Advancing Sustainable Materials Management: 2018 Tables and Figures
Assessing Trends in Materials Generation and Management in the United States
December 2020
List of Tables

<table>
<thead>
<tr>
<th>Table Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Materials Generated* in the Municipal Waste Stream, 1960 to 2018</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Materials Recycled,* Composted and Managed by Other Food Pathways in the Municipal Waste Stream, 1960 to 2018</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Paper and Paperboard Products In MSW, 2018</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Glass Products in MSW, 2018</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>Metal Products in MSW, 2018</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>Plastics in Products In MSW, 2018</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>Rubber and Leather Products In MSW, 2018</td>
<td>12</td>
</tr>
<tr>
<td>10</td>
<td>Products Generated* in the Municipal Waste Stream, 1960 to 2018</td>
<td>13</td>
</tr>
<tr>
<td>11</td>
<td>Products Recycled,* Composted and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 TO 2018</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>Products Landfilled* in the Municipal Waste Stream, 1960 to 2018</td>
<td>17</td>
</tr>
<tr>
<td>14</td>
<td>Products Generated* in the Municipal Waste Stream, 1960 to 2018 (With Detail On Durable Goods)</td>
<td>18</td>
</tr>
<tr>
<td>15</td>
<td>Products Recycled,* Composted and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 TO 2018 (With Detail on Durable Goods)</td>
<td>19</td>
</tr>
<tr>
<td>16</td>
<td>Products Combusted with Energy Recovery* in the Municipal Waste Stream, 1960 to 2018 (With Detail on Durable Goods)</td>
<td>21</td>
</tr>
<tr>
<td>18</td>
<td>Products Generated* in the Municipal Waste Stream, 1960 to 2018 (With Detail on Nondurable Goods)</td>
<td>24</td>
</tr>
<tr>
<td>19</td>
<td>Products Recycled,* Composted and Managed By Other Food Pathways In The Municipal Solid Waste Stream, 1960 To 2018 (With Detail on Nondurable Goods)</td>
<td>26</td>
</tr>
<tr>
<td>20</td>
<td>Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2018 (With Detail on Nondurable Goods)</td>
<td>27</td>
</tr>
<tr>
<td>21</td>
<td>Products Landfilled* in Municipal Solid Waste, 1960 to 2018 (With Detail on Nondurable Goods)</td>
<td>31</td>
</tr>
</tbody>
</table>
List of Tables (Continued)

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Products Generated* in the Municipal Waste Stream, 1960 to 2018 (With Detail on Containers and Packaging)</td>
<td>33</td>
</tr>
<tr>
<td>23</td>
<td>Products Generated* in the Municipal Waste Stream, 1960 to 2018 (With Detail on Containers and Packaging)</td>
<td>35</td>
</tr>
<tr>
<td>24</td>
<td>Products Recycled,* Composted and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 To 2018 (With Detail On Containers And Packaging)</td>
<td>37</td>
</tr>
<tr>
<td>25</td>
<td>Products Recycled,* Composted and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 To 2018 (With Detail on Containers and Packaging)</td>
<td>39</td>
</tr>
<tr>
<td>26</td>
<td>Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2018 (With Detail on Containers and Packaging)</td>
<td>41</td>
</tr>
<tr>
<td>27</td>
<td>Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2018 (With Detail on Containers and Packaging)</td>
<td>43</td>
</tr>
<tr>
<td>28</td>
<td>Products Landfilled* in Municipal Solid Waste, 1960 to 2018 (With Detail on Containers and Packaging)</td>
<td>45</td>
</tr>
<tr>
<td>29</td>
<td>Products Landfilled* in Municipal Solid Waste, 1960 to 2018 (With Detail on Containers and Packaging)</td>
<td>47</td>
</tr>
<tr>
<td>30</td>
<td>Selected Examples of Source Reduction Practices</td>
<td>48</td>
</tr>
<tr>
<td>31</td>
<td>Households with Residential Food Collection Programs in the U.S., 2018*</td>
<td>50</td>
</tr>
<tr>
<td>32</td>
<td>Material Recovery Facilities (MRF), 2018*</td>
<td>51</td>
</tr>
<tr>
<td>33</td>
<td>Municipal Waste-To-Energy Projects, 2018</td>
<td>52</td>
</tr>
<tr>
<td>34</td>
<td>Landfill Facilities, 2018</td>
<td>53</td>
</tr>
</tbody>
</table>
# List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Municipal Solid Waste in the Universe of Subtitle D Wastes</td>
<td>55</td>
</tr>
<tr>
<td>2</td>
<td>Definition of Terms</td>
<td>56</td>
</tr>
<tr>
<td>3</td>
<td>Paper and Paperboard Products Generated in MSW, 2018</td>
<td>57</td>
</tr>
<tr>
<td>4</td>
<td>Paper and Paperboard Generation and Recycling, 1960 to 2018</td>
<td>58</td>
</tr>
<tr>
<td>5</td>
<td>Glass Products Generated in MSW, 2018</td>
<td>59</td>
</tr>
<tr>
<td>6</td>
<td>Glass Generation and Recycling, 1960 to 2018</td>
<td>60</td>
</tr>
<tr>
<td>7</td>
<td>Metal Products Generated in MSW, 2018</td>
<td>61</td>
</tr>
<tr>
<td>8</td>
<td>Metals Generation and Recycling, 1960 to 2018</td>
<td>62</td>
</tr>
<tr>
<td>9</td>
<td>Plastics Products Generated in MSW, 2018</td>
<td>63</td>
</tr>
<tr>
<td>10</td>
<td>Plastics Generation and Recycling, 1960 to 2018</td>
<td>64</td>
</tr>
<tr>
<td>11</td>
<td>Generation of Materials in MSW, 1960 to 2018*</td>
<td>65</td>
</tr>
<tr>
<td>12</td>
<td>Recycled, Composted, Managed By Other Food Pathways, Combustion with Energy Recovery and Landfilling of Materials in MSW, 1960 to 2018</td>
<td>66</td>
</tr>
<tr>
<td>13</td>
<td>Materials Recycling, Composting and Other Food Management in MSW,* 2018</td>
<td>67</td>
</tr>
<tr>
<td>14</td>
<td>Materials Generated, Combusted with Energy Recovery and Landfilled in MSW, 2018</td>
<td>68</td>
</tr>
<tr>
<td>15</td>
<td>Generation of Products in MSW, 1960 to 2018*</td>
<td>69</td>
</tr>
<tr>
<td>16</td>
<td>Nondurable Goods Generated, Recycled, Combusted with Energy Recovery and Landfilled in Municipal Solid Waste, 2018</td>
<td>70</td>
</tr>
<tr>
<td>17</td>
<td>Containers and Packaging Materials Generated, Recycled, Combusted with Energy Recovery and Landfilled in Municipal Solid Waste, 2018</td>
<td>71</td>
</tr>
<tr>
<td>18</td>
<td>Containers and Packaging Products Generated, Recycled, Combusted with Energy Recovery and Landfilled in Municipal Solid Waste, 2018</td>
<td>72</td>
</tr>
<tr>
<td>19</td>
<td>Diagram of Solid Waste Management</td>
<td>73</td>
</tr>
<tr>
<td>20</td>
<td>States with Bottle Deposit Rules</td>
<td>74</td>
</tr>
<tr>
<td>21</td>
<td>Estimated MRF Throughput, 2018*</td>
<td>75</td>
</tr>
<tr>
<td>22</td>
<td>Mixed Waste Processing Estimated Throughput, 2018*</td>
<td>76</td>
</tr>
<tr>
<td>23</td>
<td>MSW Composting Throughput, 2018*</td>
<td>77</td>
</tr>
<tr>
<td>24</td>
<td>Yard Trimmings Composting Facilities, 2018*</td>
<td>78</td>
</tr>
<tr>
<td>25</td>
<td>Municipal Waste-To-Energy Capacity, 2018</td>
<td>79</td>
</tr>
<tr>
<td>26</td>
<td>Number of Landfills in the U.S., 2018</td>
<td>80</td>
</tr>
</tbody>
</table>

*Estimated
## Table 1. Materials Generated* in the Municipal Waste Stream, 1960 to 2018
(In thousands of tons and percent of total generation)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total MSW Generated</strong></td>
<td>88,120</td>
<td>121,060</td>
<td>151,640</td>
<td>208,270</td>
<td>243,450</td>
<td>253,730</td>
<td>251,050</td>
<td>262,110</td>
<td>268,660</td>
<td>292,360</td>
</tr>
<tr>
<td><strong>Other Wastes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food*</td>
<td>12,200</td>
<td>12,800</td>
<td>13,000</td>
<td>23,230</td>
<td>30,700</td>
<td>32,930</td>
<td>35,740</td>
<td>39,730</td>
<td>40,670</td>
<td>63,130</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>20,000</td>
<td>23,200</td>
<td>27,500</td>
<td>35,000</td>
<td>30,530</td>
<td>32,070</td>
<td>33,400</td>
<td>34,720</td>
<td>35,180</td>
<td>35,400</td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>1,300</td>
<td>1,780</td>
<td>2,250</td>
<td>2,900</td>
<td>3,500</td>
<td>3,690</td>
<td>3,840</td>
<td>3,990</td>
<td>4,040</td>
<td>4,070</td>
</tr>
<tr>
<td><strong>Total Other Wastes</strong></td>
<td>33,500</td>
<td>37,780</td>
<td>42,750</td>
<td>61,760</td>
<td>64,730</td>
<td>68,690</td>
<td>72,980</td>
<td>78,440</td>
<td>79,890</td>
<td>102,600</td>
</tr>
<tr>
<td><strong>Total Materials in Products</strong></td>
<td>54,620</td>
<td>83,280</td>
<td>108,890</td>
<td>146,510</td>
<td>178,720</td>
<td>185,040</td>
<td>187,070</td>
<td>183,670</td>
<td>188,770</td>
<td>189,760</td>
</tr>
</tbody>
</table>

### Percent of Total Generation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total MSW Generated - %</strong></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Generation before materials are recycled, composted, managed by other food pathways, combusted with energy recovery or landfilled. Does not include construction & demolition debris, industrial process wastes or certain other wastes.

** Includes electrolytes in batteries and fluff pulp, feces and urine in disposable diapers.

^ In 2018, the food waste measurement methodology was expanded to include additional sources of generation and management pathways beyond composting, combustion with energy recovery and landfiling. Please see [https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data.](https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data.)

¥ Generation rose considerably from 2017 to 2018 mainly because EPA enhanced its food measurement methodology to more fully account for all the ways wasted food is managed throughout the food system.
Table 2. Materials Recycled,* Composted and Managed by Other Food Pathways in the Municipal Waste Stream, 1960 to 2018
(In thousands of tons and percent of generation of each material)

<table>
<thead>
<tr>
<th>Materials</th>
<th>Recycled</th>
<th>Composted</th>
<th>Other Food Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper and Paperboard</td>
<td>5,080</td>
<td>6,770</td>
<td>11,740</td>
</tr>
<tr>
<td>Glass</td>
<td>100</td>
<td>160</td>
<td>750</td>
</tr>
<tr>
<td>Metals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ferrous</td>
<td>50</td>
<td>150</td>
<td>370</td>
</tr>
<tr>
<td>Aluminum</td>
<td>Neg.</td>
<td>10</td>
<td>310</td>
</tr>
<tr>
<td>Other Nonferrous</td>
<td>Neg.</td>
<td>320</td>
<td>540</td>
</tr>
<tr>
<td>Total Metals</td>
<td>50</td>
<td>480</td>
<td>1,220</td>
</tr>
<tr>
<td>Plastics</td>
<td>Neg.</td>
<td>Neg.</td>
<td>20</td>
</tr>
<tr>
<td>Rubber and Leather</td>
<td>330</td>
<td>250</td>
<td>130</td>
</tr>
<tr>
<td>Textiles</td>
<td>50</td>
<td>60</td>
<td>160</td>
</tr>
<tr>
<td>Wood</td>
<td>Neg.</td>
<td>Neg.</td>
<td>130</td>
</tr>
<tr>
<td>Other **</td>
<td>Neg.</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>Total MSW recycled</td>
<td>5,610</td>
<td>8,020</td>
<td>14,520</td>
</tr>
</tbody>
</table>

Composted

<table>
<thead>
<tr>
<th>Materials</th>
<th>Food - composted</th>
<th>Yard Trimmings - composted</th>
<th>Misc. Inorganic Wastes - composted</th>
<th>Total - composted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food*</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>4,200</td>
</tr>
</tbody>
</table>

Other Food Management

<table>
<thead>
<tr>
<th>Materials</th>
<th>Food - animal feed</th>
<th>Food - bio-based materials/biochemical processing</th>
<th>Food – codigestion/anaerobic digestion</th>
<th>Food - donation</th>
<th>Food - land application</th>
<th>Food – sewer/wastewater treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Food – other food management</td>
<td>1,820</td>
<td>1,840</td>
<td>5,260</td>
<td>4,790</td>
<td>260</td>
<td>3,740</td>
</tr>
<tr>
<td>Total MSW Recycled and Composted - Weight</td>
<td>5,610</td>
<td>8,020</td>
<td>14,520</td>
<td>33,240</td>
<td>69,460</td>
<td>79,790</td>
</tr>
<tr>
<td>Total MSW Recycled, Composted and Other Food Management - Weight</td>
<td>111,690</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Materials</th>
<th>Percent of Generation of Each Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper and Paperboard</td>
<td>16.9%</td>
</tr>
<tr>
<td>Glass</td>
<td>1.5%</td>
</tr>
<tr>
<td>Metals</td>
<td></td>
</tr>
<tr>
<td>Ferrous</td>
<td>0.5%</td>
</tr>
<tr>
<td>Aluminum</td>
<td>Neg.</td>
</tr>
<tr>
<td>Other Nonferrous</td>
<td>Neg.</td>
</tr>
<tr>
<td>Total Metals</td>
<td>0.5%</td>
</tr>
<tr>
<td>Plastics</td>
<td>Neg.</td>
</tr>
<tr>
<td>Rubber and Leather</td>
<td>17.9%</td>
</tr>
<tr>
<td>Textiles</td>
<td>2.8%</td>
</tr>
<tr>
<td>Wood</td>
<td>Neg.</td>
</tr>
<tr>
<td>Other **</td>
<td>Neg.</td>
</tr>
<tr>
<td>Total Materials in Products – recycled</td>
<td>10.3%</td>
</tr>
</tbody>
</table>
### Table 2. Materials Recycled,* Composted and Managed by Other Food Pathways in the Municipal Waste Stream, 1960 to 2018

(In thousands of tons and percent of generation of each material)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Composted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - Composted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food^</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>2.2%</td>
<td>2.1%</td>
<td>2.7%</td>
<td>5.3%</td>
<td>6.3%</td>
<td>4.1%</td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings - Composted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>12.0%</td>
<td>51.7%</td>
<td>61.9%</td>
<td>57.5%</td>
<td>61.3%</td>
<td>69.4%</td>
<td>63.0%</td>
</tr>
<tr>
<td>Misc. Inorganic Wastes – composted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total – composted</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>6.8%</td>
<td>25.4%</td>
<td>29.9%</td>
<td>27.6%</td>
<td>29.8%</td>
<td>33.8%</td>
<td>24.3%</td>
</tr>
<tr>
<td><strong>Other Food Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Food Management¥</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - animal feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.9%</td>
</tr>
<tr>
<td>Food – bio-based materials/biochemical processing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.9%</td>
</tr>
<tr>
<td>Food – codigestion/anaerobic digestion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8.3%</td>
</tr>
<tr>
<td>Food - donation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7.6%</td>
</tr>
<tr>
<td>Food - land application</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.4%</td>
</tr>
<tr>
<td>Food – sewer/wastewater treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.9%</td>
</tr>
<tr>
<td>Total Food – other food management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28.1%</td>
</tr>
<tr>
<td><strong>Total MSW Recycled and Composted - %</strong></td>
<td></td>
<td>6.4%</td>
<td>6.6%</td>
<td>9.6%</td>
<td>16.0%</td>
<td>28.5%</td>
<td>31.4%</td>
<td>34.0%</td>
<td>34.7%</td>
<td>35.0%</td>
<td>32.1%</td>
</tr>
<tr>
<td><strong>Total MSW Recycled, Composted and Other Food Management - %</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>38.2%</td>
</tr>
</tbody>
</table>

---

* Recycling of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.

** Collection of electrolytes in batteries; probably not recycled.

Neg = Less than 5,000 tons or 0.05 percent.

^ Includes collection of other MSW organics for composting.

¥ In 2018, the food waste measurement methodology was expanded to include additional sources of generation and management pathways beyond composting, combustion with energy recovery and landfilling. Please see [https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data](https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data).
### Table 3. Materials Combusted with Energy Recovery* in the Municipal Waste Stream, 1960 to 2018
(In thousands of tons and percent of total combusted)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper and Paperboard</td>
<td>150</td>
<td>860</td>
<td>8,930</td>
<td>9,730</td>
<td>7,800</td>
<td>4,740</td>
<td>4,450</td>
<td>4,490</td>
<td>4,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glass</td>
<td>60</td>
<td>300</td>
<td>1,810</td>
<td>1,790</td>
<td>1,660</td>
<td>1,360</td>
<td>1,440</td>
<td>1,650</td>
<td>1,640</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ferrous</td>
<td>60</td>
<td>250</td>
<td>1,690</td>
<td>1,610</td>
<td>1,640</td>
<td>1,810</td>
<td>2,150</td>
<td>2,290</td>
<td>2,310</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum</td>
<td>0</td>
<td>30</td>
<td>300</td>
<td>390</td>
<td>410</td>
<td>440</td>
<td>510</td>
<td>550</td>
<td>560</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Nonferrous</td>
<td>0</td>
<td>20</td>
<td>60</td>
<td>50</td>
<td>50</td>
<td>60</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Metals</strong></td>
<td>60</td>
<td>300</td>
<td>2,050</td>
<td>2,050</td>
<td>2,100</td>
<td>2,310</td>
<td>2,720</td>
<td>2,910</td>
<td>2,950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastics</td>
<td>0</td>
<td>140</td>
<td>2,980</td>
<td>4,120</td>
<td>4,330</td>
<td>4,530</td>
<td>5,330</td>
<td>5,590</td>
<td>5,620</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber and Leather</td>
<td>10</td>
<td>70</td>
<td>830</td>
<td>1,970</td>
<td>2,110</td>
<td>1,910</td>
<td>2,520</td>
<td>2,490</td>
<td>2,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textiles</td>
<td>10</td>
<td>50</td>
<td>880</td>
<td>1,880</td>
<td>2,110</td>
<td>2,270</td>
<td>3,060</td>
<td>3,170</td>
<td>3,220</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood</td>
<td>10</td>
<td>150</td>
<td>2,080</td>
<td>2,290</td>
<td>2,270</td>
<td>2,310</td>
<td>2,570</td>
<td>2,880</td>
<td>2,840</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other **</td>
<td>0</td>
<td>30</td>
<td>410</td>
<td>540</td>
<td>510</td>
<td>540</td>
<td>670</td>
<td>670</td>
<td>660</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Materials in Products</strong></td>
<td>300</td>
<td>1,900</td>
<td>19,970</td>
<td>24,370</td>
<td>22,890</td>
<td>19,970</td>
<td>22,760</td>
<td>23,850</td>
<td>23,630</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Other Wastes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper and Paperboard</td>
<td>33.3%</td>
<td>31.2%</td>
<td>30.0%</td>
<td>28.8%</td>
<td>24.6%</td>
<td>16.2%</td>
<td>13.3%</td>
<td>13.1%</td>
<td>12.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glass</td>
<td>13.3%</td>
<td>10.9%</td>
<td>6.1%</td>
<td>5.3%</td>
<td>5.2%</td>
<td>4.6%</td>
<td>4.3%</td>
<td>4.8%</td>
<td>4.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ferrous</td>
<td>13.3%</td>
<td>9.0%</td>
<td>5.7%</td>
<td>4.8%</td>
<td>5.2%</td>
<td>6.2%</td>
<td>6.4%</td>
<td>6.7%</td>
<td>6.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum</td>
<td>0.0%</td>
<td>1.1%</td>
<td>1.0%</td>
<td>1.2%</td>
<td>1.3%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.6%</td>
<td>1.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Nonferrous</td>
<td>0.0%</td>
<td>0.7%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Metals</strong></td>
<td>13.3%</td>
<td>10.8%</td>
<td>6.9%</td>
<td>6.1%</td>
<td>6.6%</td>
<td>7.9%</td>
<td>8.1%</td>
<td>8.5%</td>
<td>8.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastics</td>
<td>Neg.</td>
<td>5.1%</td>
<td>10.0%</td>
<td>12.2%</td>
<td>13.7%</td>
<td>15.5%</td>
<td>15.9%</td>
<td>16.3%</td>
<td>16.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber and Leather</td>
<td>2.2%</td>
<td>2.5%</td>
<td>2.8%</td>
<td>5.9%</td>
<td>6.7%</td>
<td>6.5%</td>
<td>7.5%</td>
<td>7.3%</td>
<td>7.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textiles</td>
<td>2.2%</td>
<td>1.8%</td>
<td>2.9%</td>
<td>5.6%</td>
<td>6.7%</td>
<td>7.7%</td>
<td>9.1%</td>
<td>9.3%</td>
<td>9.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood</td>
<td>2.2%</td>
<td>5.4%</td>
<td>7.0%</td>
<td>6.8%</td>
<td>7.2%</td>
<td>7.9%</td>
<td>7.7%</td>
<td>8.4%</td>
<td>8.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other **</td>
<td>Neg.</td>
<td>1.1%</td>
<td>1.4%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>1.8%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>1.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Materials in Products</strong></td>
<td>66.6%</td>
<td>68.8%</td>
<td>67.1%</td>
<td>72.3%</td>
<td>72.3%</td>
<td>68.1%</td>
<td>67.9%</td>
<td>69.7%</td>
<td>68.4%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Other Wastes

<table>
<thead>
<tr>
<th>Materials</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>11.1%</td>
<td>9.4%</td>
<td>13.6%</td>
<td>17.3%</td>
<td>18.5%</td>
<td>21.0%</td>
<td>22.0%</td>
<td>21.8%</td>
<td>21.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>20.0%</td>
<td>20.0%</td>
<td>17.6%</td>
<td>8.5%</td>
<td>7.0%</td>
<td>8.6%</td>
<td>7.8%</td>
<td>6.2%</td>
<td>7.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>2.3%</td>
<td>1.8%</td>
<td>1.7%</td>
<td>1.9%</td>
<td>2.1%</td>
<td>2.3%</td>
<td>2.3%</td>
<td>2.3%</td>
<td>2.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Other Wastes</strong></td>
<td>33.4%</td>
<td>31.2%</td>
<td>32.9%</td>
<td>27.7%</td>
<td>27.7%</td>
<td>31.9%</td>
<td>32.1%</td>
<td>30.3%</td>
<td>31.6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total MSW Composted with Energy Recovery- %**

| | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| | | | | | | | | | | |
* Products and materials combusted with energy recovery estimated at percentage total MSW after recycling and composting. In 2018, 19.6 percent of MSW after recycling and composting was combusted with energy recovery except for major appliances, tires and lead-acid batteries (see Table 16 for details) and food (percentage distribution for food varies by generator sector, see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data). No combustion with energy recovery in 1960 (see Table 35). Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

