

Pay-as-You-Throw

An Integrated Approach to Solid Waste Management



**CT DEP, Solid Waste Advisory Committee,
June 26, 2007**

What is Pay-As-You-Throw (PAYT)?

⌘ PAYT is a system where residents and businesses pay for waste services per unit of waste collected NOT a fixed fee

⌘ Users pay for the amount of waste they dispose in a manner similar to the way they pay for long distance telephone service or for electricity -- by amount used, or in this case generated



PAYT Options-Volume Based

- ⌘ PAYT programs need to be custom designed based on conditions in your town.
- ⌘ Residents and/or businesses can be charged by: **Volume** of waste using

bags,  or

tags, or stickers,  or

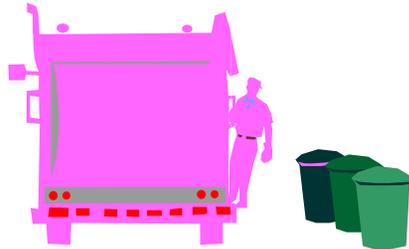
prescribed sizes of waste cans.



Studies indicate higher recycling rates (by 4%) with PAYT bag & hybrid programs than with variable can programs

PAYT Options

Or residents and or businesses can be charged by: **Weight** of waste



Whatever method is used, the end result is the same...

Residents who throw away less, save

Increased Recycling & PAYT

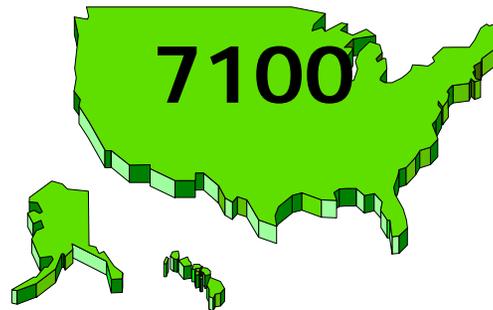
- ⌘ No Single Change Will Increase A Municipality's Recycling Rate More Than Adding A PAYT Program.
- ⌘ PAYT is More Effective at Increasing Recycling and Is More Cost Effective than:
 - adding new recyclables
 - offering commingled (single stream) recycling collection
 - collecting recyclables more frequently
- **Although PAYT May Work for Most Towns, It's Not a Perfect Fit for Every Town**

(Variable Rates Offer Constant Progress, Lisa Skumatz and John Green, Resource Recovery Journal, 2001)



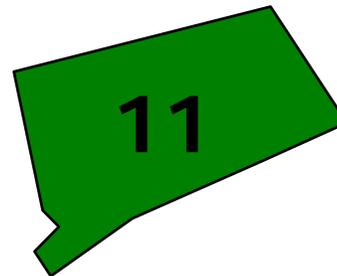
PAYT - A Growing Trend Nationally

⌘ Nationwide, over 7,100 programs



⌘ In Massachusetts, 120 programs

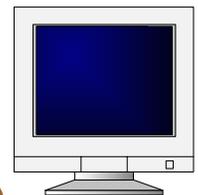
⌘ In Connecticut



programs

⌘ Visit PAYT Websites at:

www.epa.gov/PAYT and www.ct.gov/dep



EPA/SERA -PAYT in the US 2006 Update



- ⌘ 30 of the largest 100 cities use PAYT.
- ⌘ PAYT now available to 25% of U.S., or about 75 million people.
- ⌘ PAYT reduces MSW Nationally by 4.6 million to 8.3 million tons a year.
- ⌘ PAYT shows tangible GHG reductions.
- ⌘ Monthly household costs not higher for PAYT.

MA MRIP Program & PAYT

- ⌘ **Massachusetts has a Municipal Recycling Incentive Program (MRIP). MA DEP provides per ton incentive payments to qualifying municipalities for each ton of specified materials their residents recycle.**
- ⌘ **MA DEP has also established performance-based criteria that require municipalities participating in the MRIP to either:**
 - ⌘ Recycle a minimum amount of pounds per capita;
 - ⌘ Increase recycling tonnage by a certain percentage compared with the previous year; or
 - ⌘ **Have a unit-based pricing, or pay-as-you-throw, program in place.**
- ⌘ <http://www.mass.gov/dep/recycle/reduce/resrec01.pdf>

