Canterbury Recycling Committee
Pay-As-You-Throw Study Subcommittee

Report and Recommendations - November 3, 2005

I. Pay-As-You-Throw - (PAYT): Definition & Description

Waste management in Canterbury has traditionally been paid for through our property taxes. The cost per resident is therefore based on the value of their home rather than the amount of waste they throw away. This has created the concept among many of our citizens that waste disposal is “free” since there is no direct connection between disposal activity and costs - the price is the same regardless of how much a person throws away.

Pay as you throw (PAYT) programs provide a different way to bill for garbage services. PAYT charges for waste disposal based on the amount that is thrown away – residents who throw away more, pay more, those who throw away less, pay less.¹

II. Benefits of PAYT: 5 Primary Benefits Identified

- **Decrease in Overall Waste**: Residents work to reduce the amount of waste they throw away in order to reduce their costs. Consumer survey research indicates that 76% percent of households surveyed have purchasing decisions affected by PAYT.² Consider the case of Dover, NH: In 1990 Dover's total residential waste before PAYT was 11,000 tons. Last year it was 4,886 tons with their PAYT program.³

- **Decrease in Disposal Costs**: As residents decrease their waste, tipping fees decrease as does transportation expense and ash disposal costs. Exeter, NH - admittedly not comparative to Canterbury in size, saved $200,000 in the first year of their PAYT program.

- **Increase in Recycling and Composting**: Most residents naturally choose free recycling rather than paying to dispose of recyclable or compost materials as waste. PAYT programs give recyclers a chance to save money directly.

- **Increased life of MSW landfills & ashfills**: Of particular import to Canterbury right now, a dramatic decrease in overall waste would extend the lifespan of the current ash landfill in Franklin and reduce the size requirements for future MSW landfills.

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¹ Liz Bedard, NRRA, report to Town of Henniker, September 2005
³ Northeast Resource Recovery Association (NRRA) data
• **Increase in Fairness:** When waste disposal is paid for with taxes those who generate a small amount of waste, recycle and compost subsidize those who generate a large amount of waste.

III. **New Hampshire PAYT Programs:**

There are 38 communities in NH that currently have PAYT programs. The oldest program is in Somersworth, initiated in January 1991. The most recent programs are in Raymond and Lee which just passed PAYT at Town Meeting in 2005.\(^4\) See attached NRRA summary.

Note the recycling rates as a percent of total trash tonnage in the PAYT communities listed in the chart below. To make a clean comparison the numbers do not include bulk items, propane tanks, scrap steel or C&D waste.

<table>
<thead>
<tr>
<th>2004 Data(^5)</th>
<th>Recycled Paper</th>
<th>Recycled Containers</th>
<th>Trash</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>Tons % of waste</td>
<td>Tons % of waste</td>
<td>Tons % of waste</td>
<td>Tons</td>
</tr>
<tr>
<td>Lancaster</td>
<td>386 24%</td>
<td>174 11%</td>
<td>1046 65%</td>
<td>1,606</td>
</tr>
<tr>
<td>Littleton</td>
<td>1077 57%</td>
<td>208 11%</td>
<td>608 32%</td>
<td>1,893</td>
</tr>
<tr>
<td>Walpole</td>
<td>339 32%</td>
<td>108 10%</td>
<td>628 58%</td>
<td>1,075</td>
</tr>
</tbody>
</table>

These towns with PAYT programs experience an average of 37.6% of their trash as recyclable paper and 10.6% as recyclable containers (glass, aluminum, tin, plastic).

IV. **New Hampshire Mandatory Recycling Programs:**

Note how Canterbury's mandatory recycling program compares to the PAYT programs:

<table>
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<tr>
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<tr>
<td>Community</td>
<td>Tons % of waste</td>
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<td>Tons</td>
</tr>
<tr>
<td>Canterbury</td>
<td>164 15%</td>
<td>93 8%</td>
<td>848 77%</td>
<td>1,105</td>
</tr>
</tbody>
</table>

\(^4\) NRRA, report to Town of Henniker, Sept 2005
\(^5\) NRRA report
Canterbury's experience is consistent with and in some cases slightly behind other mandatory recycling programs. Chesterfield, Hillsborough and New Boston all average 16% recyclable paper and 11% recyclable containers.

