

**PAY AS YOU THROW—  
IMPLEMENTATION  
STRATEGIES**

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NH DES Training**

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# PAY AS YOU THROW - PAYT



AKA

Unit-Based Pricing,  
Variable Rate Pricing,  
User Pay, or SMART  
(Save Money and  
Reduce Trash)

**OPTIMAL PAYT SYSTEM:  
MEASURES THE AMOUNT OF  
INDIVIDUAL WASTE COLLECTED &  
CHARGES THE WASTE PRODUCER A  
FEE EQUAL TO THE COST OF  
GENERATION**

# PAYT AROUND THE COUNTRY

- Two states mandate: Vermont & Minnesota
- At least 34 towns in NH
- 7,100 communities in the US
  - ✓ Massachusetts - 59%+
  - ✓ Iowa - 56%+
  - ✓ California - 50%
  - ✓ New York State - 42%



# PAYT IMPLEMENTATION

- Measure waste by weight or volume
- Volume-based models use a range of “units” for identifying how charges will be levied
  - ✓ Bags, tags, containers RFID

# DESIGN VARIABILITY

- “Full-unit pricing”
  - ✓ Users pay for all the garbage they dispose
- “Partial-unit pricing”
  - ✓ No charge for disposal of set base amount
  - ✓ Additional bags or containers paid for by the resident

# DESIGN VARIABILITY, cont.

- “Variable-rate pricing”
  - ✓ Residents choose to rent a container or purchase bags
  - ✓ Price corresponds to the volume

# BAG SYSTEMS

- Imprinted trash bags
  - ✓ Varying sizes 20-35 gallon bags
- Price covers bag cost & part or all of the cost of hauling/disposal
- Drop-off or curbside collection
- Avoids need for billing





# STICKERS

- Stickers are purchased to affix on specific sized bags or containers
- Price of sticker covers the cost of the sticker & part or all of the cost of hauling and disposal
- Applicable for curbside collection or drop-off
- Avoids need for billing

# TRASH TAG

- All trash must be in a bag with a tag or it will not be picked up
- Maximum weight: 30 pounds
- Recycling will reduce your need for trash tags



No. 000001

# PER BAG PUNCH CARDS

- Residents purchase punch cards
- Price is based on the number of dots or bags offered on the card
- Drop-off facility operators punch the dots for each bag disposed
- Not appropriate for curbside collection
- Avoids need for billing

# CARTS OR CANS

- Increasing charge for larger containers or collection of multiple containers of same size
- Haulers may charge flat fee per cart to defray embedded hauling cost, but must add unit-based disposal charge per container
- Used primarily for curbside collection
- Requires billing system



# HYBRID

- Residents receive a smaller limited volume of service for flat fee or “no cost”
- Additional containers or bags incur a cost
- Allows for phase in of PAYT into existing town or municipal system

# WEIGHT-BASED SYSTEMS

- Containers, bags, or vehicles are weighed
- Charged on weight of trash disposed
- Drop-off or curbside programs
- Requires billing or direct payment to drop-off center operators



**REVIEW EXERCISE 4**

**CONTAINER & PRICING  
CHOICES**

# CITIZENS ADVISORY COMMITTEE

- Advantages & Disadvantages
- Role: evaluating the available options for solid waste management & funding
  - ✓ PAYT is a natural fit for these groups
- Define goals & expectations
- Define role in the decisionmaking process

# IDENTIFICATION OF PAYT GOALS

- Why the municipality is interested in pursuing a PAYT program?
- Political considerations?
- Goals and interests of other stakeholders?

**GROUP BRAINSTORM &  
REVIEW WORKSHEET 1**

**IDENTIFYING PROGRAM  
GOALS**

# MUNICIPAL PROFILE

- What background information is necessary to make informed program design decisions?
- Serves as a guideline for ensuring that all necessary information about current waste and recycling activities is compiled for making program design decisions

**KEY INDICATORS -  
WORKSHEET 2**

**DISCUSS & REVIEW  
COMPLETED MUNICIPAL  
PROFILES**

# LEGAL AUTHORITY/LEGAL ISSUES

- Does the municipality/town of legal authority to implement a PAYT program?
- Can the municipality/town require haulers to participate?
- Draft & enact any necessary ordinances to charge a variable rate for waste collection

# LEGAL AUTHORITY/LEGAL ISSUES

- Draft & enact any additional necessary & complementary ordinances
  - Banning waste burning & illegal dumping
  - Limiting container weights
  - Add additional items for recycling
  - Prohibiting use of unauthorized containers
- Define enforcement responsibilities
  - Work with police & health departments



# POLITICAL CONSIDERATIONS

- What are the barriers to implementing PAYT? Possible Solutions?
- Understand what the concerns may be & how to respond
- Understand the decision-making process in your municipality/town in order to move the project forward successfully

INITIAL POLITICAL AND CITIZEN  
CONFUSION AND RESISTANCE TO  
PAYT PROGRAM IMPLEMENTATION IS  
LIKELY TO OCCUR AT LEAST ON  
SOME SCALE.

# POLITICAL CONSIDERATIONS

- Which elected officials/decision-makers/stakeholders already support PAYT; which do you think might support PAYT if they knew more about it?
- What are citizen activists saying? How can they be persuaded?
- Who are typical allies in PAYT? Environmental activists, seniors, others?