Benefits of PAYT Programs

⌘ The Three E's

ENVIRONMENT



EQUITY

ECONOMICS



Environmental Benefits

- ⌘ Waste Reduction and prevention
- ⌘ Less reliance on landfills and resource recovery facilities
- ⌘ Increased understanding of environmental issues
- ⌘ Increased recycling and composting
- ⌘ Supports CT's preferred waste management hierarchy and CT's *Solid Waste Management Plan – December 2006*



Environmental Benefits of Increased Source Reduction and Recycling

⌘ Saves energy



⌘ Conserves natural resources



⌘ Emits less pollution



⌘ Uses less water



⌘ Reduces the need for building additional disposal capacity



⌘ Reduces greenhouse gas emissions



Environmental Benefits of PAYT - Greenhouse Gas Emissions¹



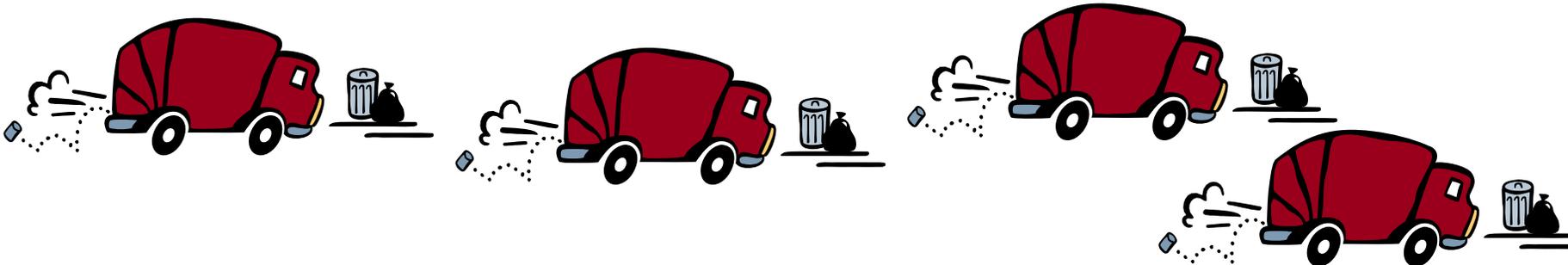
Nationally PAYT leads to reductions of:

- ⌘ 2.1 million to 3.8 million metric tons of carbon equivalents annually.
- ⌘ 7.8 million to 13.3 million metric tons of carbon dioxide equivalents annually.
- ⌘ 61 million to 109 million British thermalunits annually.

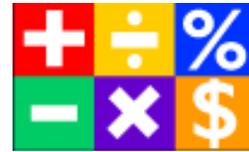
¹EPA/SERA -PAYT in the US 2006 Update

Reduces Need for Increased Disposal Capacity

⌘ During the next 5 to 10 years the people and businesses of the state must either increase their commitment to source reduction and recycling or accept the need to develop more waste disposal facilities in the state and/or rely on disposal at out-of-state facilities.



Full Cost Accounting (FCA) for Waste Management



- ⌘ Municipalities need to use FCA for solid waste management in their town and need to educate citizens on the true cost of waste management
- ⌘ (FCA) provides a common-sense approach to:
 - ⊞ identifying and assessing the cost of managing solid waste operations, and
 - ⊞ aiding decision-makers with short and long-term program planning to help identify measures for streamlining and improving operations.
- ⌘ Visit the EPA website at: <http://www.epa.gov/fullcost/>

Economic Benefits

- ⌘ **Reduced disposal costs - Towns generally pay a higher tipping fee for waste disposal and a lower or no tipping fee for recycling; sometimes revenue is generated by recycling.**
- ⌘ **Can create a new source of revenue for funding waste disposal costs.**
- ⌘ **If town pays disposal tipping fees; PAYT can help identify MSW from your town so town doesn't foot the bill for MSW from other towns**
- ⌘ **Can help keep taxes down.**



Equity

- ⌘ **Costs for disposal are spread more fairly among residents. Residents who generate less waste are not subsidizing those that generate a lot. Just as with other utilities, residents pay for how much they use**
- ⌘ **Signals to users (residents) that waste disposal has a cost**



Equity (cont'd)



If you consider this unfair:

Smith Trash Portion of Tax Bill \$300

Jones Trash Portion of Tax Bill \$300

You need to consider PAYT

What Are Your Town's Goals?

