TOWN OF BARNSTABLE
Waste Reduction Program Options

Barnstable Renewable Energy Commission
Town Council Meeting
September 6, 2012
Reasons for Study

• Town Council charge...

  “Review and analyze solid waste program options ... including recycling”

• State “Waste Ban”

• Cost savings for residents

• SEMASS tipping fees to increase significantly after 2014 (perhaps more than two-times)

• Environmental benefits of recycling
Past Town Trash Discussions

• 1992-93
  DPW Curbside Review
    – Recommended “contracted” town-wide curbside program
    – Participation optional
    – 3 town sectors

• 2002-03
  PAYT Pilot Program
    – Survey of 200 participants
    – Participants highly favorable towards PAYT
    – Participants said they recycled more, disposed less, paid less
    – Recommended expanding PAYT to all transfer station users
Cape Cod Recycling Rates by Town

<table>
<thead>
<tr>
<th>Town</th>
<th>Rate</th>
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</thead>
<tbody>
<tr>
<td>Nantucket</td>
<td>91%</td>
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<tr>
<td>Truro</td>
<td>45%</td>
</tr>
<tr>
<td>Harwich</td>
<td>41%</td>
</tr>
<tr>
<td>Chatham</td>
<td>39%</td>
</tr>
<tr>
<td>Eastham</td>
<td>37%</td>
</tr>
<tr>
<td>Falmouth</td>
<td>37%</td>
</tr>
<tr>
<td>Provincetown</td>
<td>36%</td>
</tr>
<tr>
<td>Yarmouth</td>
<td>36%</td>
</tr>
<tr>
<td>Wellfleet</td>
<td>33%</td>
</tr>
<tr>
<td>Bourne</td>
<td>30%</td>
</tr>
<tr>
<td>Dennis</td>
<td>30%</td>
</tr>
<tr>
<td>Sandwich</td>
<td>28%</td>
</tr>
<tr>
<td>Mashpee</td>
<td>22%</td>
</tr>
<tr>
<td>Brewster</td>
<td>17%</td>
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<tr>
<td><strong>Barnstable</strong>:</td>
<td><strong>16%</strong></td>
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</tbody>
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Source: MassDEP 2008 calendar year
2011 Transfer Station Sticker Holder Locations
Alternatives Reviewed

- Maintain current system; Renegotiate with Covanta/SEMASS
- Close transfer station for residential solid waste – residents would find own trash disposal service
- Pay-As-You-Throw for transfer station users only
- Pay-As-You-Throw contracted curbside pickup of solid waste and recyclables

Keep transfer station open for “bulky items,” yard waste, C&D, and residents who can’t/won’t access the curbside program.
Why Pay As You Throw (PAYT)?

• Single most effective program for reducing waste and increasing recycling
• Like a utility: users pay for amount of waste disposed; free unlimited recycling
• Proven track record - 136 communities in MA
• Trash tonnage decreases 25-50%
• Recycling tonnage increases 15-25%
Town-wide Curbside PAYT for SW and Recycling

Pros

- Simple for residents and town
- Equity and Fairness
- Cost reductions on tipping fees because less solid waste tonnage
- Present trash-hauler customers (2/3 of the town’s households) would pay less
- Increased recycling
- Fewer private vehicle trips to TS – saves energy
- Less duplication of effort by trash hauler trucks
- Ease of transition: 2/3 households already use private trash haulers in a curbside program
- Less illegal dumping in conservation lands and along roadsides
- Increased composting of food and yard waste

Cons

- More barrels/bags on side of road
- Some residents who presently use transfer station may be opposed
- Smaller vendors could be disadvantaged by RFP
- Transfer station users will pay a projected $3.87 more ($232.22 vs. $236.09)
- Some transfer station employees may be laid off or reassigned
- Levying the bag fee
PAYT for Existing Transfer Station Users

Pros
• Equity and Fairness
• Residents can control their solid waste disposal costs
• Increased recycling
• Economy and cost savings
• Minimal changes from current system
• Increased composting of food and yard waste
• PAYT has proven record — 136 PAYT communities in MA
  * Chatham, Dennis, Brewster, Wellfleet, Mashpee, and Falmouth
• Allows town to access MassDEP grants and funding

Cons
• Residents are used to paying one fee for waste disposal
• PAYT requires setting up a system to sell bags or stickers to residents
• Potential adverse effect on low-income households
• Concern some residents may switch to private haulers
• Continues inefficiencies of a third of residents driving to TS
PAYT – How it Works