V. Recommendations:

The subcommittee recommends the adoption of a PAYT program for Canterbury. The chart below comparing our current program to PAYT was created using the PAYT averages from the three communities previously listed in section III.

<table>
<thead>
<tr>
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<th>Recycled Containers</th>
<th>Trash</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tons</td>
<td>% of waste</td>
<td>Tons</td>
<td>% of waste</td>
</tr>
<tr>
<td>Canterbury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Program</td>
<td>164</td>
<td>15%</td>
<td>93</td>
<td>8%</td>
</tr>
<tr>
<td>PAYT</td>
<td>409</td>
<td>37%</td>
<td>122</td>
<td>11%</td>
</tr>
</tbody>
</table>

We could increase our overall recycling by 273 tons and reduce our trash by the same amount using just the average numbers for PAYT programs. This represents a 32% reduction in our trash disposal. This number is consistent with waste reduction numbers for PAYT programs nationwide which measured total reductions in the waste stream of approximately 27% (in 2000, the most recent data found).6

VI. Budget Impact - Recycling Improvement & GAT Reduction:

GAT reduction from 848 tons to 575 tons would save $11,193 at next years estimated tipping fee.

In 2004 recycled paper averaged $8.71 of revenue per ton recycled. The additional tons of paper would increase revenue by $2,134 (using the same rate, which is subject to change).

In 2004 recycled containers averaged $27.51 of revenue per ton recycled. The additional containers recycled would increase revenue by $798.

Total budget impact from increased recycling and reduced GAT = $14,125

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VII. Budget Impact - Bag Revenue - TBD

VIII. Concerns and Frequently Asked Questions:

Opponents of PAYT programs frequently raise the same objections in each community that first proposes changing to such a program. Listed below in the order of prevalence are the objections and some suggested responses:

1. **Illegal Dumping**: Will PAYT increase illegal dumping is one of the first worries expressed by communities considering the program. The reality is that illegal dumping does not appear to be a serious problem in PAYT communities. 34 of the 38 NH communities with PAYT report NO illegal dumping. The other 4 communities report very little illegal dumping.\(^7\) Several S.E.R.A. studies which include interviews with officials in 500 PAYT communities across the country conclude that the incidence of illegal dumping is very minor; that most illegally dumped material is not residential in origin indicating that PAYT is not a factor and that effective bulky item, appliance and C&D waste programs (which we have) go a long way toward reducing potential illegal dumping.\(^8\)

2. **Unfairness**: A second concern is that PAYT programs may be unfair to large families. It is important to separate concerns about large families from concerns about low-income households. It is not fair under the current system that small disposers have subsidized large disposers over all the years that the fixed price/property tax system has been in place.

With regard to low-income households, opportunities to reduce waste are available to all households. Those who limit their waste, recycle, re-use, etc can gain control over a cost that they previously could not reduce.

3. **Workload and Transfer Station Costs**: Most PAYT communities do not report an increase in workload as the PAYT program discourages overuse of the solid waste system. The Recycling Committee has previously noted the need at our current rates of recycling for more staff at the transfer station to monitor recycling. The sub-committee has not explored this issue in depth at this time. A 30% reduction in the trash loaded into the packer may free up some time for more monitoring of recycling but we cannot conclude with present data that it will obviate the need for an additional staffer.

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\(^7\) NRRA, *Pay As You Throw Summary*, Sept 10, 2002

\(^8\) Skumatz, et al, "Illegal Dumping...", 1994
The transfer station itself requires a separate review for infrastructure and design improvements that may be needed to accommodate increased recycling.