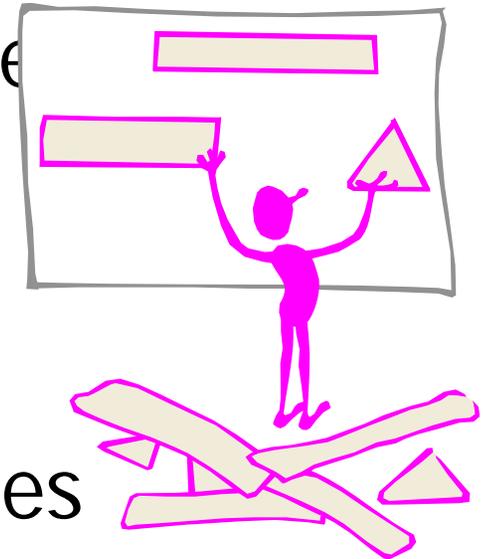


- ⌘ Encourage waste reduction and recycling?
- ⌘ Raise revenue to cover solid waste management costs or subsidize other community programs?
- ⌘ Clearly identify MSW originating in your town?
- ⌘ Convey a better understanding of the environmental, economic and social costs of waste disposal to residents and businesses?
- ⌘ Maintain or increase level of service?
- ⌘ Provide a more equitable means for funding waste disposal in your community?
- ⌘ Save money? Other?

If PAYT Seems Like it Would Benefit Your Town - What's Next?

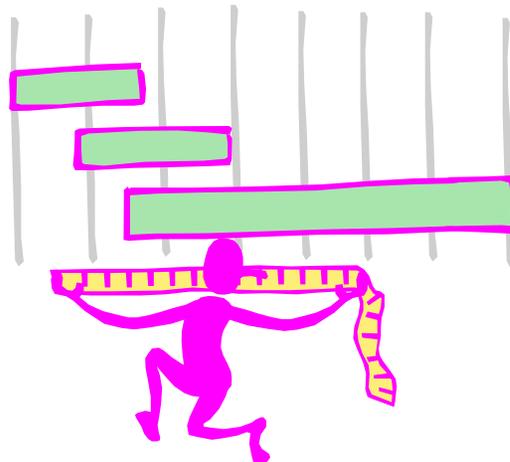
PAYT IS NOT a “One size fits all” program!

- ⌘ Set goals and establish an implementation team (See DEP guidebook)
- ⌘ Speak to other towns about the programs
- ⌘ Address the barriers
- ⌘ Build public support
- ⌘ Schedule your planning activities



Scheduling Your Activities

- ⌘ Check out the legal/jurisdictional issues of implementing new solid waste pricing mechanisms
- ⌘ Any new ordinances needed?
- ⌘ Prepare detailed timeline and tasks



Steps in Designing A PAYT Program

Make decisions on:

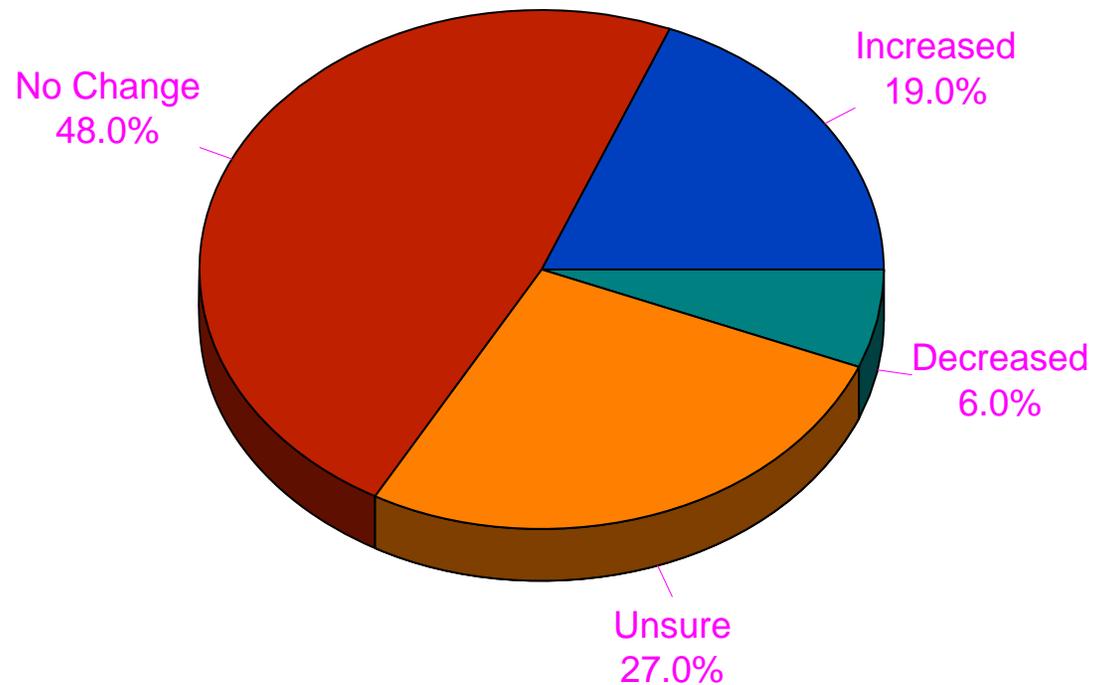
- ⌘ Volume vs weight-based programs
- ⌘ Container options and sizes
- ⌘ Pricing structures
- ⌘ Billing and payment systems
- ⌘ Accounting options
- ⌘ How to deal with multi-family housing
- ⌘ How to deal with residents with special needs