• Residents pay for what they throw away
• Various models
  – Bags
  – Stickers
  – First bag/barrel “free”
  – Vendor or Town-managed system

• Fixed cost is an annual flat fee
• Variable costs are bag/sticker fees
Municipal Solid Waste Pay-As-You-Throw Communities in Massachusetts
February 2012

Legend
- Curbside Communities (54 Municipalities)
- Drop-off Communities (82 Municipalities)
Going from a Flat Fee to PAYT

• Transition is easier because residents are accustomed to paying for solid waste disposal (unlike general tax-funded programs)

• Each and every household’s disposal costs will be based on the same unit cost. Small generators will no longer subsidize large generators.
## PAYT Impacts

<table>
<thead>
<tr>
<th>Trash Decreased</th>
<th>Recycling Increase</th>
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<tbody>
<tr>
<td>Duxbury (DO)</td>
<td>35 percent</td>
</tr>
<tr>
<td>Malden (CS)</td>
<td>49 percent</td>
</tr>
<tr>
<td>Needham (DO)</td>
<td>50 percent</td>
</tr>
<tr>
<td>Wrentham (CS)</td>
<td>33 percent</td>
</tr>
<tr>
<td>Attleboro (CS)</td>
<td>43 percent</td>
</tr>
<tr>
<td>Grafton (CS)</td>
<td>38 percent</td>
</tr>
<tr>
<td>Dartmouth (CS)</td>
<td>51 percent</td>
</tr>
<tr>
<td>Ashland (CS)</td>
<td>38 percent</td>
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- MA towns with PAYT average disposal rate per household = 0.56 tons per yr.
- Town of Barnstable current TS average = 1.04 tons per yr.
- MA towns with No Trash Limit = 1.13 tons per yr.
PAYT and Non-PAYT Disposal Averages
Town of Sandwich Results

- PAYT started at transfer station July 1, 2011
- 42% trash reduction for first year
- Commingling (cans, bottles, plastics) – Up 74%
- Fiber (paper, cardboard) – Up 20%
- Recycling rate – 54% (29% prior to PAYT)
- Traffic volume – Down 19%
- $120,000 savings/year @ $58 P/Ton T&D
- Town adopted hauler regulations mandating bundled pricing (trash and recycling combined)
Developing Private Hauler Permit Renewal Regulations

- Require bundled pricing as condition of Mass DEP grant for PAYT startup funds (up to $150,000 available):
  - Trash and recycling collection are priced as a single service (i.e. customers can’t choose one service without the other)
  - Creates a level playing field amongst haulers and transfer station

- Critical for drop-off communities
- Used in curbside communities where there are still some private haulers
- Via ordinance or Board of Health Regulation (MGL C. 111, sec. 31A & 31B)
- Reporting requirement essential

* MSW & recycling pick-up contracts not subject to M.G.L. Ch. 30B
  - Public bidding process can save $$$
1. Implement contracted PAYT curbside trash and recycling collection with three “sectors” divided by population density
   - Keep transfer station open for Bulky items, C&D, yard waste, and for residents who can’t/won’t access the curbside program.
   - Establish new Board of Health regulations requiring private haulers to offer bundled pricing for trash and recycling collection accompanied by enhanced reporting requirements.

2. Implement PAYT for current transfer station users
   - Establish new Board of Health regulations requiring private haulers to offer bundled pricing for trash and recycling collection accompanied by enhanced reporting requirements.
MassDEP can Help!

• Sustainable Materials Recovery Program
  – Funded by renewable energy credits
  – Up to $150,000 Pay-As-You-Throw startup grants
  – Wheeled recycling carts off-sets
  – Education/outreach
  – Roll-offs/compactors

• Technical assistance, data, case studies, modeling

• Regional Waste Reduction Coordinator
Suggested Next Steps for Town Council

• Direct staff to explore through an RFP, RFI or RFQ process the costs and appropriate bid specifications necessary to implement proposed recommendations

• Direct REC and Staff to seek community input regarding REC’s proposed recommendations

• Direct staff to draft new Board of Health required regulations
Conclusion

• Full curbside pickup with PAYT maximizes recycling and other environmental benefits, and provides the greatest long term cost savings for the town’s residents

• PAYT offers most equitable SW disposal system based on usage

• PAYT is most effective strategy to reduce SW
QUESTIONS & ANSWERS