** Includes electrolytes in batteries and fluff pulp, feces and urine in disposable diapers.

December 2020
### Table 4. Materials Landfilled* in the Municipal Waste Stream, 1960 to 2018
(In thousands of tons and percent of total landfilled)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper and Paperboard</td>
<td>24,910</td>
<td>37,390</td>
<td>42,560</td>
<td>43,570</td>
<td>40,450</td>
<td>35,080</td>
<td>22,000</td>
<td>18,280</td>
<td>18,350</td>
<td>17,220</td>
</tr>
<tr>
<td>Glass</td>
<td>6,620</td>
<td>12,520</td>
<td>14,080</td>
<td>8,660</td>
<td>8,100</td>
<td>8,290</td>
<td>7,030</td>
<td>6,840</td>
<td>7,580</td>
<td>7,550</td>
</tr>
<tr>
<td>Metals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ferrous</td>
<td>10,250</td>
<td>12,150</td>
<td>12,000</td>
<td>8,720</td>
<td>7,860</td>
<td>8,550</td>
<td>9,310</td>
<td>9,970</td>
<td>10,430</td>
<td>10,530</td>
</tr>
<tr>
<td>Aluminum</td>
<td>340</td>
<td>790</td>
<td>1,390</td>
<td>1,500</td>
<td>1,940</td>
<td>2,230</td>
<td>2,390</td>
<td>2,490</td>
<td>2,670</td>
<td>2,660</td>
</tr>
<tr>
<td>Other Nonferrous</td>
<td>180</td>
<td>350</td>
<td>600</td>
<td>310</td>
<td>490</td>
<td>530</td>
<td>520</td>
<td>660</td>
<td>730</td>
<td>740</td>
</tr>
<tr>
<td>Total Metals</td>
<td>10,770</td>
<td>13,290</td>
<td>13,990</td>
<td>10,530</td>
<td>10,290</td>
<td>11,310</td>
<td>12,220</td>
<td>13,120</td>
<td>13,830</td>
<td>13,930</td>
</tr>
<tr>
<td>Plastics</td>
<td>390</td>
<td>2,900</td>
<td>6,670</td>
<td>13,780</td>
<td>19,950</td>
<td>23,270</td>
<td>24,370</td>
<td>26,030</td>
<td>26,820</td>
<td>26,970</td>
</tr>
<tr>
<td>Rubber and Leather</td>
<td>1,510</td>
<td>2,710</td>
<td>4,000</td>
<td>4,590</td>
<td>3,880</td>
<td>4,130</td>
<td>4,400</td>
<td>4,490</td>
<td>4,950</td>
<td>4,990</td>
</tr>
<tr>
<td>Textiles</td>
<td>1,710</td>
<td>1,970</td>
<td>2,320</td>
<td>4,270</td>
<td>6,280</td>
<td>7,570</td>
<td>8,900</td>
<td>10,540</td>
<td>11,150</td>
<td>11,300</td>
</tr>
<tr>
<td>Wood</td>
<td>3,030</td>
<td>3,710</td>
<td>6,860</td>
<td>10,000</td>
<td>9,910</td>
<td>10,690</td>
<td>11,120</td>
<td>11,070</td>
<td>12,290</td>
<td>12,150</td>
</tr>
<tr>
<td>Other **</td>
<td>70</td>
<td>470</td>
<td>1,990</td>
<td>2,100</td>
<td>2,480</td>
<td>2,570</td>
<td>2,800</td>
<td>2,980</td>
<td>2,970</td>
<td>2,930</td>
</tr>
<tr>
<td>**Total Materials in Products</td>
<td>49,010</td>
<td>74,960</td>
<td>92,470</td>
<td>97,500</td>
<td>101,340</td>
<td>102,910</td>
<td>92,840</td>
<td>93,350</td>
<td>97,940</td>
<td>97,040</td>
</tr>
<tr>
<td>Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>12,200</td>
<td>12,750</td>
<td>12,740</td>
<td>19,800</td>
<td>24,200</td>
<td>26,370</td>
<td>28,620</td>
<td>30,250</td>
<td>30,630</td>
<td>35,280</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>20,000</td>
<td>23,110</td>
<td>26,950</td>
<td>25,560</td>
<td>11,900</td>
<td>9,990</td>
<td>11,690</td>
<td>10,800</td>
<td>8,650</td>
<td>10,530</td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>1,300</td>
<td>1,770</td>
<td>2,200</td>
<td>2,410</td>
<td>2,820</td>
<td>3,020</td>
<td>3,160</td>
<td>3,210</td>
<td>3,250</td>
<td>3,270</td>
</tr>
<tr>
<td><strong>Total Other Wastes</strong></td>
<td>33,500</td>
<td>37,630</td>
<td>41,890</td>
<td>47,770</td>
<td>38,920</td>
<td>39,380</td>
<td>43,470</td>
<td>44,260</td>
<td>42,530</td>
<td>49,080</td>
</tr>
<tr>
<td><strong>Total MSW Landfilled - Weight</strong></td>
<td>82,510</td>
<td>112,590</td>
<td>134,360</td>
<td>145,270</td>
<td>140,260</td>
<td>142,290</td>
<td>136,310</td>
<td>137,610</td>
<td>140,470</td>
<td>146,120</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper and Paperboard</td>
<td>30.2%</td>
<td>33.2%</td>
<td>31.7%</td>
<td>30.0%</td>
<td>28.8%</td>
<td>24.7%</td>
<td>16.1%</td>
<td>13.3%</td>
<td>13.1%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Glass</td>
<td>8.0%</td>
<td>11.1%</td>
<td>10.5%</td>
<td>6.0%</td>
<td>5.8%</td>
<td>5.8%</td>
<td>5.1%</td>
<td>5.0%</td>
<td>5.4%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Metals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ferrous</td>
<td>12.4%</td>
<td>10.8%</td>
<td>8.9%</td>
<td>6.0%</td>
<td>5.6%</td>
<td>6.0%</td>
<td>6.8%</td>
<td>7.2%</td>
<td>7.4%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Aluminum</td>
<td>0.4%</td>
<td>0.7%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.4%</td>
<td>1.6%</td>
<td>1.8%</td>
<td>1.9%</td>
<td>1.9%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Other Nonferrous</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>Total Metals</strong></td>
<td>13.0%</td>
<td>11.8%</td>
<td>10.3%</td>
<td>7.2%</td>
<td>7.3%</td>
<td>7.9%</td>
<td>9.0%</td>
<td>9.5%</td>
<td>9.8%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Plastics</td>
<td>0.5%</td>
<td>2.6%</td>
<td>5.0%</td>
<td>9.5%</td>
<td>14.2%</td>
<td>16.4%</td>
<td>17.9%</td>
<td>18.9%</td>
<td>19.1%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Rubber and Leather</td>
<td>1.8%</td>
<td>2.4%</td>
<td>3.0%</td>
<td>3.2%</td>
<td>2.8%</td>
<td>2.9%</td>
<td>3.2%</td>
<td>3.3%</td>
<td>3.5%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Textiles</td>
<td>2.1%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>2.9%</td>
<td>4.5%</td>
<td>5.3%</td>
<td>6.5%</td>
<td>7.7%</td>
<td>7.9%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Wood</td>
<td>3.7%</td>
<td>3.3%</td>
<td>5.1%</td>
<td>6.9%</td>
<td>7.1%</td>
<td>7.5%</td>
<td>8.2%</td>
<td>8.0%</td>
<td>8.7%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Other **</td>
<td>0.1%</td>
<td>0.4%</td>
<td>1.5%</td>
<td>1.4%</td>
<td>1.8%</td>
<td>1.8%</td>
<td>2.1%</td>
<td>2.2%</td>
<td>2.2%</td>
<td>2.0%</td>
</tr>
<tr>
<td>**Total Materials in Products</td>
<td>59.4%</td>
<td>66.6%</td>
<td>68.8%</td>
<td>67.1%</td>
<td>72.3%</td>
<td>72.3%</td>
<td>68.1%</td>
<td>67.9%</td>
<td>69.7%</td>
<td>66.4%</td>
</tr>
</tbody>
</table>

* Landfilling after recycling, composting, other food management pathways and combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes or certain other wastes. Details may not add to totals due to rounding.

** Includes electrolytes in batteries and fluff pulp, feces and urine in disposable diapers.
### Table 5. Paper and Paperboard Products In MSW, 2018
(In thousands of tons and percent of generation)

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Generation (Thousand tons)</th>
<th>Recycled (Thousand tons)</th>
<th>Recycled (Percent of generation)</th>
<th>Combusted with Energy Recovery (Thousand tons)</th>
<th>Landfilled (Thousand tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nondurable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers/Mechanical Papers†</td>
<td>5,050</td>
<td>3,270</td>
<td>64.8%</td>
<td>350</td>
<td>1,430</td>
</tr>
<tr>
<td>Books</td>
<td>690</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magazines</td>
<td>980</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office-type Papers*</td>
<td>3,970</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing Mail**</td>
<td>3,670</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Commercial Printing</td>
<td>2,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tissue Paper and Towels</td>
<td>3,790</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper Plates and Cups</td>
<td>1,420</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Nonpackaging Paper***</td>
<td>3,920</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Nondurable Goods</strong></td>
<td><strong>20,440</strong></td>
<td><strong>8,810</strong></td>
<td><strong>43.1%</strong></td>
<td><strong>2,280</strong></td>
<td><strong>9,350</strong></td>
</tr>
<tr>
<td><strong>Total Paper and Paperboard</strong></td>
<td><strong>25,490</strong></td>
<td><strong>12,080</strong></td>
<td><strong>47.4%</strong></td>
<td><strong>2,630</strong></td>
<td><strong>10,780</strong></td>
</tr>
<tr>
<td><strong>Containers and Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrugated Boxes</td>
<td>33,260</td>
<td>32,090</td>
<td>96.5%</td>
<td>230</td>
<td>940</td>
</tr>
<tr>
<td>Gable Top/Aseptic Cartons‡</td>
<td>630</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Folding Cartons</td>
<td>5,370</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Paperboard Packaging</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td>1,090</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Paper Packaging</td>
<td>1,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Containers and Packaging excluding Corrugated Boxes‡</strong></td>
<td><strong>8,640</strong></td>
<td><strong>1,800</strong></td>
<td><strong>20.8%</strong></td>
<td><strong>1,340</strong></td>
<td><strong>5,500</strong></td>
</tr>
<tr>
<td><strong>Total Paper and Paperboard</strong></td>
<td><strong>41,900</strong></td>
<td><strong>33,890</strong></td>
<td><strong>80.9%</strong></td>
<td><strong>1,570</strong></td>
<td><strong>6,440</strong></td>
</tr>
<tr>
<td><strong>Total Paper and Paperboard</strong></td>
<td><strong>67,390</strong></td>
<td><strong>45,970</strong></td>
<td><strong>68.2%</strong></td>
<td><strong>4,200</strong></td>
<td><strong>17,220</strong></td>
</tr>
</tbody>
</table>

† Starting in 2010, newsprint and groundwood inserts expanded to include directories and other mechanical papers previously counted as Other Commercial Printing.

* High-grade papers such as copy paper and printer paper; both residential and commercial.

** Formerly called Third Class Mail and Standard Mail by the U.S. Postal Service.

*** Includes paper in games and novelties, cards, etc.

‡ Includes milk, juice, and other products packaged in gable top cartons and liquid food aseptic cartons.

Neg. = Less than 5,000 tons or 0.05 percent.
### Table 6. Glass Products in MSW, 2018
(In thousands of tons and percent of generation)

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Generation (Thousand tons)</th>
<th>Recycled (Thousand tons)</th>
<th>Recycled (Percent of generation)</th>
<th>Composted with Energy Recovery (Thousand tons)</th>
<th>Landfilled (Thousand tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable Goods*</td>
<td>2,460</td>
<td>Neg.</td>
<td>Neg.</td>
<td>330</td>
<td>2,130</td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Bottles**</td>
<td>4,650</td>
<td>1,840</td>
<td>39.6%</td>
<td>550</td>
<td>2,260</td>
</tr>
<tr>
<td>Wine and Liquor Bottles</td>
<td>1,810</td>
<td>720</td>
<td>39.8%</td>
<td>210</td>
<td>880</td>
</tr>
<tr>
<td>Other Bottles and Jars</td>
<td>3,330</td>
<td>500</td>
<td>15.0%</td>
<td>550</td>
<td>2,280</td>
</tr>
<tr>
<td><strong>Total Glass Containers</strong></td>
<td>9,790</td>
<td>3,060</td>
<td>31.3%</td>
<td>1,310</td>
<td>5,420</td>
</tr>
<tr>
<td>Total Glass</td>
<td>12,250</td>
<td>3,060</td>
<td>25.0%</td>
<td>1,640</td>
<td>7,550</td>
</tr>
</tbody>
</table>

* Glass as a component of appliances, furniture, consumer electronics, etc.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks and ready-to-drink alcoholic coolers and cocktails.

Neg. = Less than 5,000 tons or 0.05 percent.

Details may not add to totals due to rounding.
Table 7. Metal Products in MSW, 2018  
(In thousands of tons and percent of generation)

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Generation (Thousand tons)</th>
<th>Recycled (Thousand tons)</th>
<th>Combusted with Energy Recovery (Thousand tons)</th>
<th>Landfilled (Thousand tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generation</td>
<td>Recycled</td>
<td>Combusted with Energy Recovery</td>
<td>Landfilled</td>
</tr>
<tr>
<td></td>
<td>(Thousand tons)</td>
<td>(Thousand tons)</td>
<td>(Percent of generation)</td>
<td>(Thousand tons)</td>
</tr>
<tr>
<td></td>
<td>Ferrous Metals*</td>
<td>16,990</td>
<td>4,730</td>
<td>27.8%</td>
</tr>
<tr>
<td></td>
<td>Aluminum**</td>
<td>1,750</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Lead†</td>
<td>1,710</td>
<td>1,690</td>
<td>98.8%</td>
</tr>
<tr>
<td></td>
<td>Other Nonferrous Metals‡</td>
<td>800</td>
<td>Neg.</td>
<td>Neg.</td>
</tr>
<tr>
<td></td>
<td>Total Metals in Durable Goods</td>
<td>21,250</td>
<td>6,420</td>
<td>30.2%</td>
</tr>
<tr>
<td></td>
<td>Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aluminum</td>
<td>220</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Containers and Packaging</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Steel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cans</td>
<td>1,580</td>
<td>1,120</td>
<td>70.9%</td>
</tr>
<tr>
<td></td>
<td>Other Steel Packaging</td>
<td>630</td>
<td>510</td>
<td>81.0%</td>
</tr>
<tr>
<td></td>
<td>Total Steel Packaging</td>
<td>2,210</td>
<td>1,630</td>
<td>73.8%</td>
</tr>
<tr>
<td></td>
<td>Aluminum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beer and Soft Drink Cans§</td>
<td>1,330</td>
<td>670</td>
<td>50.4%</td>
</tr>
<tr>
<td></td>
<td>Other Cans</td>
<td>80</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Foil and Closures</td>
<td>510</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Total Aluminum Packaging</td>
<td>1,920</td>
<td>670</td>
<td>34.9%</td>
</tr>
<tr>
<td></td>
<td>Total Metals in Containers and Packaging</td>
<td>4,130</td>
<td>2,300</td>
<td>35.7%</td>
</tr>
<tr>
<td></td>
<td>Total Metals</td>
<td>25,600</td>
<td>8,720</td>
<td>34.1%</td>
</tr>
<tr>
<td></td>
<td>Ferrous</td>
<td>19,200</td>
<td>6,360</td>
<td>33.1%</td>
</tr>
<tr>
<td></td>
<td>Aluminum</td>
<td>3,890</td>
<td>670</td>
<td>17.2%</td>
</tr>
<tr>
<td></td>
<td>Other nonferrous</td>
<td>2,510</td>
<td>1,690</td>
<td>67.3%</td>
</tr>
</tbody>
</table>

* Ferrous metals (iron and steel) in appliances, furniture, tires and miscellaneous durables.
** Aluminum in appliances, furniture and miscellaneous durables.
† Lead in lead-acid batteries.
‡ Other nonferrous metals in appliances and miscellaneous durables.
§ Aluminum can recycling does not include used beverage cans imported to produce new beverage cans.
NA = Not Available
Details may not add to totals due to rounding.
Table 8. Plastics in Products In MSW, 2018
(In thousands of tons and percent of generation by resin)

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Generation (Thousand tons)</th>
<th>Recycled * (Thousand tons)</th>
<th>Combusted with energy Recovery (Thousand tons)</th>
<th>Landfilled (Thousand tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET</td>
<td>660</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE</td>
<td>1,590</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVC</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDPE/LLDPE</td>
<td>2,130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>4,590</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>760</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other resins</td>
<td>3,780</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Plastics in Durable Goods</strong></td>
<td>13,690</td>
<td>930</td>
<td>6.8%</td>
<td>1,740</td>
</tr>
<tr>
<td><strong>Nondurable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic Plates and Cups§</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDPE/LLDPE</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLA</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>160</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>820</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Plastic Plates and Cups</strong></td>
<td>1,030</td>
<td>Neg.</td>
<td>Neg.</td>
<td>200</td>
</tr>
<tr>
<td>Trash Bags</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE</td>
<td>230</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDPE/LLDPE</td>
<td>1,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Trash Bags</strong></td>
<td>1,230</td>
<td></td>
<td></td>
<td>240</td>
</tr>
<tr>
<td>All other nondurables**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET</td>
<td>770</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE</td>
<td>690</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVC</td>
<td>270</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDPE/LLDPE</td>
<td>1,710</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLA</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>1,570</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other resins</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal All Other Nondurables</strong></td>
<td>5,200</td>
<td>180</td>
<td>3.5%</td>
<td>980</td>
</tr>
<tr>
<td><strong>Total Plastics in Nondurable Goods, by resin</strong></td>
<td>7,460</td>
<td>180</td>
<td>2.4%</td>
<td>1,420</td>
</tr>
</tbody>
</table>
### Table 8. Plastics in Products In MSW, 2018
(In thousands of tons and percent of generation by resin)

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Generation (Thousand tons)</th>
<th>Recycled * (Thousand tons)</th>
<th>Recycled * (Percent of generation)</th>
<th>Composted with energy Recovery (Thousand tons)</th>
<th>Landfilled (Thousand tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plastic Containers &amp; Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottles and Jars***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET</td>
<td>3,130</td>
<td>910</td>
<td>29.1%</td>
<td>440</td>
<td>1,780</td>
</tr>
<tr>
<td>Natural Bottles†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE</td>
<td>750</td>
<td>220</td>
<td>29.3%</td>
<td>100</td>
<td>430</td>
</tr>
<tr>
<td>Other plastic containers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE</td>
<td>1,600</td>
<td>290</td>
<td>18.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVC</td>
<td>20</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDPE/LLDPE</td>
<td>40</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>250</td>
<td>20</td>
<td>8.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>80</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Other Containers</strong></td>
<td>1,990</td>
<td>310</td>
<td>15.6%</td>
<td>330</td>
<td>1,350</td>
</tr>
<tr>
<td>Bags, sacks and wraps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE</td>
<td>640</td>
<td>50</td>
<td>7.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVC</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDPE/LLDPE</td>
<td>2,780</td>
<td>370</td>
<td>13.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>570</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>140</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Bags, Sacks and Wraps</strong></td>
<td>4,200</td>
<td>420</td>
<td>10.0%</td>
<td>740</td>
<td>3,040</td>
</tr>
<tr>
<td>Other Plastics Packaging**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET</td>
<td>730</td>
<td>70</td>
<td>9.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE</td>
<td>800</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVC</td>
<td>300</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDPE/LLDPE</td>
<td>910</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLA</td>
<td>20</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>1,010</td>
<td>30</td>
<td>3.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>330</td>
<td>20</td>
<td>6.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other resins</td>
<td>360</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Other Packaging</strong></td>
<td>4,460</td>
<td>120</td>
<td>2.7%</td>
<td>850</td>
<td>3,490</td>
</tr>
<tr>
<td><strong>Total Plastics in Containers &amp; Packaging, by resin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET</td>
<td>3,860</td>
<td>980</td>
<td>25.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE</td>
<td>3,790</td>
<td>560</td>
<td>14.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVC</td>
<td>390</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDPE/LLDPE</td>
<td>3,730</td>
<td>370</td>
<td>9.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLA</td>
<td>20</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>1,830</td>
<td>50</td>
<td>2.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>550</td>
<td>20</td>
<td>3.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other resins</td>
<td>360</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Plastics in Containers &amp; Packaging</strong></td>
<td>14,530</td>
<td>1,980</td>
<td>13.6%</td>
<td>2,460</td>
<td>10,090</td>
</tr>
</tbody>
</table>
### Table 8. Plastics in Products In MSW, 2018
(In thousands of tons and percent of generation by resin)

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Generation (Thousand tons)</th>
<th>Recycled * (Thousand tons)</th>
<th>(Percent of generation)</th>
<th>Combusted with energy Recovery (Thousand tons)</th>
<th>Landfilled (Thousand tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Plastics in MSW, by resin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET</td>
<td>5,290</td>
<td>980</td>
<td>18.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE</td>
<td>6,300</td>
<td>560</td>
<td>8.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVC</td>
<td>840</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDPE/LLDPE</td>
<td>8,590</td>
<td>370</td>
<td>4.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLA</td>
<td>90</td>
<td>Neg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>8,150</td>
<td>50</td>
<td>0.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>2,260</td>
<td>20</td>
<td>0.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other resins</td>
<td>4,160</td>
<td>1,110</td>
<td>26.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Plastics in MSW</strong></td>
<td>35,680</td>
<td>3,090</td>
<td>8.7%</td>
<td>5,620</td>
<td>26,970</td>
</tr>
</tbody>
</table>

* Mechanical and non-mechanical recycling.
‡ Nondurable goods other than containers and packaging.
§ Due to source data aggregation, PET cups are included in "Other Plastic Packaging".
** All other nondurables include plastics in disposable diapers, clothing, footware, etc.
*** Injection stretch blow molded PET containers as identified in Report on Postconsumer PET Container Recycling Activity in 2017. National Association for PET Container Resources. Recycling includes caps, lids and other material collected with PET bottles and jars.
¥ Other plastic packaging includes coatings, closures, lids, caps, clamshells, egg cartons, produce baskets, shapes, loose fill, etc.

Male detail of recycling by resin omitted due to lack of data.

Neg. = negligible, less than 5,000 tons

HDPE = High density polyethylene  
PET = Polyethylene terephthalate  
PS = Polystyrene

LDPE = Low density polyethylene  
PP = Polypropylene  
PVC = Polyvinyl chloride

LLDPE = Linear low density polyethylene  
PLA = Polylactide
<table>
<thead>
<tr>
<th>Product Category</th>
<th>Generation (Thousand tons)</th>
<th>Recycled (Thousand tons)</th>
<th>(Percent of generation)</th>
<th>Combusted with energy Recovery (Thousand tons)</th>
<th>Landfilled (Thousand tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubber in Tires*</td>
<td>4,180</td>
<td>1,670</td>
<td>40.0%</td>
<td>1,730</td>
<td>780</td>
</tr>
<tr>
<td>Other Durables**</td>
<td>3,800</td>
<td>Neg.</td>
<td>Neg.</td>
<td>540</td>
<td>3,260</td>
</tr>
<tr>
<td><strong>Total Rubber and Leather</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durable Goods</td>
<td>7,980</td>
<td>1,670</td>
<td>20.9%</td>
<td>2,270</td>
<td>4,040</td>
</tr>
<tr>
<td>Clothing and Footwear</td>
<td>900</td>
<td>Neg.</td>
<td>Neg.</td>
<td>180</td>
<td>720</td>
</tr>
<tr>
<td>Other Nondurables</td>
<td>280</td>
<td>Neg.</td>
<td>Neg.</td>
<td>50</td>
<td>230</td>
</tr>
<tr>
<td><strong>Total Rubber and Leather</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td>1,180</td>
<td>Neg.</td>
<td>Neg.</td>
<td>230</td>
<td>950</td>
</tr>
<tr>
<td><strong>Total Rubber and Leather</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Automobile and truck tires. Does not include other materials in tires.

** Includes carpets and rugs and other miscellaneous durables.

Neg. = Less than 5,000 tons or 0.05 percent.

Details may not add to totals due to rounding.
Table 10. Products Generated* in the Municipal Waste Stream, 1960 to 2018
(In thousands of tons and percent of total generation)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 22)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Product Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food^</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MSW Generated - Weight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 23)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Product Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food^</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MSW Generated - %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Generation before materials are recycled, composted, managed by other food pathways, combusted with energy recovery or landfilled. Does not include construction & demolition debris, industrial process wastes or certain other wastes. Details may not add to totals due to rounding.