Potential Concerns Related to Implementation of PAYT

- ⌘ Perception of increased costs to residents
- ⌘ Resistance to change
- ⌘ Fear of an increase in illegal dumping
- ⌘ Adequacy of pricing to recover expenses
- ⌘ Administrative costs

Changes in Illegal Dumping after Implementation of PAYT



Source: Evaluating Unit-Based Pricing, Duke University 1997 as quoted in "Environomic\$" MSW Management 1999

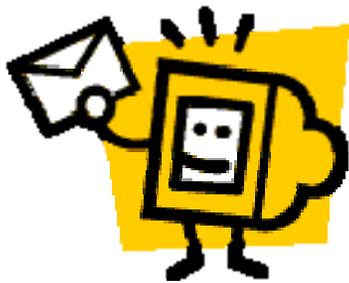
MA Findings Regarding Illegal Dumping



- ⌘ Illegal dumping happens everywhere, even in towns without PAYT
- ⌘ Most common items are white goods, C&D waste, tires and yard waste.
- ⌘ Vast majority of PAYT communities did not see increase
- ⌘ Key is aggressive enforcement early on

Addressing the Barriers

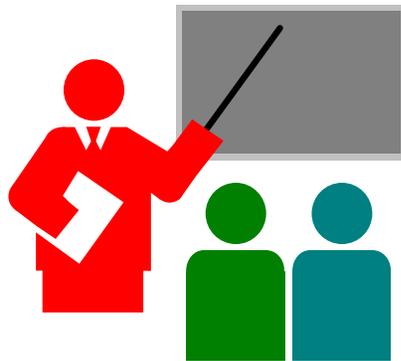
- ⌘ **Set up aggressive enforcement policies for illegal dumping and non-compliance**
- ⌘ **Consider providing waiver or subsidy for fixed income residents**
- ⌘ **Get the haulers “on board”**
- ⌘ **Critical success factor is:**



Communication
Communication
Communication

Building Public Consensus

- ⌘ PAYT Education and Outreach is critical to the success of your program
- ⌘ Comprehensive outreach campaign is needed to build support



Educational Tools



Tools include:

- ⌘ Citizens Advisory Committee
- ⌘ Public Meetings
- ⌘ Meetings with local community groups
- ⌘ Direct Mailings
- ⌘ Advertisements
- ⌘ Press Releases
- ⌘ Booths at public places (e.g. supermarkets)

How Can PAYT be Effectively Incentivized in CT?



- ⌘ We need you all to give this important program some thought to help identify effective incentives for CT municipalities to implement PAYT programs.
- ⌘ We have tried grants, workshops, guidance manuals; etc – with little effect.
- ⌘ We need something more effective – PAYT has proven itself in thousands of communities nationwide – why is CT lagging behind? What can be done to change that?

DEP PAYT Support

- ⌘ PAYT (some sections from guidebook are online) <http://www.ct.gov/dep> - Search PAYT
- ⌘ PAYT Implementation Handbook
- ⌘ PAYT & Recycling Educational Material

