Town of Lincoln
Department of Public Works

***Transfer Station Operation***

Presentation

Please Recycle
General Over-View of Current DPW & Transfer Station Materials Management

1. **Transfer Station** (Open Wed. & Sat. 7:30 a.m.-3:30 p.m.)
   A. Accept Municipal Solid Waste (MSW)
   B. Accept Recyclable Materials
      i. Glass
      ii. Single Stream
         a. Paper & Cardboard
         b. Plastic Containers
         c. Metal Containers
      iii. Scrap Metals
      iv. Food Waste Compost (New Trial Period)
   C. Other Services
      i. Swap Table and Shed
      ii. 5 Cent Bottle & Can Deposits (proceeds are deposited into Towns Recycling Fund)
      iii. Fluorescent Light Collection, Button Batteries, Mercury
      iv. White Goods Collection (refrigerators, air conditioners, empty propane tanks)
      v. Electronics Collection
      vi. Donated Clothing Drop-off
2. **DPW Yard** (Open Monday-Friday 7:30 a.m.-3:00 p.m. & first Saturday of each month 7:30 a.m.-3:30 p.m.)
   A. Brush, Yard Waste & Christmas Trees
   B. Materials Available for Residents
      i. Compost Bins
      ii. Sand for Snow & Ice
      iii. Firewood (When Available)
      iv. Wood Chips (When Available)
      v. Compost (When Available)
Some Transfer Station Facts:

- Open 7:30 AM to 3:30 PM Wednesday and Saturday
- Typically Staffed by 1 DPW Employee on Wednesday and 2 on Saturday as well as Recycling Committee Volunteers.
- Major Function to accept **MSW** and **Recyclables**
- MSW (Municipal Solid Waste) is defined as “The Refuse generated by the day-to-day activities of a household.” It does not include waste generated by other activities such as industrial or commercial activities. Additionally, building and hazardous wastes and recyclable materials are not accepted.
- MSW is hauled to Wheelabrator in North Andover via a DPW Roll-off truck. Material is dumped onto the tipping floor where it is then processed for incineration.
- Lincoln is part of a 5 year Regional Service Agreement with Wheelabrator,
- Recyclables are hauled by Waste Management (WM) of Billerica under a 5 year contract from 2019 to 2024.
- Electronics, “White Goods” and clothing are processed by separate vendors.
- Volunteers help with swap table.

**Waste Disposal Cost/Ton**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Cost/Ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$69.54</td>
</tr>
<tr>
<td>2019</td>
<td>$67.84</td>
</tr>
<tr>
<td>2018</td>
<td>$66.19</td>
</tr>
<tr>
<td>2017</td>
<td>$64.58</td>
</tr>
<tr>
<td>2016</td>
<td>$63.00</td>
</tr>
</tbody>
</table>

**Yearly Waste Disposal Costs**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$63,800</td>
</tr>
<tr>
<td>2017</td>
<td>$52,600</td>
</tr>
<tr>
<td>2016</td>
<td>$69,400</td>
</tr>
<tr>
<td>2015</td>
<td>$68,400</td>
</tr>
<tr>
<td>2014</td>
<td>$68,000</td>
</tr>
</tbody>
</table>
5 Year Contract amendment signed in April 2019 with Waste Management, Inc. for (1) hauling and (2) processing of recyclable materials.

**Recycling Costs (Waste Management)**

<table>
<thead>
<tr>
<th>FY</th>
<th>(1) Hauling Costs* (per haul)</th>
<th>(2) Processing Costs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$228 MSW</td>
<td>Standard fee of $100 per ton - less the value of materials</td>
</tr>
<tr>
<td></td>
<td>$189 Single</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$260 Glass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$164 Metal</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>$221 MSW</td>
<td>Standard fee of $100 per ton - less the value of materials</td>
</tr>
<tr>
<td></td>
<td>$183 Single</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$252 Glass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$159 Metal</td>
<td></td>
</tr>
</tbody>
</table>

* Under current contract, both hauling and processing costs will be increased by 5% per year.
# Current Recycling Material Values

<table>
<thead>
<tr>
<th>Recycled Material</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardboard</td>
<td>$35/ Ton</td>
</tr>
<tr>
<td>Mixed Paper</td>
<td>$0 / Ton</td>
</tr>
<tr>
<td>Aluminum</td>
<td>$1,040/ Ton</td>
</tr>
<tr>
<td>Plastic</td>
<td>$430/ Ton</td>
</tr>
<tr>
<td>Glass</td>
<td>-$59/ Ton</td>
</tr>
</tbody>
</table>
Town of Lincoln
Department of Public Works

Recycling Costs (other)

- Electronics and White Goods recycling by East Coast Recycling

**FY 2019 Current Costs**

<table>
<thead>
<tr>
<th>Electronics</th>
<th>White Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,250 per swap</td>
<td>$300 per swap/$7 each</td>
</tr>
</tbody>
</table>

- Fluorescent lights, button batteries and mercury are recycled by Veolia with Town being reimbursed. FY2018 reimbursement = $1,140.