^ In 2018, the food waste measurement methodology was expanded to include additional sources of generation and management pathways beyond composting, combustion with energy recovery and landfilling. Please see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data
### Table 11. Products Recycled, Composted, and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 TO 2018

*(In thousands of tons and percent of generation of each product)*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recycled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durable Goods</td>
<td>350</td>
<td>940</td>
<td>1,360</td>
<td>3,460</td>
<td>6,580</td>
<td>7,970</td>
<td>9,390</td>
<td>9,880</td>
<td>10,550</td>
<td>10,570</td>
</tr>
<tr>
<td><em>(Detail in Table 15)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td>2,390</td>
<td>3,730</td>
<td>4,670</td>
<td>8,800</td>
<td>17,560</td>
<td>19,770</td>
<td>19,190</td>
<td>16,190</td>
<td>16,290</td>
<td>14,190</td>
</tr>
<tr>
<td><em>(Detail in Table 19)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td>2,870</td>
<td>3,350</td>
<td>8,490</td>
<td>16,780</td>
<td>28,870</td>
<td>31,500</td>
<td>36,680</td>
<td>41,490</td>
<td>40,140</td>
<td>44,330</td>
</tr>
<tr>
<td><em>(Detail in Table 24)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Product Wastes - recycled</strong></td>
<td>5,610</td>
<td>8,020</td>
<td>14,520</td>
<td>29,040</td>
<td>53,010</td>
<td>59,240</td>
<td>65,260</td>
<td>67,560</td>
<td>66,980</td>
<td>69,090</td>
</tr>
<tr>
<td><strong>Composted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - composted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food^</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings - composted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total – composted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Food Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - animal feed</td>
<td>1,820</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - bio-based materials/biochemical processing</td>
<td>1,840</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food – codigestion/anaerobic digestion</td>
<td>5,260</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - donation</td>
<td>4,790</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - land application</td>
<td>260</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food – sewer/wastewater treatment</td>
<td>3,740</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Food – other food management</strong></td>
<td>17,710</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MSW Recycled and Composted - Weight</td>
<td>5,610</td>
<td>8,020</td>
<td>14,520</td>
<td>33,240</td>
<td>69,460</td>
<td>79,790</td>
<td>85,430</td>
<td>90,950</td>
<td>93,970</td>
<td>93,980</td>
</tr>
<tr>
<td>Total MSW Recycled, Composted and Other Food Management - Weight</td>
<td>111,690</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recycled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durable Goods</td>
<td>3.5%</td>
<td>6.4%</td>
<td>6.2%</td>
<td>11.6%</td>
<td>16.9%</td>
<td>17.7%</td>
<td>19.0%</td>
<td>18.3%</td>
<td>18.6%</td>
<td>18.5%</td>
</tr>
<tr>
<td><em>(Detail in Table 15)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td>13.8%</td>
<td>14.9%</td>
<td>13.6%</td>
<td>16.9%</td>
<td>27.4%</td>
<td>31.1%</td>
<td>36.0%</td>
<td>31.2%</td>
<td>32.1%</td>
<td>28.1%</td>
</tr>
<tr>
<td><em>(Detail in Table 19)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td>10.5%</td>
<td>7.7%</td>
<td>16.1%</td>
<td>26.0%</td>
<td>38.1%</td>
<td>41.3%</td>
<td>48.6%</td>
<td>53.2%</td>
<td>49.4%</td>
<td>53.9%</td>
</tr>
<tr>
<td><em>(Detail in Table 24)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Product Wastes – recycled</strong></td>
<td>10.3%</td>
<td>9.6%</td>
<td>13.3%</td>
<td>19.8%</td>
<td>29.7%</td>
<td>32.0%</td>
<td>36.6%</td>
<td>36.8%</td>
<td>35.5%</td>
<td>36.4%</td>
</tr>
<tr>
<td><strong>Composted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food^</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total – composted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

December 2020
Table 11. Products Recycled,* Composted and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 TO 2018
(In thousands of tons and percent of generation of each product)

<table>
<thead>
<tr>
<th>Products</th>
<th>Thousands of Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Food Management</td>
<td></td>
</tr>
<tr>
<td>Other Food Management¥</td>
<td></td>
</tr>
<tr>
<td>Food - animal feed</td>
<td>2.9%</td>
</tr>
<tr>
<td>Food - bio-based materials/biochemical processing</td>
<td>2.9%</td>
</tr>
<tr>
<td>Food – codigestion/anaerobic digestion</td>
<td>8.3%</td>
</tr>
<tr>
<td>Food - donation</td>
<td>7.6%</td>
</tr>
<tr>
<td>Food - land application</td>
<td>0.4%</td>
</tr>
<tr>
<td>Food – sewer/wastewater treatment</td>
<td>5.9%</td>
</tr>
<tr>
<td><strong>Total Food – other food management</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total MSW Recycled and Composted - %</strong></td>
<td>6.4%</td>
</tr>
<tr>
<td><strong>Total MSW Recycled, Composted and Other Food Management - %</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Recycling of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.

^ Includes collection of other MSW organics for composting.

¥ In 2018, the food waste measurement methodology was expanded to include additional sources of generation and management pathways beyond composting, combustion with energy recovery and landfilling. Please see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data

Neg. = Less than 5,000 tons or 0.05 percent.
Table 12. Products Combusted with Energy Recovery* in the Municipal Waste Stream, 1960 to 2018
(In thousands of tons and percent of total combusted)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 16)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 26)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Product Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MSW Combusted with Energy Recovery -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable Goods</td>
<td>13.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 16)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td>19.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td>33.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 27)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Product Wastes</td>
<td>66.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>11.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>20.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>2.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Other Wastes</td>
<td>33.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MSW Combusted with Energy Recovery -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Products and materials combusted with energy recovery estimated at percentage total MSW after recycling and composting. In 2018, 19.6 percent of MSW after recycling and composting was combusted with energy recovery except for major appliances, tires and lead-acid batteries (see Table 16 for details) and food (percentage distribution for food varies by generator sector, see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data). Does not include construction & demolition debris, industrial process wastes or certain other wastes. Details may not add to totals due to rounding.

Neg. = Less than 5,000 tons or 0.05 percent.
Table 13. Products Landfilled* in the Municipal Waste Stream, 1960 to 2018
(In thousands of tons and percent of total landfilled)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Product Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MSW Landfilled - Weight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable Goods</td>
<td>11.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td>18.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td>29.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Product Wastes</td>
<td>59.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Wastes</td>
<td>40.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MSW Landfilled - %</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Landfilling after recycling, composting, other food management pathways and combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes or certain other wastes. Details may not add to totals due to rounding.
Neg. = Less than 5,000 tons or 0.05 percent.
### Table 14. Products Generated* in the Municipal Waste Stream, 1960 to 2018
(With Detail On Durable Goods)
(In thousands of tons and percent of total generation)

<table>
<thead>
<tr>
<th>Products</th>
<th>Thousands of Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Appliances</td>
<td>1,630</td>
</tr>
<tr>
<td>Small Appliances**</td>
<td></td>
</tr>
<tr>
<td>Furniture and Furnishings</td>
<td>2,150</td>
</tr>
<tr>
<td>Carpets and Rugs**</td>
<td></td>
</tr>
<tr>
<td>Rubber Tires</td>
<td>1,120</td>
</tr>
<tr>
<td>Batteries, Lead-Acid</td>
<td>Neg.</td>
</tr>
<tr>
<td>Miscellaneous Durables</td>
<td></td>
</tr>
<tr>
<td>Selected Consumer Electronics***</td>
<td></td>
</tr>
<tr>
<td>Other Miscellaneous Durables</td>
<td></td>
</tr>
<tr>
<td><strong>Total Miscellaneous Durables</strong></td>
<td>5,020</td>
</tr>
<tr>
<td><strong>Total Durable Goods</strong></td>
<td>9,920</td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td>17,330</td>
</tr>
</tbody>
</table>

(Detail in Table 18)

### Table 15. Products Generated in Other Wastes

<table>
<thead>
<tr>
<th>Products</th>
<th>Thousands of Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Appliances</td>
<td>1.8</td>
</tr>
<tr>
<td>Small Appliances**</td>
<td>0.2</td>
</tr>
<tr>
<td>Furniture and Furnishings</td>
<td>2.4</td>
</tr>
<tr>
<td>Carpets and Rugs**</td>
<td>0.8</td>
</tr>
<tr>
<td>Rubber Tires</td>
<td>1.3</td>
</tr>
<tr>
<td>Batteries, Lead-Acid</td>
<td>Neg.</td>
</tr>
<tr>
<td>Miscellaneous Durables</td>
<td></td>
</tr>
<tr>
<td>Selected Consumer Electronics***</td>
<td>0.8</td>
</tr>
<tr>
<td>Other Miscellaneous Durables</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>Total Miscellaneous Durables</strong></td>
<td>5.7</td>
</tr>
<tr>
<td><strong>Total Durable Goods</strong></td>
<td>11.3</td>
</tr>
<tr>
<td><strong>Total Other Wastes</strong></td>
<td>19.7</td>
</tr>
</tbody>
</table>

(Detail in Table 18)

### Total Product Wastes

<table>
<thead>
<tr>
<th>Products</th>
<th>Thousands of Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food*</td>
<td>13.8</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>22.7</td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total Other Wastes</strong></td>
<td>38.0</td>
</tr>
</tbody>
</table>

(Detail in Table 23)

### Total MSW Generated - Weight

<table>
<thead>
<tr>
<th>Products</th>
<th>Thousands of Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food*</td>
<td>13.8</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>22.7</td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total Other Wastes</strong></td>
<td>38.0</td>
</tr>
</tbody>
</table>

* Generation before materials are recycled, composted, managed by other food pathways, combusted with energy recovery or landfilled. Does not include construction & demolition debris, industrial process wastes or certain other wastes. Details may not add to totals due to rounding.

** Not estimated separately prior to 1990.

*** Not estimated separately prior to 2000.

^ In 2018, the food waste measurement methodology was expanded to include additional sources of generation and management pathways beyond composting, combustion with energy recovery and landfilling. Please see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data

December 2020
### Table 15. Products Recycled,* Composted and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 TO 2018
(With Detail on Durable Goods)
(In thousands of tons and percent of generation of each product)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recycled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Appliances</td>
<td>10</td>
<td>50</td>
<td>130</td>
<td>1,070</td>
<td>2,000</td>
<td>2,420</td>
<td>2,610</td>
<td>3,000</td>
<td>3,110</td>
<td>3,140</td>
</tr>
<tr>
<td>Small Appliances**</td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Carpets and Rugs**</td>
<td>Neg.</td>
<td>190</td>
<td>250</td>
<td>270</td>
<td>190</td>
<td>280</td>
<td>280</td>
<td>310</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber Tires</td>
<td>330</td>
<td>250</td>
<td>150</td>
<td>440</td>
<td>1,290</td>
<td>1,640</td>
<td>2,270</td>
<td>2,410</td>
<td>2,610</td>
<td>2,610</td>
</tr>
<tr>
<td>Batteries, Lead-Acid</td>
<td>Neg.</td>
<td>620</td>
<td>1,040</td>
<td>1,470</td>
<td>2,130</td>
<td>2,640</td>
<td>2,980</td>
<td>2,670</td>
<td>2,910</td>
<td>2,870</td>
</tr>
<tr>
<td>Miscellaneous Durables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selected Consumer Electronics***</td>
<td>190</td>
<td>360</td>
<td>650</td>
<td>1,230</td>
<td>1,020</td>
<td>1,040</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Miscellaneous Durables</td>
<td>760</td>
<td>640</td>
<td>480</td>
<td>250</td>
<td>460</td>
<td>440</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Miscellaneous Durables</strong></td>
<td>350</td>
<td>940</td>
<td>1,360</td>
<td>3,460</td>
<td>6,580</td>
<td>7,970</td>
<td>9,390</td>
<td>9,880</td>
<td>10,550</td>
<td>10,570</td>
</tr>
<tr>
<td><strong>Total Durable Goods – recycled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nondurable Goods – recycled</strong></td>
<td>2,390</td>
<td>3,730</td>
<td>4,670</td>
<td>8,800</td>
<td>17,560</td>
<td>19,770</td>
<td>19,190</td>
<td>16,190</td>
<td>16,290</td>
<td>14,190</td>
</tr>
<tr>
<td><strong>Total Product Wastes – recycled</strong></td>
<td>5,610</td>
<td>8,020</td>
<td>14,520</td>
<td>29,040</td>
<td>53,010</td>
<td>59,240</td>
<td>65,260</td>
<td>67,560</td>
<td>66,980</td>
<td>69,090</td>
</tr>
<tr>
<td><strong>Composted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nondurable Goods – composted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging – recycled</td>
<td>2,870</td>
<td>3,350</td>
<td>8,490</td>
<td>16,780</td>
<td>28,870</td>
<td>31,500</td>
<td>36,680</td>
<td>41,490</td>
<td>40,140</td>
<td>44,330</td>
</tr>
<tr>
<td><strong>Total Other Food Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Food Management’s</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - animal feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - bio-based materials/biochemical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>processing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food – codigestion/anaerobic digestion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - donation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - land application</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food – sewer/wastewater treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Food – other food management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total MSW Recycled and Composted - Weight</strong></td>
<td>5,610</td>
<td>8,020</td>
<td>14,520</td>
<td>33,240</td>
<td>69,460</td>
<td>79,790</td>
<td>85,430</td>
<td>90,950</td>
<td>93,970</td>
<td>93,980</td>
</tr>
<tr>
<td><strong>Total MSW Recycled, Composted and Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Food Management - Weight</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percent of Total Generation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Recycled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Appliances</td>
<td>0.6%</td>
<td>2.3%</td>
<td>4.4%</td>
<td>32.3%</td>
<td>54.9%</td>
<td>67.0%</td>
<td>64.9%</td>
<td>61.7%</td>
<td>60.3%</td>
<td>59.8%</td>
</tr>
<tr>
<td>Small Appliances**</td>
<td>2.2%</td>
<td>1.9%</td>
<td>1.7%</td>
<td>6.6%</td>
<td>5.9%</td>
<td>5.7%</td>
<td>5.7%</td>
<td>5.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture and Furnishings</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Carpets and Rugs**</td>
<td>Neg.</td>
<td>7.7%</td>
<td>8.4%</td>
<td>7.3%</td>
<td>5.2%</td>
<td>8.3%</td>
<td>9.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber Tires</td>
<td>29.5%</td>
<td>13.2%</td>
<td>5.5%</td>
<td>12.2%</td>
<td>26.2%</td>
<td>33.4%</td>
<td>44.2%</td>
<td>40.4%</td>
<td>39.9%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Batteries, Lead-Acid</td>
<td>Neg.</td>
<td>75.6%</td>
<td>69.8%</td>
<td>97.4%</td>
<td>93.4%</td>
<td>96.0%</td>
<td>98.7%</td>
<td>98.9%</td>
<td>99.0%</td>
<td>99.0%</td>
</tr>
<tr>
<td>Miscellaneous Durables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selected Consumer Electronics***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Miscellaneous Durables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Miscellaneous Durables</strong></td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>3.8%</td>
<td>5.8%</td>
<td>4.9%</td>
<td>5.4%</td>
<td>6.5%</td>
<td>6.0%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>
Table 15. Products Recycled,* Composted and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 TO 2018
(With Detail on Durable Goods)
(In thousands of tons and percent of generation of each product)

<table>
<thead>
<tr>
<th>Products</th>
<th>Thousands of Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Durable Goods</strong> - recycled</td>
<td>3.5%</td>
</tr>
<tr>
<td>Nondurable Goods - recycled</td>
<td>13.8%</td>
</tr>
<tr>
<td><strong>Containers and Packaging</strong> - recycled</td>
<td>10.5%</td>
</tr>
<tr>
<td><strong>Total Product Wastes</strong> - recycled</td>
<td>10.3%</td>
</tr>
<tr>
<td>Composted</td>
<td></td>
</tr>
<tr>
<td>Composted – Food</td>
<td></td>
</tr>
<tr>
<td>Food – composted^</td>
<td>Neg.</td>
</tr>
<tr>
<td>Composted – Yard Trimmings</td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>Neg.</td>
</tr>
<tr>
<td>Composted – Misc. Inorganic Wastes</td>
<td></td>
</tr>
<tr>
<td><strong>Total - composted</strong></td>
<td>Neg.</td>
</tr>
</tbody>
</table>

| Other Food Management             |        |       |       |       |       |       |       |       |       |       |
| Food - animal feed                |        |       |       |       |       |       |       |       |       | 2.9%  |
| Food - bio-based materials/biochemical processing |        |       |       |       |       |       |       |       |       | 2.9%  |
| Food – codigestion/anaerobic digestion |        |       |       |       |       |       |       |       |       | 8.3%  |
| Food - donation                   |        |       |       |       |       |       |       |       |       | 7.6%  |
| Food - land application           |        |       |       |       |       |       |       |       |       | 0.4%  |
| Food – sewer/wastewater treatment |        |       |       |       |       |       |       |       |       | 5.9%  |
| **Total Food – other food management** |        |       |       |       |       |       |       |       |       | 28.1% |
| **Total MSW Recycled and Composted - %** | 6.4%  | 6.6%  | 9.6%  | 16.0% | 28.5% | 31.4% | 34.0% | 34.7% | 35.0% | 32.1% |
| **Total MSW Recycled, Composted and Other Food Management - %** | 38.2% |       |       |       |       |       |       |       |       |       |

---

* Recycling of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.
** Not estimated separately prior to 1990. † Other than food products.
*** Not estimated separately prior to 2000.
^ Includes collection of other MSW organics for composting.
¥ In 2018, the food waste measurement methodology was expanded to include additional sources of generation and management pathways beyond composting, combustion with energy recovery and landfilling. Please see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data
Neg. = Less than 5,000 tons or 0.05 percent.
### Table 16. Products Combusted with Energy Recovery* in the Municipal Waste Stream, 1960 to 2018
(With Detail On Durable Goods)
(In thousands of tons and percent of total combusted)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Appliances*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Small Appliances**</td>
<td></td>
<td>90</td>
<td>200</td>
<td>200</td>
<td>310</td>
<td>380</td>
<td>390</td>
<td>400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture and Furnishings</td>
<td>Neg.</td>
<td>1,150</td>
<td>1,570</td>
<td>1,700</td>
<td>1,910</td>
<td>2,350</td>
<td>2,380</td>
<td>2,360</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpets and Rugs**</td>
<td></td>
<td>290</td>
<td>440</td>
<td>490</td>
<td>610</td>
<td>670</td>
<td>610</td>
<td>600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber Tires§</td>
<td>Neg.</td>
<td>30</td>
<td>400</td>
<td>2,260</td>
<td>2,390</td>
<td>2,000</td>
<td>2,840</td>
<td>2,710</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Batteries, Lead-Acid§</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Durables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selected Consumer Electronics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Miscellaneous Durables§</td>
<td>60</td>
<td>320</td>
<td>2,550</td>
<td>1,790</td>
<td>1,970</td>
<td>2,240</td>
<td>2,400</td>
<td>2,990</td>
<td>3,050</td>
<td></td>
</tr>
<tr>
<td><strong>Total Durable Goods</strong></td>
<td>60</td>
<td>440</td>
<td>4,480</td>
<td>6,260</td>
<td>6,750</td>
<td>7,070</td>
<td>8,640</td>
<td>9,080</td>
<td>9,120</td>
<td></td>
</tr>
<tr>
<td><strong>Nondurable Goods</strong></td>
<td>90</td>
<td>580</td>
<td>7,380</td>
<td>9,000</td>
<td>7,980</td>
<td>6,030</td>
<td>6,960</td>
<td>6,720</td>
<td>7,090</td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Product Wastes</strong></td>
<td>300</td>
<td>1,900</td>
<td>19,970</td>
<td>24,370</td>
<td>22,890</td>
<td>19,970</td>
<td>22,760</td>
<td>22,380</td>
<td>23,630</td>
<td></td>
</tr>
<tr>
<td><strong>Other Wastes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>50</td>
<td>260</td>
<td>4,060</td>
<td>5,820</td>
<td>5,870</td>
<td>6,150</td>
<td>7,380</td>
<td>7,470</td>
<td>7,550</td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>90</td>
<td>550</td>
<td>5,240</td>
<td>2,860</td>
<td>2,220</td>
<td>2,510</td>
<td>2,630</td>
<td>2,110</td>
<td>2,570</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>10</td>
<td>50</td>
<td>490</td>
<td>680</td>
<td>670</td>
<td>680</td>
<td>780</td>
<td>790</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td><strong>Total Other Wastes</strong></td>
<td>150</td>
<td>860</td>
<td>9,790</td>
<td>9,360</td>
<td>8,760</td>
<td>9,340</td>
<td>10,790</td>
<td>10,370</td>
<td>10,920</td>
<td></td>
</tr>
<tr>
<td><strong>Total MSW Combusted with Energy Recovery - Weight</strong></td>
<td>450</td>
<td>2,760</td>
<td>29,760</td>
<td>33,730</td>
<td>31,650</td>
<td>29,310</td>
<td>33,550</td>
<td>34,220</td>
<td>34,550</td>
<td></td>
</tr>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Appliances*</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Small Appliances**</td>
<td>0.3%</td>
<td>0.6%</td>
<td>0.6%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture and Furnishings</td>
<td>Neg.</td>
<td>3.3%</td>
<td>3.9%</td>
<td>4.7%</td>
<td>5.4%</td>
<td>6.5%</td>
<td>7.0%</td>
<td>7.0%</td>
<td>6.8%</td>
<td></td>
</tr>
<tr>
<td>Carpets and Rugs**</td>
<td></td>
<td>1.0%</td>
<td>1.3%</td>
<td>1.5%</td>
<td>2.1%</td>
<td>2.0%</td>
<td>1.8%</td>
<td>1.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber Tires§</td>
<td>Neg.</td>
<td>1.1%</td>
<td>1.3%</td>
<td>6.7%</td>
<td>7.6%</td>
<td>6.8%</td>
<td>8.5%</td>
<td>7.9%</td>
<td>7.8%</td>
<td></td>
</tr>
<tr>
<td>Batteries, Lead-Acid§</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Durables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selected Consumer Electronics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Miscellaneous Durables§</td>
<td>13.3%</td>
<td>11.6%</td>
<td>8.6%</td>
<td>5.3%</td>
<td>6.2%</td>
<td>7.6%</td>
<td>7.2%</td>
<td>8.7%</td>
<td>8.8%</td>
<td></td>
</tr>
<tr>
<td><strong>Total Durable Goods</strong></td>
<td>13.3%</td>
<td>15.9%</td>
<td>15.1%</td>
<td>18.6%</td>
<td>21.3%</td>
<td>24.1%</td>
<td>25.8%</td>
<td>26.5%</td>
<td>26.4%</td>
<td></td>
</tr>
<tr>
<td><strong>Nondurable Goods</strong></td>
<td>19.9%</td>
<td>21.0%</td>
<td>24.8%</td>
<td>26.7%</td>
<td>25.2%</td>
<td>20.6%</td>
<td>20.7%</td>
<td>19.7%</td>
<td>20.5%</td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td>33.3%</td>
<td>31.9%</td>
<td>27.3%</td>
<td>27.0%</td>
<td>25.8%</td>
<td>23.4%</td>
<td>21.4%</td>
<td>23.4%</td>
<td>21.5%</td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 27)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Product Wastes</strong></td>
<td>66.6%</td>
<td>68.8%</td>
<td>67.1%</td>
<td>72.3%</td>
<td>72.3%</td>
<td>68.1%</td>
<td>67.9%</td>
<td>69.7%</td>
<td>68.4%</td>
<td></td>
</tr>
</tbody>
</table>

*Energy recovery includes incineration with energy recovery.

December 2020
### Table 16. Products Combusted with Energy Recovery* in the Municipal Waste Stream, 1960 to 2018  
(With Detail On Durable Goods)  
(In thousands of tons and percent of total combusted)

<table>
<thead>
<tr>
<th>Products</th>
<th>Percent of Total Combusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Wastes</td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>11.1%</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>20.0%</td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>2.3%</td>
</tr>
<tr>
<td>Total Other Wastes</td>
<td>33.4%</td>
</tr>
<tr>
<td>Total MSW Combusted with Energy Recovery - %</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Products and materials combusted with energy recovery estimated at percentage total MSW after recycling and composting. In 2018, 19.6 percent of MSW after recycling and composting was combusted with energy recovery except for major appliances, tires and lead-acid batteries (see Table 16 for details) and food (percentage distribution for food varies by generator sector, see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data). Does not include construction & demolition debris, industrial process wastes or certain other wastes. Details may not add to totals due to rounding.

** Not estimated separately prior to 1990.

§ Tires: tires to fuel based on industry percentage estimates applied to tire generation. Total Miscellaneous Durables: calculated as difference between total durable goods going to combustion and individual durable goods shown. The amounts of consumer electronics going to combustion with energy recovery are not available and are included in Total Miscellaneous Durables.

± Energy Recovery Council, 2016. Major appliances and lead-acid batteries are not accepted at waste-to-energy facilities.

