



| YEAR | TOTAL MSW GENERATED IN THE U.S. | TOTAL MSW GENERATED PER PERSON PER DAY IN THE U.S. | UNITED STATES POPULATION | SOUTH CAROLINA POPULATION |
|------|---------------------------------|--|--------------------------|---------------------------|
| 1970 | 121.1 million tons              | 3.3 pounds   | 203.3 million            | 2.6 million               |
| 1980 | 151.6 million tons              | 3.7 pounds   | 226.5 million            | 3.1 million               |
| 1990 | 208.3 million tons              | 4.8 pounds   | 248.7 million            | 3.6 million               |
| 2000 | 243.5 million tons              | 4.8 pounds   | 281.4 million            | 4.0 million               |
| 2005 | 253.7 million tons              | 4.7 pounds   | 304.0 million            | 4.5 million               |
| 2010 | 250.0 million tons              | 4.4 pounds   | 309.0 million            | 4.6 million               |
| 2013 | 254.1 million tons              | 4.4 pounds   | 316.1 million            | 4.7 million               |
| 2015 | 262.1 million tons              | 4.5 pounds   | 320.9 million            | 4.8 million               |
| 2016 | 266.8 million tons              | 4.5 pounds   | 323.1 million            | 4.9 million               |
| 2017 | 267.8 million tons              | 4.5 pounds   | 325.1 million            | 5.0 million               |
| 2018 | 292.4 million tons              | 4.9 pounds   | 327.2 million            | 5.1 million               |

**NOTE:** Municipal solid waste (MSW) is the combined residential, commercial and institutional waste generated and includes paper, cans, food waste, yard trimmings and packaging. The MSW figures are from the U.S. Environmental Protection Agency's (EPA) **Advancing Sustainable Material Management: 2018 Fact Sheet** published December 2020. The population figures are provided courtesy of the U.S. Census Bureau.

1. If each South Carolinian generates 5.3 pounds of MSW per day (before recycling), determine how much each of us makes in a week and in a year. How much does your family make?  

---
2. MSW is managed in two ways: it is recycled or disposed of in a landfill. Of the MSW disposed of in a landfill, assume that 1,300 pounds\* of waste can be compacted (crushed) into one cubic yard of landfill space. How many cubic yards of landfill space are required per person per year?  

---
3. South Carolina's population is more than 5 million people. Each South Carolinian generates 5.3 pounds of MSW per day (before recycling). How many football fields (100 yards long, 56 yards wide and 3.3 yards high) would be filled in a day?  

---
4. Review South Carolina's population growth starting with 1970 in the chart above. Review the EPA figures for MSW generation per person per day since 1970. Determine how much MSW was generated in South Carolina.\* Create a bar graph showing the growth in MSW generation over time. Draw your bar graph on the back of this page.  

---

\*Disposal and recycling rates for South Carolina are available at [scdhec.gov/data-reports](https://www.scdhec.gov/data-reports).

Visit [takeactionsc.org/curriculum](https://takeactionsc.org/curriculum) to download a printable copy.