoa.org/solidwaste/projects/smart

- case studies of 11 communities
- fact sheets
 - $_{\circ}$ template "Program Guide" for towns with PAYT
 - handout for the public to generate interest in PAYT
- "Fair Pricing Strategies" brochures
 - 3 location-specific
 - o 1 "generic" for use by everyone everywhere
- SMART Toolkit for Rural Communities

MANAS

Trash

Tall





- 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:
 - $\circ~$ 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 think the barriers might be? What might help overcome them?