Neg. = Less than 5,000 tons or 0.05 percent.
### Table 17. Products Landfilled* in the Municipal Waste Stream, 1960 to 2018
(With Detail On Durable Goods)
(In thousands of tons and percent of total landfilled)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Appliances</td>
<td>1,620</td>
<td>2,120</td>
<td>2,820</td>
<td>2,240</td>
<td>1,640</td>
<td>1,190</td>
<td>1,410</td>
<td>1,860</td>
<td>2,050</td>
<td>2,110</td>
</tr>
<tr>
<td>Small Appliances**</td>
<td>360</td>
<td>820</td>
<td>960</td>
<td>1,400</td>
<td>1,550</td>
<td>1,610</td>
<td>1,640</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture and Furnishings</td>
<td>2,150</td>
<td>2,830</td>
<td>4,670</td>
<td>5,640</td>
<td>6,550</td>
<td>7,640</td>
<td>8,900</td>
<td>9,690</td>
<td>9,790</td>
<td>9,680</td>
</tr>
<tr>
<td>Carpets and Rugs**</td>
<td>1,370</td>
<td>1,830</td>
<td>2,220</td>
<td>2,280</td>
<td>2,840</td>
<td>2,770</td>
<td>2,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber Tires</td>
<td>790</td>
<td>1,640</td>
<td>2,540</td>
<td>2,770</td>
<td>1,380</td>
<td>880</td>
<td>860</td>
<td>720</td>
<td>1,220</td>
<td>1,210</td>
</tr>
<tr>
<td>Batteries, Lead-Acid</td>
<td>200</td>
<td>450</td>
<td>40</td>
<td>150</td>
<td>110</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Durable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selected Consumer Electronics***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Miscellaneous Durables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Miscellaneous Durables</strong></td>
<td>5,010</td>
<td>6,870</td>
<td>9,520</td>
<td>9,450</td>
<td>13,660</td>
<td>17,340</td>
<td>17,440</td>
<td>18,800</td>
<td>20,040</td>
<td>20,280</td>
</tr>
<tr>
<td><strong>Total Durable Goods</strong></td>
<td>9,570</td>
<td>13,660</td>
<td>20,000</td>
<td>21,870</td>
<td>26,030</td>
<td>30,340</td>
<td>32,890</td>
<td>35,420</td>
<td>37,240</td>
<td>37,410</td>
</tr>
</tbody>
</table>

(Detail in Table 21)

| Containers and Packaging              |      |      |      |      |      |      |      |      |      |      |
| (Detail in Table 28)                  |      |      |      |      |      |      |      |      |      |      |
| **Total Product Wastes**              | 49,010|74,960|92,470|97,500|101,340|102,910|92,840|93,350|97,940|97,040|
| **Other Wastes**                      |      |      |      |      |      |      |      |      |      |      |
| Food                                  | 12,200|12,750|12,740|19,800|24,200|26,370|28,620|30,250|30,630|35,280|
| Yard Trimmings                        | 20,000|23,110|26,950|25,560|11,990|9,990|11,690|10,800|8,650|10,530|
| Miscellaneous Inorganic Wastes        | 1,300|1,770|2,200|2,410|2,820|3,020|3,160|3,210|3,250|3,270|
| **Total Other Wastes**                | 33,500|37,630|41,890|47,770|38,920|39,380|43,470|44,260|42,530|49,080|
| **Total MSW Landfilled - Weight**     | 82,510|112,590|134,360|145,270|140,260|142,290|136,310|137,610|140,470|146,120|

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Appliances</td>
<td>2.0%</td>
<td>1.9%</td>
<td>2.1%</td>
<td>1.5%</td>
<td>1.2%</td>
<td>0.8%</td>
<td>1.0%</td>
<td>1.4%</td>
<td>1.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Small Appliances**</td>
<td>0.2%</td>
<td>0.6%</td>
<td>0.7%</td>
<td>1.0%</td>
<td>1.1%</td>
<td>1.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture and Furnishings</td>
<td>2.6%</td>
<td>2.5%</td>
<td>3.5%</td>
<td>3.9%</td>
<td>4.7%</td>
<td>5.4%</td>
<td>6.5%</td>
<td>7.0%</td>
<td>7.0%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Carpets and Rugs**</td>
<td>0.9%</td>
<td>1.3%</td>
<td>1.5%</td>
<td>2.1%</td>
<td>2.0%</td>
<td>1.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber Tires</td>
<td>1.0%</td>
<td>1.5%</td>
<td>1.9%</td>
<td>1.9%</td>
<td>1.0%</td>
<td>0.6%</td>
<td>0.6%</td>
<td>0.5%</td>
<td>0.9%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Batteries, Lead-Acid</td>
<td>Neg.</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Durable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selected Consumer Electronics***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Miscellaneous Durables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Miscellaneous Durables</strong></td>
<td>6.1%</td>
<td>6.1%</td>
<td>7.1%</td>
<td>6.5%</td>
<td>9.7%</td>
<td>12.2%</td>
<td>12.8%</td>
<td>13.7%</td>
<td>14.3%</td>
<td>13.9%</td>
</tr>
<tr>
<td><strong>Total Durable Goods</strong></td>
<td>11.6%</td>
<td>12.1%</td>
<td>14.9%</td>
<td>15.0%</td>
<td>18.6%</td>
<td>21.3%</td>
<td>24.1%</td>
<td>25.7%</td>
<td>26.5%</td>
<td>25.6%</td>
</tr>
<tr>
<td><strong>Nondurable Goods</strong></td>
<td>18.1%</td>
<td>18.9%</td>
<td>21.7%</td>
<td>24.8%</td>
<td>26.7%</td>
<td>25.2%</td>
<td>20.6%</td>
<td>20.8%</td>
<td>19.7%</td>
<td>19.9%</td>
</tr>
</tbody>
</table>

(Detail in Table 21)

| Containers and Packaging              |      |      |      |      |      |      |      |      |      |      |
| (Detail in Table 29)                  |      |      |      |      |      |      |      |      |      |      |
| **Total Product Wastes**              | 59.4%| 66.6%| 68.8%| 67.1%| 72.3%| 72.3%| 68.1%| 67.9%| 69.7%| 66.4%|
| **Other Wastes**                      |      |      |      |      |      |      |      |      |      |      |
| Food                                  | 14.8%| 11.3%| 9.5% | 13.6%| 17.3%| 18.5%| 21.0%| 22.0%| 21.8%| 24.1%|
| Yard Trimmings                        | 24.2%| 20.5%| 20.1%| 17.6%| 8.5% | 7.0% | 8.6% | 7.8% | 6.2% | 7.2% |
| Miscellaneous Inorganic Wastes        | 1.6% | 1.6% | 1.6% | 1.7% | 1.9% | 2.2% | 2.3% | 2.3% | 2.3% | 2.3% |
| **Total Other Wastes**                | 40.6%| 32.4%| 31.2%| 32.9%| 27.7%| 27.7%| 31.9%| 32.1%| 30.3%| 33.6%|
| **Total MSW Landfilled - %**          | 100.0%|100.0%|100.0%|100.0%|100.0%|100.0%|100.0%|100.0%|100.0%|100.0%|

* Landfilling after recycling, composting, other food management pathways and combustion with energy recovery. Details may not add to totals due to rounding.
** Not estimated separately prior to 1990.
*** The amount of consumer electronics going to combustion with energy recovery versus landfilling are not available. These products are included in Total Miscellaneous Durables.
Neg. = Less than 5,000 tons or 0.05 percent.
Table 18. Products Generated* in the Municipal Waste Stream, 1960 to 2018  
(With Detail on Nondurable Goods)  
(In thousands of tons and percent of generation of each product)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9,920</td>
<td>14,660</td>
<td>21,800</td>
<td>29,810</td>
<td>38,870</td>
<td>45,060</td>
<td>49,350</td>
<td>53,940</td>
<td>56,870</td>
<td>57,100</td>
</tr>
<tr>
<td><strong>Nondurable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers/Mechanical Papers†</td>
<td>7,110</td>
<td>9,510</td>
<td>11,050</td>
<td>13,430</td>
<td>14,790</td>
<td>12,790</td>
<td>9,880</td>
<td>6,730</td>
<td>5,440</td>
<td>5,050</td>
</tr>
<tr>
<td>Directories***</td>
<td>610</td>
<td>680</td>
<td>660</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Paper Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books and Magazines</td>
<td>1,920</td>
<td>2,470</td>
<td>3,390</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books**</td>
<td>970</td>
<td>1,240</td>
<td>1,100</td>
<td>990</td>
<td>800</td>
<td>700</td>
<td>690</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magazines**</td>
<td>2,830</td>
<td>2,230</td>
<td>2,580</td>
<td>1,590</td>
<td>1,190</td>
<td>1,020</td>
<td>980</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office-Type Papers***</td>
<td>1,520</td>
<td>2,650</td>
<td>4,000</td>
<td>6,410</td>
<td>7,420</td>
<td>6,620</td>
<td>5,260</td>
<td>4,530</td>
<td>3,970</td>
<td>3,970</td>
</tr>
<tr>
<td>Marketing Mail§</td>
<td>3,820</td>
<td>5,570</td>
<td>5,830</td>
<td>4,340</td>
<td>4,050</td>
<td>3,790</td>
<td>3,790</td>
<td>3,670</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Commercial Printing‡</td>
<td>1,260</td>
<td>2,130</td>
<td>3,120</td>
<td>4,460</td>
<td>7,380</td>
<td>6,440</td>
<td>2,480</td>
<td>2,080</td>
<td>1,960</td>
<td>2,000</td>
</tr>
<tr>
<td>Tissue Paper and Towels</td>
<td>1,090</td>
<td>2,080</td>
<td>2,300</td>
<td>2,960</td>
<td>3,220</td>
<td>3,460</td>
<td>3,490</td>
<td>3,680</td>
<td>3,750</td>
<td>3,790</td>
</tr>
<tr>
<td>Paper Plates and Cups</td>
<td>270</td>
<td>420</td>
<td>630</td>
<td>650</td>
<td>960</td>
<td>1,160</td>
<td>1,350</td>
<td>1,360</td>
<td>1,440</td>
<td>1,420</td>
</tr>
<tr>
<td>Other Nonpackaging Paper</td>
<td>2,700</td>
<td>3,630</td>
<td>4,230</td>
<td>3,840</td>
<td>4,250</td>
<td>4,490</td>
<td>4,190</td>
<td>3,700</td>
<td>3,880</td>
<td>3,920</td>
</tr>
<tr>
<td><strong>Total Other Paper Nondurable Goods</strong></td>
<td>8,760</td>
<td>13,380</td>
<td>17,670</td>
<td>25,940</td>
<td>32,270</td>
<td>29,920</td>
<td>23,690</td>
<td>21,390</td>
<td>20,510</td>
<td>20,440</td>
</tr>
<tr>
<td>Disposable Diapers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neg.</td>
<td>350</td>
<td>1,930</td>
<td>2,700</td>
<td>3,230</td>
<td>3,410</td>
<td>3,700</td>
<td>4,170</td>
<td>4,150</td>
</tr>
<tr>
<td>Plastic Plates and Cups‡</td>
<td>190</td>
<td>650</td>
<td>870</td>
<td>930</td>
<td>890</td>
<td>1,050</td>
<td>1,080</td>
<td>1,030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trash Bags**</td>
<td>780</td>
<td>850</td>
<td>1,060</td>
<td>980</td>
<td>1,130</td>
<td>1,140</td>
<td>1,230</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothing and Footwear</td>
<td>1,360</td>
<td>1,620</td>
<td>2,170</td>
<td>4,010</td>
<td>6,470</td>
<td>7,890</td>
<td>9,100</td>
<td>11,940</td>
<td>12,800</td>
<td>12,970</td>
</tr>
<tr>
<td>Towels, Sheets and Pillowcases**</td>
<td>710</td>
<td>820</td>
<td>980</td>
<td>1,290</td>
<td>1,350</td>
<td>1,470</td>
<td>1,520</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Miscellaneous Nondurables</td>
<td>100</td>
<td>200</td>
<td>1,410</td>
<td>3,340</td>
<td>4,030</td>
<td>4,250</td>
<td>3,720</td>
<td>4,050</td>
<td>4,110</td>
<td>4,100</td>
</tr>
<tr>
<td><strong>Total Nondurable Goods</strong></td>
<td>17,330</td>
<td>25,060</td>
<td>34,420</td>
<td>52,170</td>
<td>64,010</td>
<td>63,650</td>
<td>53,250</td>
<td>51,810</td>
<td>50,700</td>
<td>50,440</td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td>27,370</td>
<td>43,560</td>
<td>52,670</td>
<td>64,530</td>
<td>75,840</td>
<td>76,330</td>
<td>75,470</td>
<td>77,920</td>
<td>81,200</td>
<td>82,220</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td>11.3%</td>
<td>12.1%</td>
<td>14.4%</td>
<td>14.3%</td>
<td>16.0%</td>
<td>17.8%</td>
<td>19.7%</td>
<td>20.6%</td>
<td>21.2%</td>
<td>19.5%</td>
</tr>
<tr>
<td><strong>Nondurable Goods</strong></td>
<td></td>
<td>8.1%</td>
<td>7.9%</td>
<td>7.3%</td>
<td>6.4%</td>
<td>6.1%</td>
<td>5.0%</td>
<td>3.9%</td>
<td>2.6%</td>
<td>2.0%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Newspapers/Mechanical Papers†</td>
<td></td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Directories***</td>
<td></td>
<td>1.4%</td>
<td>0.9%</td>
<td>1.0%</td>
<td>0.6%</td>
<td>0.5%</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Office-Type Papers***</td>
<td></td>
<td>1.7%</td>
<td>2.2%</td>
<td>2.6%</td>
<td>3.1%</td>
<td>3.0%</td>
<td>2.6%</td>
<td>2.1%</td>
<td>1.8%</td>
<td>1.6%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Marketing Mail§</td>
<td></td>
<td>1.8%</td>
<td>2.3%</td>
<td>2.3%</td>
<td>1.7%</td>
<td>1.5%</td>
<td>1.4%</td>
<td>1.3%</td>
<td>1.2%</td>
<td>1.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Other Commercial Printing‡</td>
<td></td>
<td>1.4%</td>
<td>1.8%</td>
<td>2.1%</td>
<td>2.1%</td>
<td>3.0%</td>
<td>2.5%</td>
<td>1.0%</td>
<td>0.8%</td>
<td>0.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Tissue Paper and Towels</td>
<td></td>
<td>1.2%</td>
<td>1.7%</td>
<td>1.5%</td>
<td>1.4%</td>
<td>1.3%</td>
<td>1.4%</td>
<td>1.4%</td>
<td>1.4%</td>
<td>1.4%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Paper Plates and Cups</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Other Nonpackaging Paper</td>
<td>3.1%</td>
<td>3.0%</td>
<td>2.8%</td>
<td>1.8%</td>
<td>1.7%</td>
<td>1.8%</td>
<td>1.7%</td>
<td>1.4%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>Total Other Paper Nondurable Goods</strong></td>
<td></td>
<td>9.9%</td>
<td>11.1%</td>
<td>11.7%</td>
<td>12.5%</td>
<td>13.3%</td>
<td>12.5%</td>
<td>9.4%</td>
<td>8.2%</td>
<td>7.7%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Disposable Diapers</td>
<td></td>
<td>Neg.</td>
<td>0.3%</td>
<td>1.3%</td>
<td>1.3%</td>
<td>1.3%</td>
<td>1.3%</td>
<td>1.5%</td>
<td>1.6%</td>
<td>1.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Plastic Plates and Cups‡</td>
<td></td>
<td>0.1%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Trash Bags**</td>
<td></td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>
Table 18. Products Generated* in the Municipal Waste Stream, 1960 to 2018
(With Detail on Nondurable Goods)
(In thousands of tons and percent of generation of each product)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>1.5%</td>
<td>1.3%</td>
<td>1.4%</td>
<td>1.9%</td>
<td>2.7%</td>
<td>3.1%</td>
<td>3.6%</td>
<td>4.6%</td>
<td>4.8%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Towels, Sheets and Pillowcases**</td>
<td>0.1%</td>
<td>0.2%</td>
<td>0.9%</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Other Miscellaneous Nondurables</td>
<td>19.7%</td>
<td>20.7%</td>
<td>22.7%</td>
<td>25.0%</td>
<td>25.1%</td>
<td>21.2%</td>
<td>19.8%</td>
<td>18.9%</td>
<td>17.3%</td>
<td></td>
</tr>
<tr>
<td>Total Nondurables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td>31.1%</td>
<td>36.0%</td>
<td>34.7%</td>
<td>31.0%</td>
<td>31.2%</td>
<td>30.1%</td>
<td>30.1%</td>
<td>29.7%</td>
<td>30.2%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Total Product Wastes</td>
<td>62.0%</td>
<td>68.8%</td>
<td>71.8%</td>
<td>70.3%</td>
<td>73.4%</td>
<td>72.9%</td>
<td>70.9%</td>
<td>70.1%</td>
<td>70.3%</td>
<td>64.9%</td>
</tr>
<tr>
<td>Other Wastes</td>
<td>38.0%</td>
<td>31.2%</td>
<td>28.2%</td>
<td>29.7%</td>
<td>26.6%</td>
<td>27.1%</td>
<td>29.1%</td>
<td>29.9%</td>
<td>29.7%</td>
<td>35.1%</td>
</tr>
<tr>
<td>Total MSW Generated - %</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Generation before materials are recycled, composted, managed by other food pathways, combusted with energy recovery or landfilled. Does not include construction & demolition debris, industrial process wastes or certain other wastes. Details may not add to totals due to rounding.
† Starting in 2010, newsprint and groundwood inserts expanded to include directories and other mechanical papers previously counted as Other Commercial Printing.
** Not estimated separately prior to 1990.
*** High-grade paper such as printer paper; generated in both commercial and residential sources.
§ Marketing Mail: Not estimated separately prior to 1990. Formerly called Third Class Mail and Standard Mail by the U.S. Postal Service.
¶ Plastic Plates and Cups: Not estimated separately prior to 1980.
- Detailed data not available. Neg. = Less than 5,000 tons or 0.05 percent.
## Table 19. Products Recycled,* Composted and Managed By Other Food Pathways In The Municipal Solid Waste Stream, 1960 To 2018 (With Detail on Nondurable Goods)

(Thousands of tons and percent of generation of each product)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recycled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durable Goods – recycled</td>
<td>350</td>
<td>940</td>
<td>1,360</td>
<td>3,460</td>
<td>6,580</td>
<td>7,970</td>
<td>9,390</td>
<td>9,880</td>
<td>10,550</td>
<td>10,570</td>
</tr>
<tr>
<td>(Detail in Table 15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nondurable Goods – recycled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers/Mechanical Papers‡</td>
<td>1,820</td>
<td>2,250</td>
<td>3,020</td>
<td>5,110</td>
<td>8,720</td>
<td>9,360</td>
<td>7,070</td>
<td>4,790</td>
<td>4,180</td>
<td>3,270</td>
</tr>
<tr>
<td>Directories***</td>
<td>50</td>
<td>120</td>
<td>120</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Paper Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books and Magazines</td>
<td>100</td>
<td>260</td>
<td>280</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magazines**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office-Type Papers***</td>
<td>250</td>
<td>710</td>
<td>870</td>
<td>1,700</td>
<td>4,090</td>
<td>4,110</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Marketing Mail§</td>
<td>130</td>
<td>340</td>
<td>350</td>
<td>700</td>
<td>810</td>
<td>1,440</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Commercial Printing†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tissue Paper and Towels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper Plates and Cups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Nonpackaging Paper Paper</td>
<td>40</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Other Paper Nondurable Goods – recycled</strong></td>
<td>520</td>
<td>1,420</td>
<td>1,500</td>
<td>3,000</td>
<td>7,680</td>
<td>8,870</td>
<td>10,650</td>
<td>9,330</td>
<td>9,910</td>
<td>8,810</td>
</tr>
<tr>
<td>Disposable Diapers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic Plates and Cups‡</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trash Bags**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothing and Footwear</td>
<td>50</td>
<td>60</td>
<td>150</td>
<td>520</td>
<td>900</td>
<td>1,250</td>
<td>1,250</td>
<td>1,690</td>
<td>1,740</td>
<td>1,690</td>
</tr>
<tr>
<td>Towels, Sheets and Pillowcases**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Miscellaneous Nondurables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Nondurable Goods</strong></td>
<td>2,390</td>
<td>3,730</td>
<td>4,670</td>
<td>8,800</td>
<td>17,560</td>
<td>19,770</td>
<td>19,190</td>
<td>16,190</td>
<td>16,290</td>
<td>14,190</td>
</tr>
<tr>
<td>Containers and Packaging - recycled</td>
<td>2,870</td>
<td>3,350</td>
<td>8,490</td>
<td>16,780</td>
<td>28,870</td>
<td>31,500</td>
<td>36,680</td>
<td>41,490</td>
<td>44,140</td>
<td>44,330</td>
</tr>
<tr>
<td><strong>Food – composted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings - composted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc. Inorganic Wastes - composted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total - composted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Food Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Food Management‡</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - animal feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - bio-based materials/biochemical processing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food – codigestion/anaerobic digestion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - donation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food - land application</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food – sewer/wastewater treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Food – other food management</strong></td>
<td>5,610</td>
<td>8,020</td>
<td>14,520</td>
<td>33,240</td>
<td>69,460</td>
<td>79,790</td>
<td>85,430</td>
<td>90,950</td>
<td>93,970</td>
<td>93,980</td>
</tr>
<tr>
<td>Total MSW Recycled and Composted - Weight</td>
<td>5,610</td>
<td>8,020</td>
<td>14,520</td>
<td>33,240</td>
<td>69,460</td>
<td>79,790</td>
<td>85,430</td>
<td>90,950</td>
<td>93,970</td>
<td>93,980</td>
</tr>
<tr>
<td>Total MSW Recycled, Composted and Other Food Management - Weight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 19. Products Recycled,* Composted and Managed By Other Food Pathways In The Municipal Solid Waste Stream, 1960 To 2018
(With Detail on Nondurable Goods)
(In thousands of tons and percent of generation of each product)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recycled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durable Goods – recycled</td>
<td>3.5%</td>
<td>6.4%</td>
<td>6.2%</td>
<td>11.6%</td>
<td>16.9%</td>
<td>17.7%</td>
<td>19.0%</td>
<td>18.3%</td>
<td>18.6%</td>
<td>18.5%</td>
</tr>
<tr>
<td>(Detail in Table 15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nondurable Goods – recycled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers/Mechanical Papers†</td>
<td>25.6%</td>
<td>23.7%</td>
<td>27.3%</td>
<td>38.0%</td>
<td>59.0%</td>
<td>73.2%</td>
<td>71.6%</td>
<td>71.2%</td>
<td>76.8%</td>
<td>64.8%</td>
</tr>
<tr>
<td>Directories***</td>
<td>8.2%</td>
<td>17.6%</td>
<td>18.2%</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Paper Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books and Magazines</td>
<td>5.2%</td>
<td>10.5%</td>
<td>8.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books**</td>
<td></td>
<td></td>
<td></td>
<td>10.3%</td>
<td>19.4%</td>
<td>24.5%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Magazines**</td>
<td></td>
<td></td>
<td></td>
<td>10.6%</td>
<td>31.8%</td>
<td>37.2%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Office-Type Papers***</td>
<td>16.4%</td>
<td>26.8%</td>
<td>21.8%</td>
<td>26.5%</td>
<td>55.1%</td>
<td>62.1%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Marketing Mail§</td>
<td>5.2%</td>
<td>32.9%</td>
<td>35.8%</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Commercial Printing†</td>
<td>10.3%</td>
<td>16.0%</td>
<td>11.2%</td>
<td>15.7%</td>
<td>11.0%</td>
<td>22.4%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tissue Paper and Towels</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Nonpackaging Paper</td>
<td>1.5%</td>
<td>3.0%</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Other Paper Nondurable Goods - recycled</td>
<td>5.9%</td>
<td>10.6%</td>
<td>8.5%</td>
<td>11.6%</td>
<td>24.2%</td>
<td>28.0%</td>
<td>45.0%</td>
<td>43.6%</td>
<td>48.3%</td>
<td>43.1%</td>
</tr>
<tr>
<td>Clothing and Footwear</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>13.0%</td>
<td>13.9%</td>
<td>15.8%</td>
<td>13.7%</td>
<td>14.2%</td>
<td>13.6%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Towels, Sheets and Pillowcases**</td>
<td>16.9%</td>
<td>17.1%</td>
<td>17.3%</td>
<td>17.1%</td>
<td>16.3%</td>
<td>16.3%</td>
<td>15.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Nondurables recycled</td>
<td>13.8%</td>
<td>14.9%</td>
<td>13.6%</td>
<td>16.9%</td>
<td>27.4%</td>
<td>31.1%</td>
<td>36.0%</td>
<td>31.2%</td>
<td>32.1%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Containers and Packaging - recycled</td>
<td>10.5%</td>
<td>7.7%</td>
<td>16.1%</td>
<td>26.0%</td>
<td>38.1%</td>
<td>41.3%</td>
<td>48.6%</td>
<td>53.2%</td>
<td>49.4%</td>
<td>53.9%</td>
</tr>
<tr>
<td>(Detail in Table 25)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Product Wastes - recycled</td>
<td>10.3%</td>
<td>9.6%</td>
<td>13.3%</td>
<td>19.8%</td>
<td>29.7%</td>
<td>32.0%</td>
<td>36.6%</td>
<td>36.8%</td>
<td>35.5%</td>
<td>36.4%</td>
</tr>
<tr>
<td><strong>Composted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composted - Food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food – composted^</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>2.2%</td>
<td>2.1%</td>
<td>2.7%</td>
<td>5.3%</td>
<td>6.3%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Composted – Yard Trimmings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings – composted</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>12.0%</td>
<td>51.7%</td>
<td>61.9%</td>
<td>57.5%</td>
<td>61.3%</td>
<td>69.4%</td>
<td>63.0%</td>
</tr>
<tr>
<td>Composted – Misc. Inorganic Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total - composted</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>6.8%</td>
<td>25.4%</td>
<td>29.9%</td>
<td>27.6%</td>
<td>29.8%</td>
<td>33.8%</td>
<td>24.3%</td>
</tr>
</tbody>
</table>
Table 19. Products Recycled,* Composted and Managed By Other Food Pathways In The Municipal Solid Waste Stream, 1960 To 2018
(With Detail on Nondurable Goods)
(In thousands of tons and percent of generation of each product)