- Clothing/Textile pick up by American Red Cross free of charge.
**Town of Lincoln**  
**Department of Public Works**

## Historic MSW vs. Recycling Costs

### MSW

<table>
<thead>
<tr>
<th>FY</th>
<th>Hauling</th>
<th>Processing</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$22,600</td>
<td>$63,800</td>
<td>$86,400</td>
</tr>
<tr>
<td>2017</td>
<td>$17,800</td>
<td>$52,600</td>
<td>$70,400</td>
</tr>
</tbody>
</table>

### RECYCLING

<table>
<thead>
<tr>
<th>FY</th>
<th>Hauling</th>
<th>Processing</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$18,700</td>
<td>$27,400</td>
<td>$46,100</td>
</tr>
<tr>
<td>2017</td>
<td>$22,200</td>
<td>$23,000</td>
<td>$45,200</td>
</tr>
</tbody>
</table>
Town of Lincoln
Department of Public Works

Source: MassDEP

Town of Lincoln Recycling Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Recycling Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>39.4</td>
</tr>
<tr>
<td>2017</td>
<td>42.3</td>
</tr>
<tr>
<td>2016</td>
<td>42.9</td>
</tr>
<tr>
<td>2015</td>
<td>36.5</td>
</tr>
<tr>
<td>2014</td>
<td>38.2</td>
</tr>
</tbody>
</table>
• **Goals:**
  - Improve Customer Service
  - Improve Customer Education
  - Provide an Improved Experience
  - Increase Town Recycling Rate
  - Formalize Transfer Station Operating Rules and Regulations
Town of Lincoln  
Department of Public Works

Transfer Station Improvements

- New Swap Shed
- Convert existing Swap Shed into Recycling Center
- Continue to update Town Website and Links
- Work to Formalize / Adopt Transfer Station Rules and Regulations:
  - Modernize stickers with renewal every 2 years
  - Review User List to Ensure Residential Use Only
New Swap Shed

- Larger Shed (Currently under Construction)
- Ability to House Materials Longer
- More Streamline Operation
Town of Lincoln
Department of Public Works

Existing Swap Shed Converted into a Dedicated Recycling Shed

- Area for Recycling News & Education
- Dedicated Recycling area
New Food Composting Program
Town of Lincoln
Department of Public Works

Update Sticker System

- Better Sticker Location on Vehicle
- Possible Updated, Electronic System

Possible Location of Transfer Station / Recycling Sticker
WHERE DOES OUR RECYCLING GO?

***GLASS***

Lincoln Transfer Station

Patriot Recycling
Raynham, MA

Crushed & Screened

Consumer
• Landfill Capping
• Road Base Material
WHERE DOES OUR RECYCLING GO?

PLASTICS

Lincoln Transfer Station

Waste Management, Billerica, MA

• PET
  Mohawk Industries, GA

• PP and HDPE
  KW Plastics, NC

• Plastic Bottles
• Plastic Decking
• Carpeting
• Fleece
WHERE DOES OUR RECYCLING GO?

ALUMINUM & TIN

Lincoln Transfer Station

Waste Management MRF
Billerica, MA

Aluminum

Aluminum Sheets
Cans

Constellium Netherlands
Schupin, Wixom, MI

Tin

Domestic Densifiers

Steel Mills for
Low-grade Appliances
WHERE DOES OUR RECYCLING GO?

***PAPER***

Lincoln Transfer Station

Waste Management MRF
Billerica, MA

Cardboard

Mixed Paper

Linerboard
Boxboard
Cardboard Cores

Regional Mills
(Rand Whitney, Sunoco)
Newsprint
Medium & Deluxe Board
Town of Lincoln
Department of Public Works

Municipal Solid Waste

Trash Hopper #1
(Old Commercial Hopper)

Trash Hopper #2
Town of Lincoln
Department of Public Works

Recycling

Glass
Town of Lincoln
Department of Public Works

Recycling

Co-mingled Compactor
Town of Lincoln
Department of Public Works
Recycling

White Goods & Electronic Bins, Clothing Drop-off

Electronics

White Goods
Town of Lincoln
Department of Public Works

Recycling

Scrap Metals