January 2016 • Volume 1 • Number 13

MMA Policy Committee on Energy and the Environment Best Practice Recommendation: Solid Waste Management Master Plan

BEST PRACTICE: Develop an Integrated Solid Waste Master Plan that includes projected capital and operating costs, fees and other revenue enhancements, a schedule of feasibility studies, and goals for solid waste reduction and increased recycling rates.

MassRecycle and the Massachusetts Department of Environmental Protection's Solid Waste Division both recommend Recycling and Waste Management Best Management Practices that should be considered when drafting an Integrated Solid Waste Master Plan. Key provisions include:

Automated pickup: Residents are provided with specially designed carts that are emptied by an automated vehicle. This vehicle uses a mechanical arm to pick up the cart and dump the contents. Carts range in size from 32 to 95 gallons, with most communities using 64- or 95-gallon carts. In a semi-automated collection program, the driver or attendant manually positions the cart for the lift-arm and pulls a lever to tip the cart. A number of communities in Massachusetts have converted to a two-cart system; one for trash and one for mixed (single-stream) recyclables. Others are using a cart system for single-stream recyclables only, while residents use traditional trashcans for waste. In some communities, trash is collected in a cart, and recyclables are collected in the traditional dual stream method with curbside recycling bins. Automated pickup can increase recycling rates, reduce labor costs and worker compensation claims, and reduce overall costs.

Single-stream recycling: With single-stream, residents place all recyclables (paper and containers) into one bin. The mixed materials are then sent to a single-stream materials recovery facility, where sophisticated sorting technology separates the paper from the containers. The container stream is sorted into the separate commodity streams as described above. Many communities have found increased recycling rates and lower waste disposal rates by employing single stream, especially when combined with automated pick up.

Pay as You Throw: Approximately 124 municipalities (with a total population of 1.5 million) have adopted PAYT. Some PAYT communities allow residents to dispose of one container of trash without paying, but charge for disposal of additional containers, and others charge for all waste disposal. By charging residents per container of trash, PAYT programs offer economic incentives that have substantially increased residential recycling rates and reduced the quantities of waste that need to be disposed of. Some communities have experienced a 50 percent reduction in household waste and reduced tipping fees, transfer station fees and out-of-region shipping fees. These communities

have also benefitted from increased revenues from recycled materials and increased regional employment in the recycling/manufacturing/reuse sector, all while decreasing their need for new landfill space or incinerator capacity.

As disposal costs continue to rise, an Integrated Solid Waste Master Plan incorporating education, incentives and new technologies can result in a dramatic increase in recycling rates and a significant decrease in disposal costs.

Resources

Massachusetts Department of Environmental Protection:

- Solid Waste Master Plan
- www.mass.gov/eea/agencies/massdep/recycle/reports/solid-waste-master-plan.html
- Recycling and Related Resources
- www.mass.gov/eea/agencies/massdep/recycle/reduce/assistance-for-municipalities.html
- Contracting
- www.mass.gov/eea/agencies/massdep/recycle/reduce/assistance-for-municipalities.html#4
- Public Events Recycling and Composting
- www.mass.gov/eea/agencies/massdep/recycle/reduce/assistance-for-municipalities.html#5
- Mandatory Recycling
- www.mass.gov/eea/agencies/massdep/recycle/reduce/mandatory-recycling.html
- Pay As You Throw
- www.mass.gov/eea/agencies/massdep/recycle/reduce/pay-as-you-throw-payt.html
- Waste Reduction Toolkit
- www.mass.gov/eea/agencies/massdep/recycle/reduce/municipal-waste-reduction-toolkit.html
- U.S. Environmental Protection Agency:
- EPA Integrated Solid Waste Plan
- www3.epa.gov/climatechange/wycd/waste/downloads/overview.pdf