<table>
<thead>
<tr>
<th>Products</th>
<th>percent of generation of each product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Food Management</td>
<td></td>
</tr>
<tr>
<td>Other Food Management†</td>
<td></td>
</tr>
<tr>
<td>Food - animal feed</td>
<td></td>
</tr>
<tr>
<td>Food - bio-based materials/biochemical processing</td>
<td></td>
</tr>
<tr>
<td>Food – codigestion/anaerobic digestion</td>
<td></td>
</tr>
<tr>
<td>Food - donation</td>
<td></td>
</tr>
<tr>
<td>Food - land application</td>
<td></td>
</tr>
<tr>
<td>Food – sewer/wastewater treatment</td>
<td></td>
</tr>
<tr>
<td>Total Food – other food management</td>
<td></td>
</tr>
<tr>
<td>Total MSW Recycled and Composted - %</td>
<td>6.4%</td>
</tr>
<tr>
<td>Total MSW Recycled, Composted and Other Food Management - %</td>
<td></td>
</tr>
</tbody>
</table>

* Recycling of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.
† Starting in 2010, newsprint and groundwood inserts expanded to include directories and other mechanical papers previously counted as Other Commercial Printing.
** Not estimated separately prior to 1990.
*** High-grade paper such as printer paper; generated in both commercial and residential sources.
§ Marketing Mail: Not estimated separately prior to 1990. Formerly called Third Class Mail and Standard Mail by the U.S. Postal Service.
^ Includes collection of other MSW organics for composting.
†† In 2018, the food waste measurement methodology was expanded to include additional sources of generation and management pathways beyond composting, combustion with energy recovery and landfilling. Please see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data
- Detailed data not available.
  Neg. = Less than 5,000 tons or 0.05 percent.
Table 20. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2018
(With Detail on Nondurable Goods)
(In thousands of tons and percent of total combusted)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers/Mechanical Papers†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directories***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Paper Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books and Magazines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magazines**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office-Type Papers***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing Mail†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Commercial Printing†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tissue Paper and Towels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper Plates and Cups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Nonpackaging Paper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Other Paper Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disposable Diapers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic Plates and Cups¥</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trash Bags**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothing and Footwear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Towels, Sheets and Pillowcases**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Miscellaneous Nondurables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Nondurables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Product Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MSW Combusted with Energy Recovery - Weight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers/Mechanical Papers†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directories***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Paper Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books and Magazines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magazines**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office-Type Papers***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing Mail†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Commercial Printing†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*MSW = Municipal Solid Waste

December 2020
Table 20. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2018
(With Detail on Nondurable Goods)
(In thousands of tons and percent of total combusted)

<table>
<thead>
<tr>
<th>Products</th>
<th>Percent of Total Combusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tissue Paper and Towels</td>
<td></td>
</tr>
<tr>
<td>Paper Plates and Cups</td>
<td></td>
</tr>
<tr>
<td>Other Nonpackaging Paper</td>
<td></td>
</tr>
<tr>
<td><strong>Total Other Paper Nondurable Goods</strong></td>
<td></td>
</tr>
<tr>
<td>Disposable Diapers</td>
<td>Neg.</td>
</tr>
<tr>
<td>Plastic Plates and Cups †</td>
<td>Neg.</td>
</tr>
<tr>
<td>Trash Bags **</td>
<td></td>
</tr>
<tr>
<td>Clothing and Footwear</td>
<td></td>
</tr>
<tr>
<td>Towels, Sheets and Pillowcases **</td>
<td></td>
</tr>
<tr>
<td>Other Miscellaneous Nondurables</td>
<td>Neg.</td>
</tr>
<tr>
<td><strong>Total Nondurables</strong></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td></td>
</tr>
<tr>
<td><strong>(Detail in Table 27)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Product Wastes</strong></td>
<td></td>
</tr>
<tr>
<td>Other Wastes</td>
<td></td>
</tr>
<tr>
<td><strong>Total MSW Combusted with Energy Recovery - %</strong></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Products and materials combusted with energy recovery estimated at percentage total MSW after recycling and composting. In 2018, 19.6 percent of MSW after recycling and composting was combusted with energy recovery except for major appliances, tires and lead-acid batteries (see Table 16 for details) and food (percentage distribution for food varies by generator sector, see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data). Does not include construction & demolition debris, industrial process wastes or certain other wastes. Details may not add to totals due to rounding.

† Starting in 2010, newsprint and groundwood inserts expanded to include directories and other mechanical papers previously counted as Other Commercial Printing.

** Not estimated separately prior to 1990.

*** High-grade paper such as printer paper; generated in both commercial and residential sources.

§ Marketing Mail: Not estimated separately prior to 1990. Formerly called Third Class Mail and Standard Mail by the U.S. Postal Service.


- Detailed data not available.

Neg. = Less than 5,000 tons or 0.05 percent.
Table 21. Products Landfilled* in Municipal Solid Waste, 1960 to 2018
(With Detail on Nondurable Goods)
(In thousands of tons and percent of total landfilled)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nondurable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers/Mechanical Papers†</td>
<td>5,290</td>
<td>7,230</td>
<td>7,870</td>
<td>6,900</td>
<td>4,890</td>
<td>2,810</td>
<td>2,310</td>
<td>1,560</td>
<td>1,010</td>
<td>1,430</td>
</tr>
<tr>
<td>Directories†***</td>
<td>460</td>
<td>450</td>
<td>440</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books and Magazines</td>
<td>1,820</td>
<td>2,200</td>
<td>3,050</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books**</td>
<td>720</td>
<td>810</td>
<td>680</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magazines**</td>
<td>2,100</td>
<td>1,230</td>
<td>1,330</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office-Type Papers***</td>
<td>1,270</td>
<td>1,930</td>
<td>3,070</td>
<td>3,910</td>
<td>2,680</td>
<td>2,050</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing Mail†</td>
<td>3,000</td>
<td>3,010</td>
<td>3,060</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Commercial Printing†</td>
<td>1,130</td>
<td>1,780</td>
<td>2,710</td>
<td>3,120</td>
<td>5,300</td>
<td>4,090</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tissue Paper and Towels</td>
<td>1,090</td>
<td>2,070</td>
<td>2,250</td>
<td>2,460</td>
<td>2,600</td>
<td>2,830</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper Plates and Cups</td>
<td>270</td>
<td>420</td>
<td>620</td>
<td>540</td>
<td>770</td>
<td>950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Nonpackaging Paper</td>
<td>2,660</td>
<td>3,510</td>
<td>4,150</td>
<td>3,190</td>
<td>3,430</td>
<td>3,670</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Other Paper Nondurable Goods</strong></td>
<td><strong>8,240</strong></td>
<td><strong>11,910</strong></td>
<td><strong>15,850</strong></td>
<td><strong>19,040</strong></td>
<td><strong>19,830</strong></td>
<td><strong>18,660</strong></td>
<td><strong>10,730</strong></td>
<td><strong>9,700</strong></td>
<td><strong>8,520</strong></td>
<td><strong>9,350</strong></td>
</tr>
<tr>
<td>Disposable Diapers</td>
<td>350</td>
<td>1,900</td>
<td>2,240</td>
<td>2,600</td>
<td>2,790</td>
<td>3,050</td>
<td>3,360</td>
<td>3,340</td>
<td>3,300</td>
<td></td>
</tr>
<tr>
<td>Plastic Plates and Cups‡</td>
<td>190</td>
<td>540</td>
<td>700</td>
<td>760</td>
<td>730</td>
<td>840</td>
<td>870</td>
<td>830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trash Bags**</td>
<td>650</td>
<td>690</td>
<td>870</td>
<td>810</td>
<td>910</td>
<td>920</td>
<td>990</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothing and Footwear</td>
<td>1,310</td>
<td>1,550</td>
<td>1,970</td>
<td>2,900</td>
<td>4,490</td>
<td>5,430</td>
<td>6,460</td>
<td>8,240</td>
<td>8,900</td>
<td>9,070</td>
</tr>
<tr>
<td>Towels, Sheets and Pillowcases**</td>
<td>490</td>
<td>550</td>
<td>660</td>
<td>880</td>
<td>910</td>
<td>990</td>
<td>1,030</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Miscellaneous Nondurables</td>
<td>100</td>
<td>200</td>
<td>1,390</td>
<td>2,770</td>
<td>3,250</td>
<td>3,480</td>
<td>3,060</td>
<td>3,140</td>
<td>3,140</td>
<td>3,160</td>
</tr>
<tr>
<td><strong>Total Nondurables</strong></td>
<td><strong>14,940</strong></td>
<td><strong>21,240</strong></td>
<td><strong>29,170</strong></td>
<td><strong>35,990</strong></td>
<td><strong>37,450</strong></td>
<td><strong>35,900</strong></td>
<td><strong>28,030</strong></td>
<td><strong>28,660</strong></td>
<td><strong>27,690</strong></td>
<td><strong>29,160</strong></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td>24,500</td>
<td>40,060</td>
<td>43,300</td>
<td>39,640</td>
<td>37,860</td>
<td>36,670</td>
<td>31,920</td>
<td>29,270</td>
<td>33,010</td>
<td>30,470</td>
</tr>
<tr>
<td><strong>Total Product Wastes</strong></td>
<td><strong>49,010</strong></td>
<td><strong>74,960</strong></td>
<td><strong>92,470</strong></td>
<td><strong>97,500</strong></td>
<td><strong>101,340</strong></td>
<td><strong>102,910</strong></td>
<td><strong>92,840</strong></td>
<td><strong>93,350</strong></td>
<td><strong>97,940</strong></td>
<td><strong>97,040</strong></td>
</tr>
<tr>
<td><strong>Other Wastes</strong></td>
<td><strong>33,500</strong></td>
<td><strong>37,630</strong></td>
<td><strong>41,890</strong></td>
<td><strong>47,770</strong></td>
<td><strong>38,920</strong></td>
<td><strong>39,380</strong></td>
<td><strong>43,470</strong></td>
<td><strong>44,260</strong></td>
<td><strong>42,530</strong></td>
<td><strong>49,080</strong></td>
</tr>
<tr>
<td><strong>Total MSW Landfilled - Weight</strong></td>
<td><strong>82,510</strong></td>
<td><strong>112,590</strong></td>
<td><strong>134,360</strong></td>
<td><strong>145,270</strong></td>
<td><strong>140,260</strong></td>
<td><strong>142,290</strong></td>
<td><strong>136,310</strong></td>
<td><strong>137,610</strong></td>
<td><strong>140,470</strong></td>
<td><strong>146,120</strong></td>
</tr>
</tbody>
</table>

(Detail in Table 17)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nondurable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers/Mechanical Papers†</td>
<td>6.4%</td>
<td>6.4%</td>
<td>5.9%</td>
<td>4.7%</td>
<td>3.5%</td>
<td>2.0%</td>
<td>1.7%</td>
<td>1.1%</td>
<td>0.7%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Directories†***</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Nondurable Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books and Magazines</td>
<td>2.2%</td>
<td>2.0%</td>
<td>2.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books**</td>
<td>0.5%</td>
<td>0.6%</td>
<td>0.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magazines**</td>
<td>1.4%</td>
<td>0.9%</td>
<td>0.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office-Type Papers***</td>
<td>1.5%</td>
<td>1.7%</td>
<td>2.3%</td>
<td>2.7%</td>
<td>1.9%</td>
<td>1.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing Mail†</td>
<td>2.1%</td>
<td>2.1%</td>
<td>2.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Commercial Printing</td>
<td>1.4%</td>
<td>1.6%</td>
<td>2.0%</td>
<td>2.1%</td>
<td>3.8%</td>
<td>2.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tissue Paper and Towels</td>
<td>1.3%</td>
<td>1.8%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.9%</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper Plates and Cups</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Nonpackaging Paper</td>
<td>3.2%</td>
<td>3.1%</td>
<td>3.1%</td>
<td>2.2%</td>
<td>2.4%</td>
<td>2.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Other Paper Nondurable Goods</strong></td>
<td><strong>10.0%</strong></td>
<td><strong>10.6%</strong></td>
<td><strong>11.8%</strong></td>
<td><strong>13.1%</strong></td>
<td><strong>14.1%</strong></td>
<td><strong>17.6%</strong></td>
<td><strong>7.9%</strong></td>
<td><strong>7.0%</strong></td>
<td><strong>6.1%</strong></td>
<td><strong>6.4%</strong></td>
</tr>
</tbody>
</table>

(Detail in Table 17)
### Table 21. Products Landfilled* in Municipal Solid Waste, 1960 to 2018
(With Detail on Nondurable Goods)
(In thousands of tons and percent of total landfilled)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable Diapers</td>
<td>Neg.</td>
<td>0.3%</td>
<td>1.4%</td>
<td>1.5%</td>
<td>1.9%</td>
<td>2.0%</td>
<td>2.2%</td>
<td>2.4%</td>
<td>2.4%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Plastic Plates and Cups†</td>
<td>0.1%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.6%</td>
<td>0.6%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Trash Bags**</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.6%</td>
<td>0.6%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Clothing and Footwear</td>
<td>1.6%</td>
<td>1.4%</td>
<td>1.5%</td>
<td>2.0%</td>
<td>3.2%</td>
<td>3.8%</td>
<td>4.7%</td>
<td>6.0%</td>
<td>6.3%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Towels, Sheets and Pillowcases**</td>
<td></td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.6%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Other Miscellaneous Nondurables</td>
<td>0.1%</td>
<td>0.2%</td>
<td>1.0%</td>
<td>1.9%</td>
<td>2.3%</td>
<td>2.4%</td>
<td>2.3%</td>
<td>2.2%</td>
<td>2.2%</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>Total Nondurables</strong></td>
<td>18.1%</td>
<td>18.9%</td>
<td>21.7%</td>
<td>24.8%</td>
<td>26.7%</td>
<td>25.2%</td>
<td>20.6%</td>
<td>19.7%</td>
<td>19.9%</td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td>29.7%</td>
<td>35.6%</td>
<td>32.2%</td>
<td>27.3%</td>
<td>27.0%</td>
<td>25.8%</td>
<td>23.4%</td>
<td>21.4%</td>
<td>23.5%</td>
<td>20.9%</td>
</tr>
<tr>
<td>(Detail in Table 29)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Product Wastes</strong></td>
<td>59.4%</td>
<td>66.6%</td>
<td>68.8%</td>
<td>67.1%</td>
<td>72.3%</td>
<td>72.3%</td>
<td>68.1%</td>
<td>67.9%</td>
<td>69.7%</td>
<td>66.4%</td>
</tr>
<tr>
<td>Other Wastes</td>
<td>40.6%</td>
<td>33.4%</td>
<td>31.2%</td>
<td>32.9%</td>
<td>27.7%</td>
<td>27.7%</td>
<td>31.9%</td>
<td>32.1%</td>
<td>30.3%</td>
<td>33.6%</td>
</tr>
<tr>
<td><strong>Total MSW Landfilled - %</strong></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Landfilling after recycling, composting, other food management pathways and combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes or certain other wastes. Details may not add to totals due to rounding.
† Starting in 2010, newsprint and groundwood inserts expanded to include directories and other mechanical papers previously counted as Other Commercial Printing.
** Not estimated separately prior to 1990.
*** High-grade paper such as printer paper; generated in both commercial and residential sources.
§ Marketing Mail: Not estimated separately prior to 1990. Formerly called Third Class Mail and Standard Mail by the U.S. Postal Service.
- Detailed data not available.
  Neg. = Less than 5,000 tons or 0.05 percent.
Table 22. Products Generated* in the Municipal Waste Stream, 1960 to 2018
(With Detail on Containers and Packaging)
(In thousands of tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Bottles</td>
<td>1,400</td>
<td>5,580</td>
<td>6,740</td>
<td>5,640</td>
<td>5,710</td>
<td>5,640</td>
<td>5,670</td>
<td>5,320</td>
<td>4,830</td>
<td>4,650</td>
</tr>
<tr>
<td>Wine and Liquor Bottles</td>
<td>1,080</td>
<td>1,900</td>
<td>2,450</td>
<td>2,030</td>
<td>1,910</td>
<td>1,630</td>
<td>1,700</td>
<td>1,810</td>
<td>1,800</td>
<td>1,810</td>
</tr>
<tr>
<td>Other Bottles &amp; Jars</td>
<td>3,710</td>
<td>4,440</td>
<td>4,780</td>
<td>4,160</td>
<td>3,420</td>
<td>2,290</td>
<td>1,990</td>
<td>1,990</td>
<td>3,220</td>
<td>3,330</td>
</tr>
<tr>
<td><strong>Total Glass Packaging</strong></td>
<td>6,190</td>
<td>11,920</td>
<td>13,970</td>
<td>11,830</td>
<td>11,040</td>
<td>10,460</td>
<td>9,360</td>
<td>9,120</td>
<td>8,950</td>
<td>8,790</td>
</tr>
<tr>
<td><strong>Steel Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cans</td>
<td>3,760</td>
<td>3,540</td>
<td>2,850</td>
<td>2,540</td>
<td>2,630</td>
<td>2,130</td>
<td>2,300</td>
<td>1,740</td>
<td>1,480</td>
<td>1,580</td>
</tr>
<tr>
<td>Other Steel Packaging</td>
<td>260</td>
<td>270</td>
<td>240</td>
<td>200</td>
<td>240</td>
<td>240</td>
<td>440</td>
<td>480</td>
<td>530</td>
<td>630</td>
</tr>
<tr>
<td><strong>Total Steel Packaging</strong></td>
<td>4,660</td>
<td>5,380</td>
<td>3,610</td>
<td>2,890</td>
<td>2,870</td>
<td>2,370</td>
<td>2,740</td>
<td>2,220</td>
<td>2,010</td>
<td>2,210</td>
</tr>
<tr>
<td><strong>Aluminum Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>Neg.</td>
<td>100</td>
<td>850</td>
<td>1,550</td>
<td>1,520</td>
<td>1,450</td>
<td>1,370</td>
<td>1,220</td>
<td>1,330</td>
<td>1,330</td>
</tr>
<tr>
<td>Cans</td>
<td>Neg.</td>
<td>60</td>
<td>40</td>
<td>20</td>
<td>50</td>
<td>80</td>
<td>70</td>
<td>130</td>
<td>50</td>
<td>80</td>
</tr>
<tr>
<td>Foil and Closures</td>
<td>170</td>
<td>410</td>
<td>380</td>
<td>330</td>
<td>380</td>
<td>400</td>
<td>460</td>
<td>490</td>
<td>500</td>
<td>510</td>
</tr>
<tr>
<td><strong>Total Aluminum Packaging</strong></td>
<td>170</td>
<td>570</td>
<td>1,270</td>
<td>1,900</td>
<td>1,950</td>
<td>1,930</td>
<td>1,900</td>
<td>1,840</td>
<td>1,880</td>
<td>1,920</td>
</tr>
<tr>
<td><strong>Paper &amp; Paperboard Pkg</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrugated Boxes</td>
<td>7,330</td>
<td>12,760</td>
<td>17,080</td>
<td>24,010</td>
<td>30,210</td>
<td>30,930</td>
<td>29,050</td>
<td>31,330</td>
<td>32,540</td>
<td>33,260</td>
</tr>
<tr>
<td>Other Paper &amp; Paperboard Pkg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gable Top/Aseptic Cartons†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Folding Cartons</td>
<td>3,820</td>
<td>4,300</td>
<td>5,820</td>
<td>5,530</td>
<td>5,470</td>
<td>5,380</td>
<td>5,330</td>
<td>5,370</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Paperboard Packaging</td>
<td>3,840</td>
<td>4,830</td>
<td>230</td>
<td>290</td>
<td>200</td>
<td>160</td>
<td>90</td>
<td>70</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td>3,380</td>
<td>2,440</td>
<td>1,490</td>
<td>1,120</td>
<td>1,040</td>
<td>930</td>
<td>1,100</td>
<td>1,090</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Paper Packaging</td>
<td>2,940</td>
<td>3,810</td>
<td>850</td>
<td>1,020</td>
<td>1,670</td>
<td>1,400</td>
<td>1,490</td>
<td>1,620</td>
<td>1,450</td>
<td>1,500</td>
</tr>
<tr>
<td><strong>Subtotal Other Paper &amp; Paperboard Pkg</strong></td>
<td>6,780</td>
<td>8,640</td>
<td>9,270</td>
<td>8,670</td>
<td>9,730</td>
<td>8,710</td>
<td>8,630</td>
<td>8,590</td>
<td>8,520</td>
<td>8,640</td>
</tr>
<tr>
<td><strong>Total Paper &amp; Board Pkg</strong></td>
<td>14,110</td>
<td>21,400</td>
<td>26,350</td>
<td>32,680</td>
<td>39,940</td>
<td>39,640</td>
<td>37,680</td>
<td>39,920</td>
<td>41,060</td>
<td>41,900</td>
</tr>
<tr>
<td><strong>Plastics Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET Bottles and Jars</td>
<td>260</td>
<td>430</td>
<td>1,720</td>
<td>2,540</td>
<td>2,670</td>
<td>2,980</td>
<td>2,960</td>
<td>3,130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE Natural Bottles</td>
<td>230</td>
<td>530</td>
<td>690</td>
<td>800</td>
<td>800</td>
<td>760</td>
<td>770</td>
<td>750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Containers</td>
<td>60</td>
<td>910</td>
<td>890</td>
<td>1,430</td>
<td>1,740</td>
<td>1,420</td>
<td>1,830</td>
<td>1,940</td>
<td>1,990</td>
<td>1,990</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td>390</td>
<td>940</td>
<td>1,650</td>
<td>1,640</td>
<td>770</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wraps</td>
<td>840</td>
<td>1,530</td>
<td>2,550</td>
<td>2,810</td>
<td>3,160</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Bags, Sacks and Wraps</strong></td>
<td>1,230</td>
<td>2,470</td>
<td>4,200</td>
<td>4,450</td>
<td>3,930</td>
<td>4,130</td>
<td>4,140</td>
<td>4,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Plastics Packaging</td>
<td>60</td>
<td>1,180</td>
<td>790</td>
<td>2,040</td>
<td>2,840</td>
<td>3,210</td>
<td>4,450</td>
<td>4,870</td>
<td>4,630</td>
<td>4,460</td>
</tr>
<tr>
<td><strong>Total Plastics Packaging</strong></td>
<td>120</td>
<td>2,090</td>
<td>3,400</td>
<td>6,900</td>
<td>11,190</td>
<td>12,420</td>
<td>13,680</td>
<td>14,680</td>
<td>14,490</td>
<td>14,530</td>
</tr>
<tr>
<td><strong>Other Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Packaging</td>
<td>2,000</td>
<td>2,070</td>
<td>3,940</td>
<td>8,180</td>
<td>8,610</td>
<td>9,230</td>
<td>9,770</td>
<td>9,770</td>
<td>11,560</td>
<td>11,530</td>
</tr>
<tr>
<td>Other Misc. Packaging</td>
<td>120</td>
<td>130</td>
<td>130</td>
<td>150</td>
<td>240</td>
<td>280</td>
<td>340</td>
<td>370</td>
<td>350</td>
<td>340</td>
</tr>
<tr>
<td><strong>Total Containers &amp; Pkg</strong></td>
<td>27,370</td>
<td>43,560</td>
<td>52,670</td>
<td>64,530</td>
<td>75,840</td>
<td>76,330</td>
<td>75,470</td>
<td>77,920</td>
<td>81,200</td>
<td>82,220</td>
</tr>
<tr>
<td><strong>Total Product Wastes</strong></td>
<td>54,620</td>
<td>83,280</td>
<td>108,890</td>
<td>146,510</td>
<td>178,720</td>
<td>185,040</td>
<td>178,070</td>
<td>183,670</td>
<td>188,770</td>
<td>189,760</td>
</tr>
</tbody>
</table>
### Table 22. Products Generated* in the Municipal Waste Stream, 1960 to 2018
(With Detail on Containers and Packaging)
(In thousands of tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other Wastes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Food</strong></td>
<td>12,200</td>
<td>12,800</td>
<td>13,000</td>
<td>23,860</td>
<td>30,700</td>
<td>32,930</td>
<td>35,740</td>
<td>39,730</td>
<td>40,670</td>
<td>63,130</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>20,000</td>
<td>23,200</td>
<td>27,500</td>
<td>35,000</td>
<td>30,530</td>
<td>32,070</td>
<td>33,400</td>
<td>34,720</td>
<td>35,180</td>
<td>35,400</td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>1,300</td>
<td>1,780</td>
<td>2,250</td>
<td>2,900</td>
<td>3,500</td>
<td>3,690</td>
<td>3,840</td>
<td>3,990</td>
<td>4,040</td>
<td>4,070</td>
</tr>
<tr>
<td><strong>Total Other Wastes</strong></td>
<td>33,500</td>
<td>37,780</td>
<td>42,750</td>
<td>61,760</td>
<td>64,730</td>
<td>68,690</td>
<td>72,980</td>
<td>78,440</td>
<td>79,890</td>
<td>102,600</td>
</tr>
<tr>
<td><strong>Total MSW Generated - Weight</strong></td>
<td>88,120</td>
<td>121,060</td>
<td>151,640</td>
<td>208,270</td>
<td>243,450</td>
<td>253,730</td>
<td>251,050</td>
<td>262,110</td>
<td>268,660</td>
<td>292,360</td>
</tr>
</tbody>
</table>

* Generation before materials are recycled, composted, managed by other food pathways, combusted with energy recovery or landfilled. Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks and ready-to-drink alcoholic coolers and cocktails.