**GROUP BRAINSTORM -  
WORKSHEETS 3 & 6**

**POTENTIAL BARRIERS  
& POLITICAL  
CONSIDERATIONS**

# ADDITIONAL PLANNING TASKS

- Develop & implement policies for:
  - ✓ Accommodating low-income residents, physically handicapped, & elderly residents
  - ✓ Accommodating residents of multi-family units
- Develop procedure for gathering & analyzing data on waste generation amounts & costs
  - ✓ Conduct baseline data collection

**WHAT PAYT SYSTEM IS  
RIGHT FOR YOUR  
COMMUNITY?**

**GROUP DISCUSSION OF  
THE ABOVE FACTORS &  
ANY OTHERS THAT COME  
INTO PLAY WHEN MAKING  
THIS DECISION**

# **COST INFRASTRUCTURE & RATE STRUCTURE DESIGN**

- What costs do you want your PAYT system to include?
- Consider the philosophical, political, & economic influences in your community

# **COST INFRASTRUCTURE & RATE STRUCTURE DESIGN**

- Step 1: Waste Collection Forecast
  - ✓ Estimate the amount of waste you will be collecting under Pay-As-You-Throw
- Step 2: Estimate your program costs & the cost of any complementary programs



# KEY FINANCIAL ASSUMPTIONS

- Will all costs associated with collection and disposal of MSW and recyclables be included in the PAYT program?
- Or, just a portion of those costs in the PAYT program? If only a portion, which costs are they? Why?

# KEY FINANCIAL ASSUMPTIONS

- What are the costs?
  - Fixed and variable MSW, Recycling, other complementary programs
- Should there be a sliding scale for cost of disposal?
  - Based on what?

# KEY FINANCIAL ASSUMPTIONS

- Should there be a cost associated with recycling?
- What are the costs associated to MSW, recycling, C&D, yard waste?
  - ✓ Tipping/handling fees? Hauling? Processing?
  - ✓ Which should be included?

# KEY FINANCIAL ASSUMPTIONS

- Should the town/facility implement a mandatory recycling ordinance?
- Or, other mandate to go along with this message & help increase diversion?

# KEY FINANCIAL ASSUMPTIONS

- How is the program going to affect existing solid waste & recycling operations?
- Does the town need to reconfigure their transfer station in order to make this work?

# KEY FINANCIAL ASSUMPTIONS

- Step 3: Estimate the per container price (or per bag, volume) needed to meet program costs
- Prices will be dependent on two things
  - ✓ Type of PAYT program planned
  - ✓ Assumptions regarding the specific costs the PAYT program are proposed to cover
- Develop/test the rate structure, budgeting & tracking systems

**WORKSHEET 5 -  
GROUP DISCUSSION**

**RATE STRUCTURE  
DESIGN**

# PUBLIC OUTREACH

- What are the public outreach goals for the program and how will they be achieved?
- Who are the targeted stakeholders?
  - ✓ Decisionmakers, residents, haulers, businesses, seniors, multi-family property management/residents, low income residents, seasonal populations, others



# PLANNING AND DESIGN PHASE

- Soliciting feedback
- Feedback should be initiated during the planning stage, through outreach, surveys, involvement of a citizen taskforce.

# GROUP DISCUSSION

**WHAT ARE TARGET  
AUDIENCES FOR INITIAL  
FEEDBACK?  
HOW CAN THEY BEST BE  
REACHED?**

# IMPLEMENTATION PHASE

- Outreach during the implementation phase begins during the final design
- Planning the education and outreach campaign: Informing residents about how to participate (where to buy bags, any changes to the recycling program, complementary programs being added or modified, how to handle bulky items, etc.)

# IMPLEMENTATION PHASE

- Develop outreach materials & schedule briefings and presentations
- Create a phone bank hotline for the first few weeks of program operation

**GROUP DISCUSSION &  
REVIEW WORKSHEET 7**

**WHAT TYPES OF OUTREACH  
MATERIALS SHOULD BE  
DESIGNED?**

**WHAT MESSAGES ARE  
IMPORTANT TO RELAY?**

# IMPLEMENTATION SCHEDULE

## *Tasks and Staff Training*

- Reassign collection & management staff as needed to new roles in outreach, enforcement, & administration
- Determine ongoing administrative tasks that will be associated with the program (billing, accounting procedures, program maintenance, etc.)

# IMPLEMENTATION SCHEDULE

- Prepare staff to address resident concerns & questions
- Develop a phase-in strategy
  - ✓ Collect all wastes for several weeks
  - ✓ Leave "error tags" to educate customers that only correctly paid & packaged trash will be collected in the future

# IMPLEMENTATION SCHEDULE

- Work with retail establishments to carry bags, if necessary.
- Consider working with the business community to ensure that they lock their dumpsters to prevent illegal dumping.
- Address specifics for each system: Bag-and tag; Can-based; Weight-based; Hybrid)



**GROUP DISCUSSION:  
REVIEW WORKSHEET 8**

**WHAT OTHER TASKS MAY  
BE NECESSARY?**

# PROGRAM MAINTENANCE, MONITORING AND EVALUATION

- Setup an ongoing system for program maintenance, monitoring and measurement
- Quantity of bags being ordered; if different size bags are being used, what is the ratio of use (e.g., two 33-gal. bags are purchased for every one 20- gal. bag); are enough bags being purchased?

# PROGRAM MAINTENANCE, MONITORING AND EVALUATION

- Storage and distribution mechanisms – are they effective?
- Accounting and billing procedures – do they need adjustments? Waste generation – is it showing a reduction? How much?

# PROGRAM MAINTENANCE, MONITORING AND EVALUATION

- Recyclable collection – is it showing an increase? How much?
- Rate structure – is it adequate? Public education – are residents receiving frequent reminders and 3R instructions?
- Enforcement – are residents participating correctly? Is there illegal dumping?

# NERC CAN HELP

## *We're experts in*

- Waste reduction & recycling
- Recycling program design & implementation
- Food scraps/Organics management
- Green procurement
- C&D reuse & recycling
- Electronics recycling
- School reuse, recycling & composting
- Textile recycling programs
- Multi-stakeholder dialogues & negotiations
- & More!

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