Case Study: Sandwich Pay-As-You-Throw (PAYT) Program

In a Pay-As-You-Throw (PAYT) solid waste program, residents purchase preprinted stickers or bags for disposal of trash, thereby paying directly for the amount of solid waste they generate. There is no direct fee for recycling.

Community Population: 21,774
Households Served: 5,500 (FY11)
Services Provided: Drop-off trash and dual-stream recycling at Transfer Station
Program Start Date: July 2011

Program Overview
- Residents pay $1.20 for each 30-gallon bag, $0.60 for each 15-gallon bag, and $0.25 for 8-gallon bags to offset the cost of trash disposal.
- Residents also purchase an annual sticker to access the transfer station. The sticker cost was $110 per year and was issued on a calendar year basis. When PAYT started, the sticker was extended 6 months, through June 30, 2012. The new sticker price, effective July 1, 2012, is $55.
- The average household spends less than $70.00 annually for PAYT trash bags.
- All residential trash must be in Town-approved bags. There is no limit to the number of PAYT bags a resident may purchase and use each week.
- The Town was awarded a PAYT start-up grant of $27,000 from MassDEP.

History
- The Town sends its solid waste to a waste-to-energy facility in Rochester, MA (the Covanta/SEMASS facility). Their 20-year contract will end in 2014; tip fees are expected to double or more after the contract expires. Adopting a unit-based pricing system has helped the Town absorb the impending cost increase through the reduction in trash generation.
- The Town Selectmen approved the PAYT program in 2011.
- Directly following the vote, the Town launched a campaign to educate and inform the public. The Town spent $2,000 on outreach efforts.
- The new program started in July 2011.
- The Town also started a fee system for bulky waste to cover disposal costs. The Town charges $10.00 per item for bulky waste and uses an automated dispenser at the Transfer Station for the stickers.

Implementation
- The PAYT bag vendor manufactures bags, warehouses inventory and delivers bags to stores. PAYT bags are sold at 13 local retailers but not at any municipal buildings.
- In the first six months, residents purchased 655 cases of 30-gallon bags (131,000 bags), 445 cases of 15-gallon bags (89,000 bags), and 99 cases of 8-gallon bags (19,800 bags).
- Retailers receive no mark up for selling bags.

Administration and Enforcement
- Enforcement involves monitors at the solid waste and recycling areas at the Transfer Station. The Transfer Station is typically staffed with 3-4 employees for approximately 775 visitors per day. The Town temporarily increased staff for start-up but has not added any permanent positions due to PAYT.
- Solid Waste operations are more efficient due to reduced equipment usage and fewer solid waste hauls made by the Town. The Town transports its solid waste with
trailers to the Upper Cape Regional Transfer Station, where it is loaded onto the Mass Coastal trains. Recycling contractors pick up recyclable material at the Sandwich Transfer Station. The Town upgraded its recycling area and equipment to better accommodate increased recycling.

- All PAYT bag revenue currently goes into the General Fund. The Town will start a Solid Waste Enterprise Account July 1, 2012.
- The Town of Sandwich has noticed no increase in illegal dumping in isolated areas in town since the implementation of PAYT. Lock bars on some of the Town and commercial dumpsters have deterred illegal dumping in these containers.

Additional Waste Services
- Bulky items, white goods, TVs, monitors and CRT items cost $10.00 for disposal.
- Hazardous waste collection days are held on a quarterly basis.
- Yard waste disposal allowed at Transfer Station throughout year. Compost available for residents in spring.

Successes

<table>
<thead>
<tr>
<th>Waste Reduction in First Six Months (July 2011 - December 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recycling:</strong></td>
</tr>
<tr>
<td>- Commingled up from 211 to 347 tons (up 65%)</td>
</tr>
<tr>
<td>- Fiber up from 417 to 569 tons (up 36%)</td>
</tr>
<tr>
<td><strong>Solid waste:</strong></td>
</tr>
<tr>
<td>- Solid waste down from 2,728 to 1,605 tons (down 41%)</td>
</tr>
<tr>
<td>- Bulky waste down from 399 to 91 tons (down 73%)</td>
</tr>
</tbody>
</table>

Financial Results for First Six Months
- Net bag revenue = $127,000
- Solid waste disposal savings at $58/ton including transportation ($65,000).
- Bulky waste disposal savings at $75/ton ($18,600).

Other Positive Outcomes
- Traffic is down 20% at Transfer Station
- Trailer trips are down 39% for solid waste & 73% for bulky waste
- Usage hours of equipment (e.g., backhoe, loader) is significantly down
- No longer need additional staff during peak periods (e.g., holidays)
- Distributed over 2,500 recycling bins and 300 compost bins

For More Information
- Sandwich DPW: (508) 833-8002
- Web site: [www.sandwichma.org](http://www.sandwichma.org)