† Includes milk, juice and other products packaged in gable top cartons and liquid food aseptic cartons.

^ In 2018, the food waste measurement methodology was expanded to include additional sources of generation and management pathways beyond composting, combustion with energy recovery and landfilling. Please see: https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data

Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.
### Table 23. Products Generated* in the Municipal Waste Stream, 1960 to 2018 (With Detail on Containers and Packaging)
(In percent of total generation)

<table>
<thead>
<tr>
<th>Products</th>
<th>Percent of Total Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable Goods</td>
<td>11.3%</td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td>19.7%</td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td></td>
</tr>
<tr>
<td>Glass Packaging</td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Bottles**</td>
<td>1.6%</td>
</tr>
<tr>
<td>Wine and Liquor Bottles</td>
<td>1.2%</td>
</tr>
<tr>
<td>Other Bottles &amp; Jars</td>
<td>4.2%</td>
</tr>
<tr>
<td>Total Glass Packaging</td>
<td>7.0%</td>
</tr>
<tr>
<td>Steel Packaging</td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>0.7%</td>
</tr>
<tr>
<td>Cans</td>
<td>4.3%</td>
</tr>
<tr>
<td>Other Steel Packaging</td>
<td>0.3%</td>
</tr>
<tr>
<td>Total Steel Packaging</td>
<td>5.3%</td>
</tr>
<tr>
<td>Aluminum Packaging</td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>Neg.</td>
</tr>
<tr>
<td>Other Cans</td>
<td>Neg.</td>
</tr>
<tr>
<td>Foil and Closures</td>
<td>0.2%</td>
</tr>
<tr>
<td>Total Aluminum Packaging</td>
<td>0.2%</td>
</tr>
<tr>
<td>Paper &amp; Paperboard Pkg</td>
<td></td>
</tr>
<tr>
<td>Corrugated Boxes</td>
<td>8.3%</td>
</tr>
<tr>
<td>Other Paper &amp; Paperboard Pkg</td>
<td></td>
</tr>
<tr>
<td>Gable Top/Aseptic Cartons‡</td>
<td></td>
</tr>
<tr>
<td>Folding Cartons</td>
<td></td>
</tr>
<tr>
<td>Other Paperboard Packaging</td>
<td>4.4%</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td>2.2%</td>
</tr>
<tr>
<td>Other Paper Packaging</td>
<td>3.3%</td>
</tr>
<tr>
<td>Subtotal Other Paper &amp; Paperboard Pkg</td>
<td></td>
</tr>
<tr>
<td>Total Paper &amp; Board Pkg</td>
<td>16.0%</td>
</tr>
<tr>
<td>Plastics Packaging</td>
<td></td>
</tr>
<tr>
<td>PET Bottles and Jars</td>
<td>0.2%</td>
</tr>
<tr>
<td>HDPE Natural Bottles</td>
<td>0.2%</td>
</tr>
<tr>
<td>Other Containers</td>
<td>0.1%</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td>0.3%</td>
</tr>
<tr>
<td>Wraps</td>
<td>0.6%</td>
</tr>
<tr>
<td>Subtotal Bags, Sacks and Wraps</td>
<td>0.8%</td>
</tr>
<tr>
<td>Other Plastics Packaging</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total Plastics Packaging</td>
<td>0.1%</td>
</tr>
<tr>
<td>Other Packaging</td>
<td></td>
</tr>
<tr>
<td>Wood Packaging</td>
<td>2.3%</td>
</tr>
<tr>
<td>Other Misc. Packaging</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total Containers &amp; Pkg</td>
<td>31.1%</td>
</tr>
<tr>
<td>Total Product Wastes</td>
<td>62.0%</td>
</tr>
</tbody>
</table>
Table 23. Products Generated* in the Municipal Waste Stream, 1960 to 2018  
(With Detail on Containers and Packaging)  
(In percent of total generation)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food*</td>
<td>13.8%</td>
<td>10.6%</td>
<td>8.6%</td>
<td>11.5%</td>
<td>12.6%</td>
<td>13.0%</td>
<td>14.2%</td>
<td>15.2%</td>
<td>15.1%</td>
<td>21.6%</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>22.7%</td>
<td>19.2%</td>
<td>18.1%</td>
<td>16.8%</td>
<td>12.5%</td>
<td>12.6%</td>
<td>13.3%</td>
<td>13.2%</td>
<td>13.1%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.4%</td>
<td>1.4%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td><strong>Total Other Wastes</strong></td>
<td>38.0%</td>
<td>31.2%</td>
<td>28.2%</td>
<td>29.7%</td>
<td>26.6%</td>
<td>27.1%</td>
<td>29.1%</td>
<td>29.9%</td>
<td>29.7%</td>
<td>35.1%</td>
</tr>
<tr>
<td><strong>Total MSW Generated - %</strong></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Generation before materials are recycled, composted, managed by other food pathways, combusted with energy recovery or landfilled. Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks and ready-to-drink alcoholic coolers and cocktails.

‡ Includes milk, juice, and other products packaged in gable top cartons and liquid food aseptic cartons.

^ In 2018, the food waste measurement methodology was expanded to include additional sources of generation and management pathways beyond composting, combustion with energy recovery and landfilling. Please see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data

Neg. = Less than 5,000 tons or 0.05 percent.  
NA = Not Available  
- Detailed data not available.
## Table 24. Products Recycled,* Composted and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 To 2018
(With Detail On Containers And Packaging)
(In thousands of tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recycled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durable Goods – recycled</td>
<td>350</td>
<td>940</td>
<td>1,360</td>
<td>3,460</td>
<td>6,580</td>
<td>7,970</td>
<td>9,390</td>
<td>9,880</td>
<td>10,550</td>
<td>10,570</td>
</tr>
<tr>
<td>(Detail in Table 15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods – recycled</td>
<td>2,390</td>
<td>3,730</td>
<td>4,670</td>
<td>8,800</td>
<td>17,560</td>
<td>19,770</td>
<td>19,190</td>
<td>16,290</td>
<td>16,190</td>
<td>14,190</td>
</tr>
<tr>
<td>(Detail in Table 19)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging – recycled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Glass Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Bottles**</td>
<td>90</td>
<td>140</td>
<td>730</td>
<td>1,890</td>
<td>2,000</td>
<td>2,350</td>
<td>2,230</td>
<td>1,880</td>
<td>1,840</td>
<td>1,800</td>
</tr>
<tr>
<td>Wine and Liquor Bottles</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>210</td>
<td>430</td>
<td>250</td>
<td>540</td>
<td>660</td>
<td>710</td>
<td>720</td>
</tr>
<tr>
<td>Other Bottles &amp; Jars</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>520</td>
<td>920</td>
<td>340</td>
<td>240</td>
<td>300</td>
<td>480</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total Glass Packaging</strong></td>
<td>100</td>
<td>150</td>
<td>750</td>
<td>2,620</td>
<td>2,590</td>
<td>3,130</td>
<td>3,190</td>
<td>3,070</td>
<td>3,060</td>
<td>3,060</td>
</tr>
<tr>
<td><strong>Steel Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>10</td>
<td>20</td>
<td>50</td>
<td>40</td>
<td>320</td>
<td>1,010</td>
<td>1,690</td>
<td>1,500</td>
<td>1,890</td>
<td>1,620</td>
</tr>
<tr>
<td>Other Cans</td>
<td>20</td>
<td>60</td>
<td>150</td>
<td>590</td>
<td>1,530</td>
<td>1,340</td>
<td>1,240</td>
<td>1,050</td>
<td>1,120</td>
<td>1,120</td>
</tr>
<tr>
<td><strong>Total Steel Packaging</strong></td>
<td>30</td>
<td>80</td>
<td>200</td>
<td>690</td>
<td>1,690</td>
<td>1,500</td>
<td>1,890</td>
<td>1,620</td>
<td>1,470</td>
<td>1,630</td>
</tr>
<tr>
<td><strong>Aluminum Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>Neg.</td>
<td>10</td>
<td>320</td>
<td>990</td>
<td>830</td>
<td>650</td>
<td>680</td>
<td>670</td>
<td>600</td>
<td>670</td>
</tr>
<tr>
<td>Other Cans</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Total Aluminum Pkg</strong></td>
<td>Neg.</td>
<td>10</td>
<td>320</td>
<td>1,010</td>
<td>860</td>
<td>690</td>
<td>680</td>
<td>670</td>
<td>600</td>
<td>670</td>
</tr>
<tr>
<td><strong>Paper &amp; Paperboard Pkg</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrugated Boxes</td>
<td>2,520</td>
<td>2,760</td>
<td>6,390</td>
<td>11,530</td>
<td>20,330</td>
<td>22,100</td>
<td>24,690</td>
<td>28,930</td>
<td>28,780</td>
<td>32,090</td>
</tr>
<tr>
<td>Other Paper &amp; Paperboard Pkg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gable Top/Aseptic Cartons‡</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Folding Cartons</td>
<td>520</td>
<td>340</td>
<td>410</td>
<td>1,190</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Paperboard Packaging</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td>Neg.</td>
<td>200</td>
<td>300</td>
<td>320</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wrapping Papers</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Paper Packaging</td>
<td>220</td>
<td>350</td>
<td>300</td>
<td>Neg.</td>
<td>Neg.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal Other Paper &amp; Paperboard Pkg</strong></td>
<td>2,160</td>
<td>2,270</td>
<td>1,300</td>
<td>1,800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Paper &amp; Board Pkg</strong></td>
<td>2,740</td>
<td>3,110</td>
<td>7,210</td>
<td>12,070</td>
<td>21,040</td>
<td>23,610</td>
<td>26,850</td>
<td>31,200</td>
<td>30,080</td>
<td>33,890</td>
</tr>
<tr>
<td><strong>Plastics Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET Bottles and Jars</td>
<td>10</td>
<td>140</td>
<td>380</td>
<td>590</td>
<td>780</td>
<td>890</td>
<td>860</td>
<td>910</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE Natural Bottles</td>
<td>Neg.</td>
<td>20</td>
<td>210</td>
<td>230</td>
<td>220</td>
<td>230</td>
<td>240</td>
<td>220</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Containers</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>170</td>
<td>140</td>
<td>300</td>
<td>360</td>
<td>300</td>
<td>310</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wraps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Bags, Sacks and Wraps</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Plastics Packaging</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>90</td>
<td>90</td>
<td>100</td>
<td>140</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total Plastics Packaging</strong></td>
<td>Neg.</td>
<td>Neg.</td>
<td>10</td>
<td>260</td>
<td>1,030</td>
<td>1,280</td>
<td>1,850</td>
<td>2,150</td>
<td>1,890</td>
<td>1,980</td>
</tr>
<tr>
<td><strong>Other Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Packaging</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>130</td>
<td>1,370</td>
<td>1,830</td>
<td>2,280</td>
<td>2,660</td>
<td>3,030</td>
<td>3,100</td>
</tr>
<tr>
<td><strong>Total Containers &amp; Pkg – recycled</strong></td>
<td>2,870</td>
<td>3,350</td>
<td>8,490</td>
<td>16,780</td>
<td>28,870</td>
<td>31,500</td>
<td>36,680</td>
<td>41,490</td>
<td>40,140</td>
<td>44,330</td>
</tr>
</tbody>
</table>
Table 24. Products Recycled,* Composted and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 To 2018
(With Detail On Containers And Packaging)
(In thousands of tons)

<table>
<thead>
<tr>
<th>Products</th>
<th>Thousands of Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Product Wastes – recycled</strong></td>
<td>5,610</td>
</tr>
<tr>
<td><strong>Composted</strong></td>
<td></td>
</tr>
<tr>
<td>Food - composted</td>
<td>Neg.</td>
</tr>
<tr>
<td>Yard Trimmings - composted</td>
<td>Neg.</td>
</tr>
<tr>
<td><strong>Total - composted</strong></td>
<td>Neg.</td>
</tr>
<tr>
<td><strong>Other Food Management</strong></td>
<td></td>
</tr>
<tr>
<td>Food - animal feed</td>
<td>1,820</td>
</tr>
<tr>
<td>Food - bio-based materials/biochemical processing</td>
<td>1,840</td>
</tr>
<tr>
<td>Food – codigestion/anaerobic digestion</td>
<td>5,260</td>
</tr>
<tr>
<td>Food - donation</td>
<td>4,790</td>
</tr>
<tr>
<td>Food - land application</td>
<td>260</td>
</tr>
<tr>
<td>Food – sewer/wastewater treatment</td>
<td>3,740</td>
</tr>
<tr>
<td><strong>Total Food – other food management</strong></td>
<td><strong>17,710</strong></td>
</tr>
<tr>
<td><strong>Total MSW Recycled and Composted - Weight</strong></td>
<td><strong>5,610</strong></td>
</tr>
<tr>
<td><strong>Total MSW Recycled, Composted and Other Food Management - Weight</strong></td>
<td>111,690</td>
</tr>
</tbody>
</table>

* Recycling of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.
** Includes carbonated drinks and non-carbonated water, teas, flavored drinks and ready-to-drink alcoholic coolers and cocktails.
‡ Includes milk, juice and other products packaged in gable top cartons and liquid food aseptic cartons.
^ Includes collection of other MSW organics for composting.
¥ In 2018, the food waste measurement methodology was expanded to include additional sources of generation and management pathways beyond composting, combustion with energy recovery and landfilling. Please see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data

Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.
### Table 25. Products Recycled,* Composted and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 To 2018
(With Detail on Containers and Packaging)
(In percent of generation of each product)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recycled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durable Goods - recycled</td>
<td>3.5%</td>
<td>6.4%</td>
<td>6.2%</td>
<td>11.6%</td>
<td>16.9%</td>
<td>17.7%</td>
<td>19.0%</td>
<td>18.3%</td>
<td>18.6%</td>
<td>18.5%</td>
</tr>
<tr>
<td>(Detail in Table 15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nondurable Goods – recycled</strong></td>
<td>13.8%</td>
<td>14.9%</td>
<td>13.6%</td>
<td>16.9%</td>
<td>27.4%</td>
<td>31.1%</td>
<td>36.0%</td>
<td>31.2%</td>
<td>32.1%</td>
<td>28.1%</td>
</tr>
<tr>
<td>(Detail in Table 19)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging – recycled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Glass Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Bottles**</td>
<td>6.4%</td>
<td>2.5%</td>
<td>10.8%</td>
<td>33.5%</td>
<td>26.8%</td>
<td>30.6%</td>
<td>41.4%</td>
<td>41.9%</td>
<td>38.9%</td>
<td>39.6%</td>
</tr>
<tr>
<td>Wine and Liquor Bottles</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>10.3%</td>
<td>22.5%</td>
<td>15.3%</td>
<td>31.8%</td>
<td>36.5%</td>
<td>39.4%</td>
<td>39.8%</td>
</tr>
<tr>
<td>Other Bottles &amp; Jars</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>12.5%</td>
<td>26.9%</td>
<td>14.8%</td>
<td>12.1%</td>
<td>15.1%</td>
<td>14.9%</td>
<td>15.0%</td>
</tr>
<tr>
<td><strong>Total Glass Packaging</strong></td>
<td>1.6%</td>
<td>1.3%</td>
<td>5.4%</td>
<td>22.1%</td>
<td>26.1%</td>
<td>24.8%</td>
<td>33.4%</td>
<td>35.0%</td>
<td>31.2%</td>
<td>31.3%</td>
</tr>
<tr>
<td><strong>Steel Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Steel Packaging</td>
<td>Neg.</td>
<td>1.7%</td>
<td>5.3%</td>
<td>23.2%</td>
<td>58.2%</td>
<td>62.9%</td>
<td>67.0%</td>
<td>71.3%</td>
<td>70.9%</td>
<td>70.9%</td>
</tr>
<tr>
<td><strong>Total Steel Packaging</strong></td>
<td>Neg.</td>
<td>1.5%</td>
<td>5.5%</td>
<td>23.9%</td>
<td>58.9%</td>
<td>63.3%</td>
<td>69.0%</td>
<td>73.0%</td>
<td>73.1%</td>
<td>73.8%</td>
</tr>
<tr>
<td><strong>Aluminum Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>Neg.</td>
<td>10.0%</td>
<td>37.6%</td>
<td>63.9%</td>
<td>54.6%</td>
<td>44.8%</td>
<td>49.6%</td>
<td>54.9%</td>
<td>45.1%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Other Cans</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>6.1%</td>
<td>7.9%</td>
<td>10.0%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Total Aluminum Pkg</strong></td>
<td>Neg.</td>
<td>1.8%</td>
<td>25.2%</td>
<td>53.2%</td>
<td>44.1%</td>
<td>35.8%</td>
<td>35.8%</td>
<td>36.4%</td>
<td>31.9%</td>
<td>34.9%</td>
</tr>
<tr>
<td><strong>Paper &amp; Paperboard Pkg</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrugated Boxes</td>
<td>34.4%</td>
<td>21.6%</td>
<td>37.4%</td>
<td>48.0%</td>
<td>67.3%</td>
<td>71.5%</td>
<td>85.0%</td>
<td>92.3%</td>
<td>88.4%</td>
<td>96.5%</td>
</tr>
<tr>
<td>Other Paper &amp; Paperboard Pkg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gable Top/Aseptic Cartons#</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Folding Cartons</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>7.0%</td>
<td>21.5%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Paperboard Packaging</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>20.1%</td>
<td>28.6%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wrapping Papers</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Paper Packaging</td>
<td>7.5%</td>
<td>9.2%</td>
<td>35.3%</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal Other Paper &amp; Paperboard Pkg</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Paper &amp; Board Pkg</strong></td>
<td>19.4%</td>
<td>14.5%</td>
<td>27.4%</td>
<td>36.9%</td>
<td>52.7%</td>
<td>59.6%</td>
<td>71.3%</td>
<td>78.2%</td>
<td>73.3%</td>
<td>80.9%</td>
</tr>
<tr>
<td><strong>Plastics Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET Bottles and Jars</td>
<td>3.8%</td>
<td>32.6%</td>
<td>22.1%</td>
<td>23.2%</td>
<td>29.2%</td>
<td>29.9%</td>
<td>29.1%</td>
<td>29.1%</td>
<td>29.1%</td>
<td>29.1%</td>
</tr>
<tr>
<td>HDPE Natural Bottles</td>
<td>Neg.</td>
<td>3.8%</td>
<td>30.4%</td>
<td>28.8%</td>
<td>27.5%</td>
<td>30.3%</td>
<td>31.2%</td>
<td>29.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Containers</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>1.4%</td>
<td>9.8%</td>
<td>9.9%</td>
<td>16.4%</td>
<td>18.6%</td>
<td>15.1%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wraps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Percentages may not sum to 100 due to rounding.*
Table 25. Products Recycled,* Composted and Managed by Other Food Pathways in the Municipal Solid Waste Stream, 1960 To 2018
(With Detail on Containers and Packaging)
(In percent of generation of each product)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal Bags, Sacks and Wraps</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>2.4%</td>
<td>4.3%</td>
<td>5.2%</td>
<td>11.5%</td>
<td>12.8%</td>
<td>9.4%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Other Plastics Packaging</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>1.0%</td>
<td>3.2%</td>
<td>2.8%</td>
<td>2.2%</td>
<td>2.9%</td>
<td>2.2%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Total Plastics Packaging</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>3.8%</td>
<td>9.2%</td>
<td>10.3%</td>
<td>13.5%</td>
<td>14.6%</td>
<td>13.0%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Other Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Packaging</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>1.6%</td>
<td>15.9%</td>
<td>19.8%</td>
<td>23.3%</td>
<td>27.2%</td>
<td>26.2%</td>
</tr>
<tr>
<td>Total Containers &amp; Pkg – recycled</td>
<td>10.5%</td>
<td>7.7%</td>
<td>16.1%</td>
<td>26.0%</td>
<td>38.1%</td>
<td>41.3%</td>
<td>48.6%</td>
<td>53.2%</td>
<td>49.4%</td>
<td>53.9%</td>
</tr>
<tr>
<td>Total Product Wastes recycled</td>
<td>10.3%</td>
<td>9.6%</td>
<td>13.3%</td>
<td>19.8%</td>
<td>29.7%</td>
<td>32.0%</td>
<td>36.6%</td>
<td>36.8%</td>
<td>35.5%</td>
<td>36.4%</td>
</tr>
<tr>
<td>Composted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composted - Food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food^</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>2.2%</td>
<td>2.1%</td>
<td>2.7%</td>
<td>5.3%</td>
<td>6.3%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Composted – Yard Trimmings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td></td>
<td>12.0%</td>
<td>51.7%</td>
<td>61.9%</td>
<td>57.5%</td>
<td>61.3%</td>
<td>69.4%</td>
</tr>
<tr>
<td>Composted – Misc. Inorganic Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total - composted</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>6.8%</td>
<td>25.4%</td>
<td>29.9%</td>
<td>27.6%</td>
<td>29.8%</td>
<td>33.8%</td>
</tr>
</tbody>
</table>

Other Food Management

| Other Food Management^ | | | | | | | | | | | |
| Food - animal feed | | | | | | | | | | | 2.9% |
| Food - bio-based materials/biochemical processing | | | | | | | | | | | 2.9% |
| Food – codigestion/anaerobic digestion | | | | | | | | | | | 8.3% |
| Food - donation | | | | | | | | | | | 7.6% |
| Food - land application | | | | | | | | | | | 0.4% |
| Food – sewer/wastewater treatment | | | | | | | | | | | 5.9% |
| Total Food – other food management | | | | | | | | | | | 28.1% |

Total MSW Recycled and Composted - % 6.4% 6.6% 9.6% 16.0% 28.5% 31.4% 34.0% 34.7% 35.0% 32.1% 38.2%

* Recycling of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.
** Includes carbonated drinks and non-carbonated water, teas, flavored drinks and ready-to-drink alcoholic coolers and cocktails.
‡ Includes milk, juice and other products packaged in gable top cartons and liquid food aseptic cartons.
^ Includes collection of other MSW organics for composting.
¥ In 2018, the food waste measurement methodology was expanded to include additional sources of generation and management pathways beyond composting, combustion with energy recovery and landfilling. Please see [https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data](https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data)

Neg. = Less than 5,000 tons or 0.05 percent.  NA = Not Available  - Detailed data not available.

