Case Study: Duxbury
Pay-As-You-Throw (PAYT) Drop-off Program

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

Community Population: 15,330
Households Served: 4,400
Services Provided: Drop-off trash and recycling

Program Overview
- Duxbury operates a municipal solid waste transfer station; residents pay a $25 annual fee to dispose of solid waste, recyclables, and a range of other materials.
- Residents and municipal officials in Duxbury know the Pay-As-You-Throw program as Save-As-You-Throw (SAYT). They chose this term to bring focus to the fact that unit-based pricing of trash disposal saves residents and the municipality on solid waste costs.
- This program requires all trash be placed in Duxbury SAYT bags in order to be accepted for disposal at the Duxbury Transfer Station. Two bag sizes were approved by the BOS, a 33 gallon which is sold for $1.50 and a 13 gallon bag which is sold for $1.00.
- Town employees haul trash to Covanta Energy/SEMASS in Rochester, MA.
- Single stream recycling materials collected at the transfer station are compacted and hauled to the Materials Recovery Facility (MRF) in North Andover, by Integrated Paper.

History
- Upon the recommendation of the Transfer Station Advisory Committee, changes were made in the Fall of 2007 at the transfer station in order to improve recycling, accommodate single stream recycling and facilitate better traffic flow through the facility in anticipation of a SAYT program.
- The Duxbury Board of Selectmen (BOS) voted to approve the unit-based pricing program on November 19, 2007 after conducting two public hearings.
- The SAYT program commenced April 1, 2008.

Implementation
- The bag vendor manufactures bags, warehouses inventory, and delivers official trash bags to stores. They also handle the billing and send revenues to the town on a monthly basis.
- Bags are distributed through 12 local retailers.
- Duxbury utilizes a hybrid finance mechanism for its unit-based pricing program.
- The flat fee charged to all participating households was reduced from $118/year to $25/year (still true in FY10) with the SAYT program.
- The flat fee generates approximately $110,000 in revenue and is supplemented by approximately $200,000 from the tax base to cover the fixed costs related to solid waste management in the Town of Duxbury. Prior to SAYT, the amount contributed from the tax base was approximately $500,000.
- SAYT net bag revenues (bag sales minus bag costs) cover disposal costs for solid waste generated.

Calculating Bag Fees
- The cost for disposal of waste at Covanta Energy SEMASS was approximately $95/ton in FY08. The costs were approximately $99/ton and $102.50/ton in FY09 and FY10, respectively. In FY08, this equated to $.048 lb. for trash.
- Analysis of average bag weight showed a 33 gallon bag averages 25 lbs. and a 13 gallon bag averages 15 lbs.
- The bags net the Town of Duxbury about $431,750 after deducting production, inventory and management fees charged by the bag vendor.
- Revenues from the sale of bags go into the General Fund.
Administration & Enforcement

- During the first few months of the SAYT Program, the Department of Public Works worked closely with residents to educate them on reducing waste and to minimize non-conformance.
- Extra personnel were assigned to monitor compliance at the transfer station.
- Signage was placed at the transfer station one month prior to start-up (March 2008) to notify residents of the coming change.
- Compliance is enforced through the Town of Duxbury’s Progressive Disciplinary Action Plan involving a verbal warning for the first offense, a written warning for the second offense and revocation of the transfer station sticker for the third offense.

Additional Waste/Recycling Services

The transfer station accepts a wide range of other separated materials for recycling or reuse, as listed below. There is no additional charge to residents to drop off these items, except as noted:

<table>
<thead>
<tr>
<th>Bulky Items</th>
<th>Appliances/White Goods</th>
<th>Electronics, CRT’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing and Textiles</td>
<td>Propane Tanks</td>
<td>Oil Paints</td>
</tr>
<tr>
<td>Motor Oil Tires</td>
<td>Scrap Metal</td>
<td>Car Batteries</td>
</tr>
<tr>
<td>Yard Waste</td>
<td>Christmas Trees</td>
<td>Fluorescent Bulbs</td>
</tr>
<tr>
<td>Swap Shop</td>
<td>Books</td>
<td></td>
</tr>
<tr>
<td>Construction &amp; Demolition Debris (with appropriate fee)</td>
<td>Thermometer, thermostat exchange program</td>
<td>Household Hazardous Spring and Fall Waste Days (with appropriate fee)</td>
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