December 2020 40
Table 26. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2018
(With Detail on Containers and Packaging)
(In thousands of tons)

<table>
<thead>
<tr>
<th>Products</th>
<th>Thousands of Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable Goods</td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 16)</td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 20)</td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td></td>
</tr>
<tr>
<td>Glass Packaging</td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Bottles**</td>
<td>0</td>
</tr>
<tr>
<td>Wine and Liquor Bottles</td>
<td>0</td>
</tr>
<tr>
<td>Other Bottles &amp; Jars</td>
<td>0</td>
</tr>
<tr>
<td>Total Glass Packaging</td>
<td>0</td>
</tr>
<tr>
<td>Steel Packaging</td>
<td></td>
</tr>
<tr>
<td>Cans</td>
<td>0</td>
</tr>
<tr>
<td>Other Steel Packaging</td>
<td>0</td>
</tr>
<tr>
<td>Total Steel Packaging</td>
<td>0</td>
</tr>
<tr>
<td>Aluminum Packaging</td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>0</td>
</tr>
<tr>
<td>Other Cans</td>
<td>0</td>
</tr>
<tr>
<td>Foil and Closures</td>
<td>0</td>
</tr>
<tr>
<td>Total Aluminum Pkg</td>
<td>0</td>
</tr>
<tr>
<td>Paper &amp; Paperboard Pkg</td>
<td></td>
</tr>
<tr>
<td>Corrugated Boxes</td>
<td>0</td>
</tr>
<tr>
<td>Other Paper &amp; Paperboard Pkg</td>
<td></td>
</tr>
<tr>
<td>Gable Top/Aseptic Cartons‡</td>
<td>20</td>
</tr>
<tr>
<td>Folding Cartons</td>
<td>70</td>
</tr>
<tr>
<td>Other Paperboard Packaging</td>
<td>0</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td>70</td>
</tr>
<tr>
<td>Wrapping Papers</td>
<td>Neg.</td>
</tr>
<tr>
<td>Other Paper Packaging</td>
<td>0</td>
</tr>
<tr>
<td>Subtotal Other Paper &amp; Paperboard Pkg</td>
<td></td>
</tr>
<tr>
<td>Total Paper &amp; Board Pkg</td>
<td>0</td>
</tr>
<tr>
<td>Plastics Packaging</td>
<td></td>
</tr>
<tr>
<td>PET Bottles and Jars</td>
<td>Neg.</td>
</tr>
<tr>
<td>HDPE Natural Bottles</td>
<td>Neg.</td>
</tr>
<tr>
<td>Other Containers</td>
<td>0</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td></td>
</tr>
<tr>
<td>Wraps</td>
<td></td>
</tr>
<tr>
<td>Subtotal Bags, Sacks and Wraps</td>
<td></td>
</tr>
<tr>
<td>Other Plastics Packaging</td>
<td>0</td>
</tr>
<tr>
<td>Total Plastics Packaging</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 26. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2018
(With Detail on Containers and Packaging)
(In thousands of tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Packaging</td>
<td>0</td>
<td>10</td>
<td>80</td>
<td>1,370</td>
<td>1,400</td>
<td>1,350</td>
<td>1,330</td>
<td>1,390</td>
<td>1,670</td>
<td>1,650</td>
</tr>
<tr>
<td>Other Misc. Packaging</td>
<td>0</td>
<td>Neg.</td>
<td>Neg.</td>
<td>20</td>
<td>50</td>
<td>60</td>
<td>60</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Total Containers &amp; Pkg</td>
<td>0</td>
<td>150</td>
<td>880</td>
<td>8,110</td>
<td>9,110</td>
<td>8,160</td>
<td>6,870</td>
<td>8,160</td>
<td>8,050</td>
<td>7,420</td>
</tr>
<tr>
<td>Total Product Wastes</td>
<td>0</td>
<td>300</td>
<td>1,900</td>
<td>19,970</td>
<td>24,370</td>
<td>22,890</td>
<td>19,970</td>
<td>22,760</td>
<td>23,850</td>
<td>23,630</td>
</tr>
<tr>
<td>Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>0</td>
<td>50</td>
<td>260</td>
<td>4,060</td>
<td>5,820</td>
<td>5,870</td>
<td>6,150</td>
<td>7,380</td>
<td>7,470</td>
<td>7,550</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>0</td>
<td>90</td>
<td>550</td>
<td>5,240</td>
<td>2,860</td>
<td>2,220</td>
<td>2,510</td>
<td>2,630</td>
<td>2,110</td>
<td>2,570</td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>0</td>
<td>10</td>
<td>50</td>
<td>490</td>
<td>680</td>
<td>670</td>
<td>680</td>
<td>780</td>
<td>790</td>
<td>800</td>
</tr>
<tr>
<td>Total Other Wastes</td>
<td>0</td>
<td>150</td>
<td>860</td>
<td>9,790</td>
<td>9,360</td>
<td>8,760</td>
<td>9,340</td>
<td>10,790</td>
<td>10,370</td>
<td>10,920</td>
</tr>
<tr>
<td>Total MSW Combusted with Energy Recovery - Weight</td>
<td>0</td>
<td>450</td>
<td>2,760</td>
<td>29,760</td>
<td>33,730</td>
<td>31,650</td>
<td>29,310</td>
<td>33,550</td>
<td>34,220</td>
<td>34,550</td>
</tr>
</tbody>
</table>

* Products and materials combusted with energy recovery estimated at percentage total MSW after recycling and composting. In 2018, 19.6 percent of MSW after recycling and composting was combusted with energy recovery except for major appliances, tires and lead-acid batteries (see Table 16 for details) and food (percentage distribution for food varies by generator sector, see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data). Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks and ready-to-drink alcoholic coolers and cocktails.

† Includes milk, juice and other products packaged in gable top cartons and liquid food aseptic cartons.

Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.
### Table 27. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2018
(With Detail on Containers and Packaging)
(In percent of total combusted)

<table>
<thead>
<tr>
<th>Products</th>
<th>Percent of Total Combusted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 16)</td>
<td></td>
</tr>
<tr>
<td><strong>Nondurable Goods</strong></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 20)</td>
<td></td>
</tr>
<tr>
<td><strong>Containers and Packaging</strong></td>
<td></td>
</tr>
<tr>
<td>Glass Packaging</td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Bottles**</td>
<td>4.5%</td>
</tr>
<tr>
<td>Wine and Liquor Bottles</td>
<td>2.2%</td>
</tr>
<tr>
<td>Other Bottles &amp; Jars</td>
<td>4.4%</td>
</tr>
<tr>
<td><strong>Total Glass Packaging</strong></td>
<td>11.1%</td>
</tr>
<tr>
<td>Steel Packaging</td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>2.2%</td>
</tr>
<tr>
<td>Cans</td>
<td>2.2%</td>
</tr>
<tr>
<td>Other Steel Packaging</td>
<td>Neg.</td>
</tr>
<tr>
<td><strong>Total Steel Packaging</strong></td>
<td>4.4%</td>
</tr>
<tr>
<td>Aluminum Packaging</td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>Neg.</td>
</tr>
<tr>
<td>Other Cans</td>
<td>Neg.</td>
</tr>
<tr>
<td>Foil and Closures</td>
<td>Neg.</td>
</tr>
<tr>
<td><strong>Total Aluminum Pkg</strong></td>
<td>Neg.</td>
</tr>
<tr>
<td>Paper &amp; Paperboard Pkg</td>
<td></td>
</tr>
<tr>
<td>Corrugated Boxes</td>
<td>8.9%</td>
</tr>
<tr>
<td>Other Paper &amp; Paperboard Pkg</td>
<td></td>
</tr>
<tr>
<td>Gable Top/Aseptic Cartons‡</td>
<td>0.7%</td>
</tr>
<tr>
<td>Folding Cartons</td>
<td>2.5%</td>
</tr>
<tr>
<td>Other Paperboard Packaging</td>
<td>4.5%</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td>2.5%</td>
</tr>
<tr>
<td>Wrapping Papers</td>
<td>Neg.</td>
</tr>
<tr>
<td>Other Paper Packaging</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>Subtotal Other Paper &amp; Paperboard Pkg</strong></td>
<td>3.9%</td>
</tr>
<tr>
<td><strong>Total Paper &amp; Board Pkg</strong></td>
<td>15.6%</td>
</tr>
<tr>
<td>Plastics Packaging</td>
<td></td>
</tr>
<tr>
<td>PET Bottles and Jars</td>
<td>Neg.</td>
</tr>
<tr>
<td>HDPE Natural Bottles</td>
<td>Neg.</td>
</tr>
<tr>
<td>Other Containers</td>
<td>Neg.</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td></td>
</tr>
<tr>
<td>Wraps</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Bags, Sacks and Wraps</strong></td>
<td>1.1%</td>
</tr>
<tr>
<td>Other Plastics Packaging</td>
<td>Neg.</td>
</tr>
<tr>
<td><strong>Total Plastics Packaging</strong></td>
<td>Neg.</td>
</tr>
<tr>
<td>Other Packaging</td>
<td></td>
</tr>
<tr>
<td>Wood Packaging</td>
<td>2.2%</td>
</tr>
<tr>
<td>Other Misc. Packaging</td>
<td>Neg.</td>
</tr>
<tr>
<td><strong>Total Containers &amp; Pkg</strong></td>
<td>33.3%</td>
</tr>
<tr>
<td><strong>Total Product Wastes</strong></td>
<td>66.6%</td>
</tr>
</tbody>
</table>

*Data includes energy recovery from all waste streams including commercial, industrial, and institutional.

(Detail in Table 16)

(Detail in Table 20)
Table 27. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2018  
(With Detail on Containers and Packaging)  
(In percent of total combusted)

<table>
<thead>
<tr>
<th>Products</th>
<th>Percent of Total Combusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Wastes</td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>11.1%</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>20.0%</td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>2.3%</td>
</tr>
<tr>
<td>Total Other Wastes</td>
<td>33.4%</td>
</tr>
<tr>
<td>Total MSW Combusted with Energy Recovery - %</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Products and materials combusted with energy recovery estimated at percentage total MSW after recycling and composting. In 2018, 19.6 percent of MSW after recycling and composting was combusted with energy recovery except for major appliances, tires and lead-acid batteries (see Table 16 for details) and food (percentage distribution for food varies by generator sector, see https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data). Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks and ready-to-drink alcoholic coolers and cocktails.

‡ Includes milk, juice and other products packaged in gable top cartons and liquid food aseptic cartons.

Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.
### Table 28. Products Landfilled* in Municipal Solid Waste, 1960 to 2018
(With Detail on Containers and Packaging)
(In thousands of tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Durable Goods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 17)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Detail in Table 21)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Containers and Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Glass Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Bottles**</td>
<td>1,310</td>
<td>5,420</td>
<td>5,890</td>
<td>3,110</td>
<td>3,370</td>
<td>3,710</td>
<td>2,730</td>
<td>2,480</td>
<td>2,370</td>
<td>2,260</td>
</tr>
<tr>
<td>Wine and Liquor Bottles</td>
<td>1,070</td>
<td>1,880</td>
<td>2,380</td>
<td>1,510</td>
<td>1,190</td>
<td>1,130</td>
<td>950</td>
<td>920</td>
<td>880</td>
<td>880</td>
</tr>
<tr>
<td>Other Bottles &amp; Jars</td>
<td>3,710</td>
<td>4,420</td>
<td>4,680</td>
<td>3,020</td>
<td>2,010</td>
<td>1,600</td>
<td>1,440</td>
<td>1,360</td>
<td>2,200</td>
<td>2,280</td>
</tr>
<tr>
<td><strong>Total Glass Packaging</strong></td>
<td>6,090</td>
<td>11,720</td>
<td>12,950</td>
<td>7,640</td>
<td>6,570</td>
<td>6,440</td>
<td>5,120</td>
<td>4,760</td>
<td>5,450</td>
<td>5,420</td>
</tr>
<tr>
<td><strong>Steel Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>630</td>
<td>1,540</td>
<td>460</td>
<td>90</td>
<td>Neg</td>
<td>Neg</td>
<td>Neg</td>
<td>Neg</td>
<td>Neg</td>
<td>Neg</td>
</tr>
<tr>
<td>Cans</td>
<td>3,740</td>
<td>3,470</td>
<td>2,650</td>
<td>1,620</td>
<td>890</td>
<td>650</td>
<td>630</td>
<td>400</td>
<td>350</td>
<td>370</td>
</tr>
<tr>
<td>Other Steel Packaging</td>
<td>260</td>
<td>270</td>
<td>240</td>
<td>120</td>
<td>60</td>
<td>70</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total Steel Packaging</strong></td>
<td>4,630</td>
<td>5,280</td>
<td>3,350</td>
<td>1,830</td>
<td>950</td>
<td>720</td>
<td>700</td>
<td>480</td>
<td>440</td>
<td>470</td>
</tr>
<tr>
<td><strong>Aluminum Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>Neg.</td>
<td>90</td>
<td>520</td>
<td>460</td>
<td>560</td>
<td>650</td>
<td>570</td>
<td>440</td>
<td>590</td>
<td>530</td>
</tr>
<tr>
<td>Other Cans</td>
<td>Neg.</td>
<td>60</td>
<td>40</td>
<td>20</td>
<td>40</td>
<td>70</td>
<td>60</td>
<td>100</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Foil and Closures</td>
<td>170</td>
<td>410</td>
<td>370</td>
<td>260</td>
<td>280</td>
<td>290</td>
<td>380</td>
<td>390</td>
<td>400</td>
<td>410</td>
</tr>
<tr>
<td><strong>Total Aluminum Pkg</strong></td>
<td>170</td>
<td>560</td>
<td>930</td>
<td>740</td>
<td>880</td>
<td>1,010</td>
<td>1,010</td>
<td>930</td>
<td>1,030</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Paper &amp; Paperboard Pkg</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrugated Boxes</td>
<td>4,810</td>
<td>9,960</td>
<td>10,480</td>
<td>10,360</td>
<td>7,960</td>
<td>7,220</td>
<td>3,590</td>
<td>1,930</td>
<td>3,020</td>
<td>940</td>
</tr>
<tr>
<td>Other Paper &amp; Paperboard Pkg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gable Top/Aseptic Cartons‡</td>
<td>770</td>
<td>420</td>
<td>440</td>
<td>410</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Folding Cartons</td>
<td>3,230</td>
<td>3,290</td>
<td>4,360</td>
<td>3,550</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Paperboard Packaging</td>
<td>3,840</td>
<td>4,810</td>
<td>230</td>
<td>240</td>
<td>160</td>
<td>130</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td>3,310</td>
<td>1,860</td>
<td>960</td>
<td>650</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wrapping Papers</td>
<td>200</td>
<td>90</td>
<td>Neg.</td>
<td>Neg.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Paper Packaging</td>
<td>2,720</td>
<td>3,450</td>
<td>540</td>
<td>850</td>
<td>1,350</td>
<td>1,150</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal Other Paper &amp; Paperboard Pkg</strong></td>
<td>5,320</td>
<td>5,080</td>
<td>5,800</td>
<td>5,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Paper &amp; Board Pkg</strong></td>
<td>11,370</td>
<td>18,220</td>
<td>18,760</td>
<td>17,110</td>
<td>15,230</td>
<td>13,110</td>
<td>8,910</td>
<td>7,010</td>
<td>8,820</td>
<td>6,440</td>
</tr>
<tr>
<td><strong>Plastics Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET Bottles and Jars</td>
<td>250</td>
<td>240</td>
<td>1,080</td>
<td>1,600</td>
<td>1,560</td>
<td>1,680</td>
<td>1,690</td>
<td>1,780</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE Natural Bottles</td>
<td>230</td>
<td>420</td>
<td>390</td>
<td>470</td>
<td>480</td>
<td>430</td>
<td>430</td>
<td>430</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Containers</td>
<td>60</td>
<td>910</td>
<td>870</td>
<td>1,170</td>
<td>1,270</td>
<td>1,050</td>
<td>1,260</td>
<td>1,270</td>
<td>1,360</td>
<td>1,350</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wraps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Bags, Sacks and Wraps</strong></td>
<td>1,200</td>
<td>2,000</td>
<td>3,240</td>
<td>3,450</td>
<td>2,860</td>
<td>2,890</td>
<td>3,010</td>
<td>3,040</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Plastics Packaging</td>
<td>60</td>
<td>1,180</td>
<td>770</td>
<td>1,680</td>
<td>2,220</td>
<td>2,550</td>
<td>3,580</td>
<td>3,800</td>
<td>3,640</td>
<td>3,490</td>
</tr>
<tr>
<td><strong>Total Plastics Packaging</strong></td>
<td>120</td>
<td>2,090</td>
<td>3,320</td>
<td>5,510</td>
<td>8,200</td>
<td>9,120</td>
<td>9,740</td>
<td>10,070</td>
<td>10,130</td>
<td>10,090</td>
</tr>
<tr>
<td><strong>Other Packaging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Packaging</td>
<td>2,000</td>
<td>2,060</td>
<td>3,860</td>
<td>6,860</td>
<td>5,840</td>
<td>6,050</td>
<td>6,160</td>
<td>5,720</td>
<td>6,860</td>
<td>6,780</td>
</tr>
<tr>
<td>Other Misc. Packaging</td>
<td>120</td>
<td>130</td>
<td>130</td>
<td>190</td>
<td>220</td>
<td>280</td>
<td>300</td>
<td>280</td>
<td>270</td>
<td></td>
</tr>
<tr>
<td><strong>Total Containers &amp; Pkg</strong></td>
<td>24,500</td>
<td>40,060</td>
<td>43,300</td>
<td>39,640</td>
<td>37,860</td>
<td>36,670</td>
<td>31,920</td>
<td>29,270</td>
<td>33,010</td>
<td>30,470</td>
</tr>
<tr>
<td><strong>Total Product Wastes</strong></td>
<td>49,010</td>
<td>74,960</td>
<td>92,470</td>
<td>97,500</td>
<td>101,340</td>
<td>102,910</td>
<td>92,840</td>
<td>93,350</td>
<td>97,940</td>
<td>97,040</td>
</tr>
</tbody>
</table>
Table 28. Products Landfilled* in Municipal Solid Waste, 1960 to 2018
(With Detail on Containers and Packaging)
(In thousands of tons)

<table>
<thead>
<tr>
<th>Products</th>
<th>Thousands of Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Wastes</td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>12,200</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>20,000</td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>1,300</td>
</tr>
<tr>
<td><strong>Total Other Wastes</strong></td>
<td>33,500</td>
</tr>
<tr>
<td><strong>Total MSW Landfilled - Weight</strong></td>
<td>82,510</td>
</tr>
</tbody>
</table>

* Landfilling after recycling, composting, other food management pathways and combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes or certain other wastes. Details may not add to totals due to rounding.
** Includes carbonated drinks and non-carbonated water, teas, flavored drinks and ready-to-drink alcoholic coolers and cocktails.
‡ Includes milk, juice and other products packaged in gable top cartons and liquid food aseptic cartons.
Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.
Table 29. Products Landfilled* in Municipal Solid Waste, 1960 to 2018  
(With Detail on Containers and Packaging)  
(In percent of total landfilled)  

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable Goods</td>
<td>11.6%</td>
<td>12.1%</td>
<td>14.9%</td>
<td>15.0%</td>
<td>18.6%</td>
<td>21.3%</td>
<td>24.1%</td>
<td>25.7%</td>
<td>26.5%</td>
<td>25.6%</td>
</tr>
<tr>
<td>(Detail in Table 17)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nondurable Goods</td>
<td>18.1%</td>
<td>18.9%</td>
<td>21.7%</td>
<td>24.8%</td>
<td>26.7%</td>
<td>25.2%</td>
<td>20.6%</td>
<td>20.8%</td>
<td>19.7%</td>
<td>19.9%</td>
</tr>
<tr>
<td>(Detail in Table 21)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers and Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glass Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Bottles**</td>
<td>1.6%</td>
<td>4.8%</td>
<td>4.4%</td>
<td>2.1%</td>
<td>2.4%</td>
<td>2.6%</td>
<td>2.0%</td>
<td>1.8%</td>
<td>1.7%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Wine and Liquor Bottles</td>
<td>1.3%</td>
<td>1.7%</td>
<td>1.8%</td>
<td>1.0%</td>
<td>0.8%</td>
<td>0.8%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.6%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Other Bottles &amp; Jars</td>
<td>4.5%</td>
<td>3.9%</td>
<td>3.5%</td>
<td>2.1%</td>
<td>1.5%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.0%</td>
<td>1.6%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Total Glass Packaging</td>
<td>7.4%</td>
<td>10.4%</td>
<td>9.6%</td>
<td>5.3%</td>
<td>4.7%</td>
<td>4.5%</td>
<td>3.8%</td>
<td>3.5%</td>
<td>3.9%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Steel Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>0.8%</td>
<td>1.4%</td>
<td>0.3%</td>
<td>0.1%</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
</tr>
<tr>
<td>Cans</td>
<td>4.5%</td>
<td>3.1%</td>
<td>2.0%</td>
<td>1.1%</td>
<td>0.6%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Other Steel Packaging</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.0%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total Steel Packaging</td>
<td>5.6%</td>
<td>4.7%</td>
<td>2.5%</td>
<td>1.3%</td>
<td>0.7%</td>
<td>0.5%</td>
<td>0.6%</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Aluminum Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer and Soft Drink Cans</td>
<td>Neg.</td>
<td>0.1%</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Other Cans</td>
<td>Neg.</td>
<td>0.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>0.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Foil and Closures</td>
<td>0.2%</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Total Aluminum Pkg</td>
<td>0.2%</td>
<td>0.5%</td>
<td>0.7%</td>
<td>0.5%</td>
<td>0.6%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Paper &amp; Paperboard Pkg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrugated Boxes</td>
<td>5.8%</td>
<td>8.8%</td>
<td>7.8%</td>
<td>7.1%</td>
<td>5.7%</td>
<td>5.1%</td>
<td>2.6%</td>
<td>1.4%</td>
<td>2.1%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Other Paper &amp; Paperboard Pkg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gable Top/Aseptic Cartons†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Folding Cartons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Paperboard Packaging</td>
<td>4.7%</td>
<td>4.3%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrapping Papers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Paper Packaging</td>
<td>3.3%</td>
<td>3.1%</td>
<td>0.4%</td>
<td>0.6%</td>
<td>1.0%</td>
<td>0.8%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal Other Paper &amp; Paperboard Pkg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Paper &amp; Board Pkg</td>
<td>13.8%</td>
<td>16.2%</td>
<td>14.0%</td>
<td>11.8%</td>
<td>10.9%</td>
<td>9.2%</td>
<td>6.5%</td>
<td>5.1%</td>
<td>6.3%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Plastics Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET Bottles and Jars</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.8%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.2%</td>
</tr>
<tr>
<td>HDPE Natural Bottles</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Other Containers</td>
<td>0.1%</td>
<td>0.8%</td>
<td>0.6%</td>
<td>0.8%</td>
<td>0.9%</td>
<td>0.7%</td>
<td>0.9%</td>
<td>0.9%</td>
<td>1.0%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Bags and Sacks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wraps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Plastics Packaging</td>
<td>0.1%</td>
<td>1.0%</td>
<td>0.6%</td>
<td>1.2%</td>
<td>1.5%</td>
<td>1.8%</td>
<td>2.6%</td>
<td>2.8%</td>
<td>2.6%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Total Plastics Packaging</td>
<td>0.1%</td>
<td>1.9%</td>
<td>2.5%</td>
<td>3.8%</td>
<td>5.8%</td>
<td>6.4%</td>
<td>7.1%</td>
<td>7.3%</td>
<td>7.2%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Other Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Packaging</td>
<td>2.4%</td>
<td>1.8%</td>
<td>2.9%</td>
<td>4.6%</td>
<td>4.2%</td>
<td>4.3%</td>
<td>4.5%</td>
<td>4.2%</td>
<td>4.9%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Other Misc. Packaging</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Total Containers &amp; Pkg</td>
<td>29.7%</td>
<td>35.6%</td>
<td>32.2%</td>
<td>27.3%</td>
<td>27.0%</td>
<td>25.8%</td>
<td>23.4%</td>
<td>21.4%</td>
<td>23.5%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Total Product Wastes</td>
<td>59.4%</td>
<td>66.6%</td>
<td>68.8%</td>
<td>67.1%</td>
<td>72.3%</td>
<td>72.3%</td>
<td>68.1%</td>
<td>67.9%</td>
<td>69.7%</td>
<td>66.4%</td>
</tr>
<tr>
<td>Other Wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>14.8%</td>
<td>11.3%</td>
<td>9.5%</td>
<td>13.6%</td>
<td>17.3%</td>
<td>18.5%</td>
<td>21.0%</td>
<td>22.0%</td>
<td>21.8%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>24.2%</td>
<td>20.5%</td>
<td>20.1%</td>
<td>17.6%</td>
<td>8.5%</td>
<td>7.0%</td>
<td>8.6%</td>
<td>7.8%</td>
<td>6.2%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Miscellaneous Inorganic Wastes</td>
<td>1.6%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.9%</td>
<td>2.2%</td>
<td>2.3%</td>
<td>2.3%</td>
<td>2.3%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Total Other Wastes</td>
<td>40.6%</td>
<td>33.4%</td>
<td>31.2%</td>
<td>32.9%</td>
<td>27.7%</td>
<td>27.7%</td>
<td>31.9%</td>
<td>32.1%</td>
<td>30.3%</td>
<td>33.6%</td>
</tr>
<tr>
<td>Total MSW Landfilled - %</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Landfilling after recycling, composting, other food management pathways and combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes or certain other wastes. Details may not add to totals due to rounding.  
** Includes carbonated drinks and non-carbonated water, teas, flavored drinks and ready-to-drink alcoholic coolers and cocktails.  
† Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.
Table 30. Selected Examples of Source Reduction Practices

<table>
<thead>
<tr>
<th>Source Reduction Practice</th>
<th>Durable Goods</th>
<th>Nondurable Goods</th>
<th>Containers &amp; Packaging</th>
<th>Organics (Wood, Yard Waste, Food, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product or Packaging Redesign</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials reduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Downgauge metals in appliances</td>
<td>Use paperless purchase orders</td>
<td>Implement container lightweighting</td>
<td>Optimize food packaging (size and design) to maximize consumption of product</td>
<td></td>
</tr>
<tr>
<td>- Use fewer materials in electronics</td>
<td>Use concentrated products</td>
<td>Use right size packaging</td>
<td>Trayless dining in cafeterias</td>
<td></td>
</tr>
<tr>
<td>- <strong>Materials substitution</strong></td>
<td>Use of composites in appliances and electronic circuitry</td>
<td>Replace rigid or heavy packaging with lighter or more compact options, e.g., cereal in bags, coffee in brick packs</td>
<td>Marketing, sale and consumption of off-grade produce</td>
<td></td>
</tr>
<tr>
<td>- Use high mileage tires</td>
<td>Perform regular servicing</td>
<td>Consider purchasing warranties to make repair more affordable</td>
<td>Use intelligent packaging that extends shelf life and prevents spoilage of food products</td>
<td></td>
</tr>
<tr>
<td>- Design for upgrades (e.g., add computer memory or processing capacity, battery upgrades)</td>
<td>Extend warranties</td>
<td>- Use life cycle data to choose material with lower lifecycle impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- <strong>Lengthen product lifespan</strong></td>
<td>Use high mileage tires</td>
<td>Perform regular servicing</td>
<td>Design for secondary use</td>
<td>Use intelligent packaging that extends shelf life and prevents spoilage of food products</td>
</tr>
<tr>
<td>- Design for upgrades (e.g., add computer memory or processing capacity, battery upgrades)</td>
<td>Consider purchasing warranties to make repair more affordable</td>
<td>Use Reusable packaging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- <strong>Consumer and Business Practices</strong></td>
<td>Purchase long-lived products</td>
<td>Perform repair</td>
<td>Purchase products in bulk (less packaging)</td>
<td>Implement xeriscaping</td>
</tr>
<tr>
<td>- Perform regular servicing</td>
<td>Use duplex printing</td>
<td>Use reusable bags and containers</td>
<td>Perform backyard composting, vermicomposting and grasscycling</td>
<td></td>
</tr>
<tr>
<td>- Perform repair</td>
<td>Share products</td>
<td>Buy fewer items</td>
<td>Donate food from businesses</td>
<td></td>
</tr>
<tr>
<td>- Buy fewer items</td>
<td>Reduce unwanted mail</td>
<td></td>
<td>Businesses can use just in time ordering/inventory control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Purchase concentrated products</td>
<td></td>
<td>Businesses can avoid food spoilage by changing:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buy fewer items</td>
<td></td>
<td>- Storage and transportation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Supply chain management</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Adjust menus to reduce frequently uneaten or wasted items</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Avoid spoilage by monitoring and tracking food and purchases and use</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Perform proper food storage and preparation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repurpose (e.g., older bread can be made into croutons)</td>
<td></td>
</tr>
</tbody>
</table>
Table 30. Selected Examples of Source Reduction Practices

<table>
<thead>
<tr>
<th>Source Reduction Practice</th>
<th>MSW Product Categories</th>
<th>Organics (Wood, Yard Waste, Food, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Durable Goods</td>
<td>Nondurable Goods</td>
</tr>
<tr>
<td>Reuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>By Design</td>
<td>● Document materials and methods for disassembly/repair/reuse</td>
<td>● Use reusable shipping or mailing envelopes</td>
</tr>
<tr>
<td></td>
<td>● Use materials and systems that exhibit modularity, and standardization to facilitate reuse and repair</td>
<td>● Use returnable secondary packaging</td>
</tr>
<tr>
<td></td>
<td>● Minimize connections between parts and/or make connections more accessible for ease of repair and replacement of parts</td>
<td>● Use reusable service ware in food service</td>
</tr>
<tr>
<td></td>
<td>● Use mechanical connections with bolts and screws instead of glues, to facilitate repair</td>
<td>● Use returnable secondary packaging</td>
</tr>
<tr>
<td></td>
<td>● Minimize connections to increase ease of repair or part replacement</td>
<td>● Use reusable service ware in food service</td>
</tr>
<tr>
<td></td>
<td>● Provide adequate tolerances to allow for removal and replacement or repair of parts without affecting adjacent components</td>
<td>● Use returnable secondary packaging</td>
</tr>
<tr>
<td>Secondary</td>
<td>● Borrow or rent for temporary use</td>
<td>● Donate clothing, books</td>
</tr>
<tr>
<td></td>
<td>● Give to charity</td>
<td>● Waste paper scratch pads</td>
</tr>
<tr>
<td></td>
<td>● Buy or sell at garage sales</td>
<td></td>
</tr>
</tbody>
</table>
Table 31. Households with Residential Food Collection Programs in the U.S., 2018*

<table>
<thead>
<tr>
<th>State</th>
<th>Curbside Households with Access</th>
<th>Drop off Households with Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>—</td>
<td>500</td>
</tr>
<tr>
<td>California</td>
<td>2,752,008</td>
<td>41,730</td>
</tr>
<tr>
<td>Colorado</td>
<td>293,325</td>
<td>601,295</td>
</tr>
<tr>
<td>Connecticut</td>
<td>—</td>
<td>28,364</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>—</td>
<td>255,000</td>
</tr>
<tr>
<td>Idaho</td>
<td>73,738</td>
<td>—</td>
</tr>
<tr>
<td>Illinois</td>
<td>148,448</td>
<td>207,000</td>
</tr>
<tr>
<td>Iowa</td>
<td>83,601</td>
<td>—</td>
</tr>
<tr>
<td>Maine</td>
<td>926</td>
<td>23,012</td>
</tr>
<tr>
<td>Maryland</td>
<td>18,425</td>
<td>—</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>45,319</td>
<td>412,103</td>
</tr>
<tr>
<td>Michigan</td>
<td>47,419</td>
<td>—</td>
</tr>
<tr>
<td>Minnesota</td>
<td>186,828</td>
<td>1,087,016</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>—</td>
<td>5,244</td>
</tr>
<tr>
<td>New Jersey</td>
<td>21,521</td>
<td>—</td>
</tr>
<tr>
<td>New York</td>
<td>790,090</td>
<td>3,159,035</td>
</tr>
<tr>
<td>North Carolina</td>
<td>—</td>
<td>509,000</td>
</tr>
<tr>
<td>Ohio</td>
<td>443</td>
<td>—</td>
</tr>
<tr>
<td>Oregon</td>
<td>188,441</td>
<td>—</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>3,600</td>
<td>—</td>
</tr>
<tr>
<td>Texas</td>
<td>403,000</td>
<td>—</td>
</tr>
<tr>
<td>Vermont</td>
<td>19,767</td>
<td>93,840</td>
</tr>
<tr>
<td>Virginia</td>
<td>3,025</td>
<td>25,166</td>
</tr>
<tr>
<td>Washington</td>
<td>980,578</td>
<td>253,622</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>23,176</td>
<td>—</td>
</tr>
<tr>
<td><strong>Households with Access to Collection</strong></td>
<td><strong>6,083,678</strong></td>
<td><strong>6,701,927</strong></td>
</tr>
<tr>
<td><strong>Total U.S. Households</strong></td>
<td><strong>126,224,000</strong></td>
<td><strong>126,224,000</strong></td>
</tr>
<tr>
<td></td>
<td><strong>4.82%</strong></td>
<td><strong>5.31%</strong></td>
</tr>
</tbody>
</table>

*Table presents 2017 data, the most recent data as of July 2020.
Table 32. Material Recovery Facilities (MRF), 2018*

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
<th>Estimated Throughput (tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTHEAST</td>
<td>128</td>
<td>22,528</td>
</tr>
<tr>
<td>SOUTH</td>
<td>142</td>
<td>23,718</td>
</tr>
<tr>
<td>MIDWEST</td>
<td>139</td>
<td>18,016</td>
</tr>
<tr>
<td>WEST</td>
<td>123</td>
<td>26,867</td>
</tr>
<tr>
<td><strong>U.S. Total</strong></td>
<td><strong>532</strong></td>
<td><strong>91,129</strong></td>
</tr>
</tbody>
</table>

*Number of facilities and throughput include bale and ship operations receiving fiber, mainly old corrugated cardboard (OCC), that bale and ship with no additional processing. Throughput is the tons of waste processed by the facility.


**Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

**South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

**Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin

**West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming
<table>
<thead>
<tr>
<th>Region</th>
<th>Number Operational</th>
<th>Design Capacity (tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTHEAST</td>
<td>37</td>
<td>44,807</td>
</tr>
<tr>
<td>SOUTH</td>
<td>19</td>
<td>32,194</td>
</tr>
<tr>
<td>MIDWEST</td>
<td>14</td>
<td>11,524</td>
</tr>
<tr>
<td>WEST</td>
<td>5</td>
<td>6,530</td>
</tr>
<tr>
<td>U.S. Total*</td>
<td>75</td>
<td>95,055</td>
</tr>
</tbody>
</table>

*WTE includes mass burn, modular and refuse-derived fuel combustion facilities.


South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
Table 34. Landfill Facilities, 2018

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Landfills</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTHEAST</td>
<td>105</td>
</tr>
<tr>
<td>SOUTH</td>
<td>491</td>
</tr>
<tr>
<td>MIDWEST</td>
<td>345</td>
</tr>
<tr>
<td>WEST</td>
<td>328</td>
</tr>
<tr>
<td><strong>U.S. Total</strong></td>
<td><strong>1,269</strong></td>
</tr>
</tbody>
</table>


**Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

**South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

**Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin

**West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming
Table 35. Generation, Recycling, Composting, Combustion with Energy Recovery and Landfilling of Municipal Solid Waste, 1960 to 2018
(In thousands of tons and percent of total generation)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thousands of Tons</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generation</td>
<td>88,120</td>
<td>121,060</td>
<td>151,640</td>
<td>208,270</td>
<td>243,450</td>
<td>253,730</td>
<td>251,050</td>
<td>262,110</td>
<td>268,660</td>
<td>292,360</td>
</tr>
<tr>
<td>Recycling</td>
<td>5,610</td>
<td>8,020</td>
<td>14,520</td>
<td>29,040</td>
<td>53,010</td>
<td>59,240</td>
<td>65,260</td>
<td>67,560</td>
<td>66,980</td>
<td>69,090</td>
</tr>
<tr>
<td>Composting*</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>4,200</td>
<td>16,450</td>
<td>20,550</td>
<td>20,170</td>
<td>23,390</td>
<td>26,990</td>
<td>24,890</td>
</tr>
<tr>
<td>Other food management**</td>
<td></td>
<td></td>
<td></td>
<td>17,710</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combustion with energy recovery¥</td>
<td>0</td>
<td>450</td>
<td>2,760</td>
<td>29,760</td>
<td>33,730</td>
<td>31,650</td>
<td>29,310</td>
<td>33,550</td>
<td>34,220</td>
<td>34,550</td>
</tr>
<tr>
<td>Discards to landfill, other disposal†</td>
<td>82,510</td>
<td>112,590</td>
<td>134,360</td>
<td>145,270</td>
<td>140,260</td>
<td>142,290</td>
<td>136,310</td>
<td>137,610</td>
<td>140,470</td>
<td>146,120</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pounds per Person per Day</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generation</td>
<td>2.68</td>
<td>3.25</td>
<td>3.66</td>
<td>4.57</td>
<td>4.74</td>
<td>4.69</td>
<td>4.45</td>
<td>4.48</td>
<td>4.53</td>
<td>4.90</td>
</tr>
<tr>
<td>Recycling</td>
<td>0.17</td>
<td>0.22</td>
<td>0.35</td>
<td>0.64</td>
<td>1.03</td>
<td>1.10</td>
<td>1.16</td>
<td>1.15</td>
<td>1.13</td>
<td>1.16</td>
</tr>
<tr>
<td>Composting*</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>0.09</td>
<td>0.32</td>
<td>0.38</td>
<td>0.36</td>
<td>0.40</td>
<td>0.45</td>
<td>0.42</td>
</tr>
<tr>
<td>Other food management**</td>
<td></td>
<td></td>
<td></td>
<td>0.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combustion with energy recovery¥</td>
<td>0.00</td>
<td>0.01</td>
<td>0.07</td>
<td>0.65</td>
<td>0.66</td>
<td>0.59</td>
<td>0.52</td>
<td>0.57</td>
<td>0.58</td>
<td>0.58</td>
</tr>
<tr>
<td>Discards to landfill, other disposal†</td>
<td>2.51</td>
<td>3.02</td>
<td>3.24</td>
<td>3.19</td>
<td>2.73</td>
<td>2.62</td>
<td>2.41</td>
<td>2.36</td>
<td>2.37</td>
<td>2.44</td>
</tr>
<tr>
<td>Population (thousands)</td>
<td>179,979</td>
<td>203,984</td>
<td>227,255</td>
<td>249,907</td>
<td>281,422</td>
<td>296,410</td>
<td>309,051</td>
<td>320,897</td>
<td>325,147</td>
<td>327,167</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percent of Total Generation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generation</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Recycling</td>
<td>6.4%</td>
<td>6.6%</td>
<td>9.6%</td>
<td>14.0%</td>
<td>21.8%</td>
<td>23.3%</td>
<td>26.0%</td>
<td>25.8%</td>
<td>24.9%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Composting*</td>
<td>Neg.</td>
<td>Neg.</td>
<td>Neg.</td>
<td>2.0%</td>
<td>6.7%</td>
<td>8.1%</td>
<td>8.0%</td>
<td>8.9%</td>
<td>10.1%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Other food management**</td>
<td></td>
<td></td>
<td></td>
<td>6.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combustion with energy recovery¥</td>
<td>0.0%</td>
<td>0.4%</td>
<td>1.8%</td>
<td>14.2%</td>
<td>13.9%</td>
<td>12.5%</td>
<td>11.7%</td>
<td>12.8%</td>
<td>12.7%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Landfilling and other disposal†</td>
<td>93.6%</td>
<td>93.0%</td>
<td>88.6%</td>
<td>69.8%</td>
<td>57.6%</td>
<td>56.1%</td>
<td>54.3%</td>
<td>52.5%</td>
<td>52.3%</td>
<td>50.0%</td>
</tr>
</tbody>
</table>

* Composting of yard trimmings, food and other MSW organic material. Does not include backyard composting.
** Includes the following management pathways: animal feed, bio-based materials/biochemical processing, codigestion/anaerobic digestion, donation, land application, and sewer/wastewater treatment
¥ Includes combustion with energy recovery of MSW in mass burn or refuse-derived fuel form, and combustion with energy recovery of source separated materials in MSW (e.g., wood pallets and tire-derived fuel). 2018 includes 30,190 MSW, 1,650 wood, and 2,710 tires (1,000 tons)
† Landfilling after recycling, composting, other food management, and combustion with energy recovery.
Details may not add to totals due to rounding.

**Figure 1. Municipal Solid Waste in the Universe of Subtitle D Wastes**

<table>
<thead>
<tr>
<th>The Subtitle D Waste included in this report as Municipal Solid Waste (MSW), which includes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Containers and packaging such as soft drink bottles and corrugated boxes</td>
</tr>
<tr>
<td>- Durable goods such as furniture and appliances</td>
</tr>
<tr>
<td>- Nondurable goods such as newspapers, trash bags and clothing</td>
</tr>
<tr>
<td>- Other wastes such as food and yard trimmings.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subtitle D Wastes not included as MSW in this report are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Municipal sludges</td>
</tr>
<tr>
<td>- Industrial nonhazardous process wastes</td>
</tr>
<tr>
<td>- Construction and demolition debris*</td>
</tr>
<tr>
<td>- Land clearing debris</td>
</tr>
<tr>
<td>- Transportation parts and equipment</td>
</tr>
<tr>
<td>- Agricultural wastes</td>
</tr>
<tr>
<td>- Oil and gas wastes</td>
</tr>
<tr>
<td>- Mining wastes</td>
</tr>
<tr>
<td>- Auto bodies</td>
</tr>
<tr>
<td>- Grease and oils (non-food)</td>
</tr>
</tbody>
</table>

*Construction and demolition debris are included in this report, but are outside of the scope of MSW.*
The materials flow methodology produces an estimate of total municipal solid waste (MSW) generation in the United States, by material categories and by product categories.

**Generation** refers to the weight of materials and products as they enter the waste management system from residential, commercial and institutional sources and before recycling, composting, combustion or landfilling take place. Preconsumer (industrial) scrap is not included in the generation estimate. Source reduction activities, such as backyard composting of yard trimmings, take place ahead of generation.

**Source reduction** as used in this report refers to activities that reduce the amount of wastes before they enter the municipal solid waste management system. Reuse is a source reduction activity involving the recovery or reapplication of a package, used product or material in a manner that retains its original form or identity. Reuse of products such as refillable glass bottles and reusable plastic food storage containers is considered to be source reduction, not recycling.

**Recycling** is defined as the recovery of useful materials, such as paper, glass, plastic and metals, from the MSW stream, along with the transformation of the materials, to make new products to reduce the amount of virgin raw materials needed to meet consumer demands.

**Composting** is the decomposition of organic materials by aerobic microorganisms. Composting facilities manage the amount of moisture and oxygen and mixture of organic materials for optimal composting conditions. The composting process emits heat, water vapor and biogenic carbon dioxide, reducing the raw organic materials in mass and volume to create compost.

**Combustion with energy recovery** is often called “waste-to-energy,” and as used in this report refers to confined and controlled burning with energy recovery, which not only decreases the volume of solid waste destined for landfills, but can also recover energy from the waste burning process.

**Landfilling** refers to the MSW remaining after recycling, composting and combustion with energy recovery. These materials presumably would be landfilled in a discrete area of land or excavation that receives household waste. Some MSW, however, is littered, stored or disposed onsite; or burned onsite, particularly in rural areas. There are no good estimates for these other disposal practices available, but the total amounts of MSW involved are assumed to be small.

For the analysis of municipal solid waste in this report, products are divided into three basic categories: durable goods, nondurable goods and containers and packaging. The durable goods and nondurable goods categories generally follow the definitions of the U.S. Department of Commerce.

**Durable goods** are those products that last three years or more. Products in this category include major and small appliances, furniture and furnishings, carpets and rugs, tires, lead-acid batteries, consumer electronics and other miscellaneous durables.

**Nondurable goods** are those products that last less than three years. Products in this category include newspapers, books, magazines, office papers, directories, mail, other commercial printing, tissue paper and towels, paper and plastic plates and cups, trash bags, disposable diapers, clothing and footwear, towels, sheets and pillowcases, other nonpackaging paper and other miscellaneous nondurables.

**Containers and packaging** are assumed to be discarded the same year the products they contain are purchased. Products in this category include bottles, containers, corrugated boxes, milk cartons, folding cartons, bags, sacks, and wraps, wood packaging and other miscellaneous packaging.

---

Figure 3. Paper and Paperboard Products Generated in MSW, 2018

- Books
- Magazines
- Bags and sacks
- Paper plates and cups
- Other packaging
- Commercial printing
- Marketing mail
- Tissue paper and towels
- Other papers
- Office-type papers
- Newspapers/mechanical papers
- Gable top/aseptic and folding cartons
- Corrugated boxes

Million tons

0  7  14  21  28  35
Figure 4. Paper and Paperboard Generation and Recycling, 1960 to 2018
Figure 5. Glass Products Generated in MSW, 2018

- Wine & liquor bottles
- Other bottles & jars
- Durable goods
- Beer & soft drink bottles*

*Includes carbonated drinks and non-carbonated water, teas, flavored drinks, and ready-to-drink alcoholic coolers and cocktails.
Figure 6. Glass Generation and Recycling, 1960 to 2018
Figure 7. Metal Products Generated in MSW, 2018

- **Nondurables**: 100%
- **Packaging**: 54% Ferrous metals, 46% Aluminum
- **Durables**: 80% Ferrous metals, 8% Aluminum, 12% Other nonferrous
Figure 8. Metals Generation and Recycling, 1960 to 2018
Figure 9. Plastics Products Generated in MSW, 2018

- Other containers
- PET bottles and jars and HDPE natural bottles
- Bags, sacks and wraps
- Other packaging
- Nondurable goods
- Durable goods

million tons
Figure 10. Plastics Generation and Recycling, 1960 to 2018
Figure 11. Generation of Materials in MSW, 1960 to 2018*

* Generation rose considerably from 2017 to 2018 mainly because EPA enhanced its food measurement methodology to more fully account for all the ways wasted food is managed throughout the food system.

** *All other* includes primarily wood, rubber and leather, and textiles.
Figure 12. Recycled, Composted, Managed By Other Food Pathways, Combustion with Energy Recovery and Landfilling of Materials in MSW, 1960 to 2018

\[ \text{Graph showing the treatment of MSW from 1960 to 2018 with labels for each category: Recycling, Composting, Combustion with energy recovery, and Landfilling.} \]

\[ \text{In this figure composting and other food management pathways are combined.} \]
\[ \text{* Landfilling after composting, food waste management, recycling and combustion with energy recovery. Includes combustion without energy recovery.} \]
\[ \text{The top line measures generation, because generation = recycling + composting + combustion with energy recovery + landfilling.} \]
\[ \text{** MSW generation rose considerably from 2017 to 2018 mainly because EPA enhanced its food measurement methodology to more fully account for all the ways wasted food is managed throughout the food system.} \]
Figure 13. Materials Recycling, Composting and Other Food Management in MSW,* 2018

- Recycling (69.09 Million tons)
  - Paper and paperboard: 65.5%
  - Metals: 12.6%
  - Plastics: 4.5%
  - Glass: 4.4%
  - Wood: 4.5%
  - Rubber, leather and textiles: 6.1%
  - Other: 1.4%

- Composting and Other Food Management (42.6 Million tons)
  - Food - other management: 41.6%
  - Food - composting: 6.1%
  - Yard trimmings composting: 52.3%

* In percent by weight of total recycling and composting and other food management
Figure 14. Materials Generated, Combusted with Energy Recovery and Landfilled in MSW, 2018

- **Generation (292.36 Million tons)**
  - Paper and paperboard: 23.1%
  - Glass: 8.9%
  - Metals: 6.2%
  - Plastics: 8.8%
  - Rubber, leather and textiles: 12.1%
  - Wood: 12.2%
  - Yard trimmings: 2.9%
  - Food: 4.2%
  - Other: 21.6%

- **Combustion with Energy Recovery (34.55 Million tons)**
  - Paper and paperboard: 21.9%
  - Glass: 8.2%
  - Metals: 7.4%
  - Plastics: 16.3%
  - Rubber, leather and textiles: 12.2%
  - Wood: 16.5%
  - Yard trimmings: 4.8%
  - Food: 8.5%
  - Other: 12.2%

- **Landfilled (146.12 Million tons)**
  - Paper and paperboard: 24.1%
  - Glass: 9.5%
  - Metals: 11.1%
  - Plastics: 18.5%
  - Rubber, leather and textiles: 7.2%
  - Wood: 11.8%
  - Yard trimmings: 5.2%
  - Food: 8.3%
  - Other: 4.3%
Figure 15. Generation of Products in MSW, 1960 to 2018*

* Generation rose considerably from 2017 to 2018 mainly because EPA enhanced its food measurement methodology to more fully account for all the ways wasted food is managed throughout the food system.
Figure 16. Nondurable Goods Generated, Recycled, Combusted with Energy Recovery and Landfilled in Municipal Solid Waste, 2018
Figure 17. Containers and Packaging Materials Generated, Recycled, Combusted with Energy Recovery and Landfilled in Municipal Solid Waste, 2018

- **Generation (82.22 Million tons)**
  - Paper and paperboard: 51.0%
  - Glass: 14.4%
  - Metals: 11.9%
  - Plastics: 17.7%
  - Wood, other*: 5.0%

- **Recycling (44.33 Million tons)**
  - Paper and paperboard: 76.4%
  - Glass: 6.9%
  - Metals: 5.2%
  - Plastics: 4.5%
  - Wood, other*: 7.0%

- **Combusted with Energy Recovery (7.42 Million tons)**
  - Paper and paperboard: 23.0%
  - Glass: 21.2%
  - Metals: 17.7%
  - Plastics: 33.2%
  - Wood, other*: 4.9%

- **Landfilled (30.47 Million tons)**
  - Paper and paperboard: 23.1%
  - Glass: 21.1%
  - Metals: 17.8%
  - Plastics: 33.1%
  - Wood, other*: 4.9%

*Primarily wood, with less than 1% textiles.
Figure 18. Containers and Packaging Products Generated, Recycled, Combusted with Energy Recovery and Landfilled in Municipal Solid Waste, 2018
Figure 19. Diagram of Solid Waste Management
Figure 20. States with Bottle Deposit Rules

Source: Container Recycling Institute, 2011.
Figure 21. Estimated MRF Throughput, 2018*
(Tons per day per million persons)

*Throughput is the tons of waste processed.

Source: U.S. Census Bureau, Governmental Advisory Associates, Inc. Data provided August 2019


South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin

Figure 22. Mixed Waste Processing Estimated Throughput, 2018*
(Tons per day per million persons)

*Throughput is the tons of waste processed.

South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
Figure 23. MSW Composting Throughput, 2018*
(Tons per day per million persons)

*Throughput is the tons of waste processed.

Source: U.S. Census Bureau; BioCycle, November 2011, BioCycle October 2017, Mariposa County, CA; Marlborough, MA; Nantucket, MA; Faribault County, MN; Gallatin County, MT; Delaware County, NY; Medina County, OH; Rapid City, SD; Sevier County, TN websites.


South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin

Figure 24. Yard Trimmings Composting Facilities, 2018*
(In number of facilities)


South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin


* Latest data available.
Figure 25. Municipal Waste-To-Energy Capacity, 2018
(Tons per day per million persons)

South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
Figure 26. Number of Landfills in the U.S., 2018


South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin