

I. Disposal Activities

Table 1. Status of Vermont landfills that were permitted for waste acceptance in 2019

| Solid Waste Landfills | Location | Status | Permitted Fill Rate (tons/year) |
|---|-----------|---|---------------------------------|
| New England Waste Services, Vermont (NEWSVT): Phase IV: Cells 1-4 | Coventry | Operating | 600,000 |
| Salisbury Landfill | Salisbury | Closed (9-1-20), unlined | 1,000 |
| Northwest Solid Waste District – Sheldon: Cell 1 | Sheldon | Permitted, no current plans for construction, not operating | 20,000 |

Table 2. In-state and Out-of-State (OOS) materials disposed *within* Vermont landfills, as reported in 2019

| | Total Tons (as reported by disposal facilities) | OOS Tons | VT Tons (Total tons minus OOS tons) |
|-------------------|--|----------------|---|
| MSW | 394,168 | --- | 394,168 |
| C&D | 9,132 | 8,203 | 930 |
| Sludge (WWTP) | 42,440 | 27,754 | 14,686 |
| Asbestos | 36,712 | 32,917 | 3,795 |
| Ash | 4,537 | 4,533 | 4 |
| Contaminated Soil | 8,905 | 6,977 | 1,928 |
| Sewer Grit | 893 | --- | 893 |
| Paper Sludge | 2,995 | --- | 2,995 |
| Medical Waste | 110 | --- | 110 |
| Other | 37,665 | 28,512 | 9,153 |
| TOTAL | 537,557 | 108,896 | 428,661 |

Table 3. Solid waste sourced in Vermont but sent for management at an Out-of-State facility in 2019

| | Massachusetts | New Hampshire | New York | Quebec | Total |
|-----|---------------|---------------|----------|--------|----------------|
| MSW | 38 | 40,383 | 66,228 | --- | 106,649 |
| C&D | --- | 15,136 | 18,966 | --- | 34,102 |

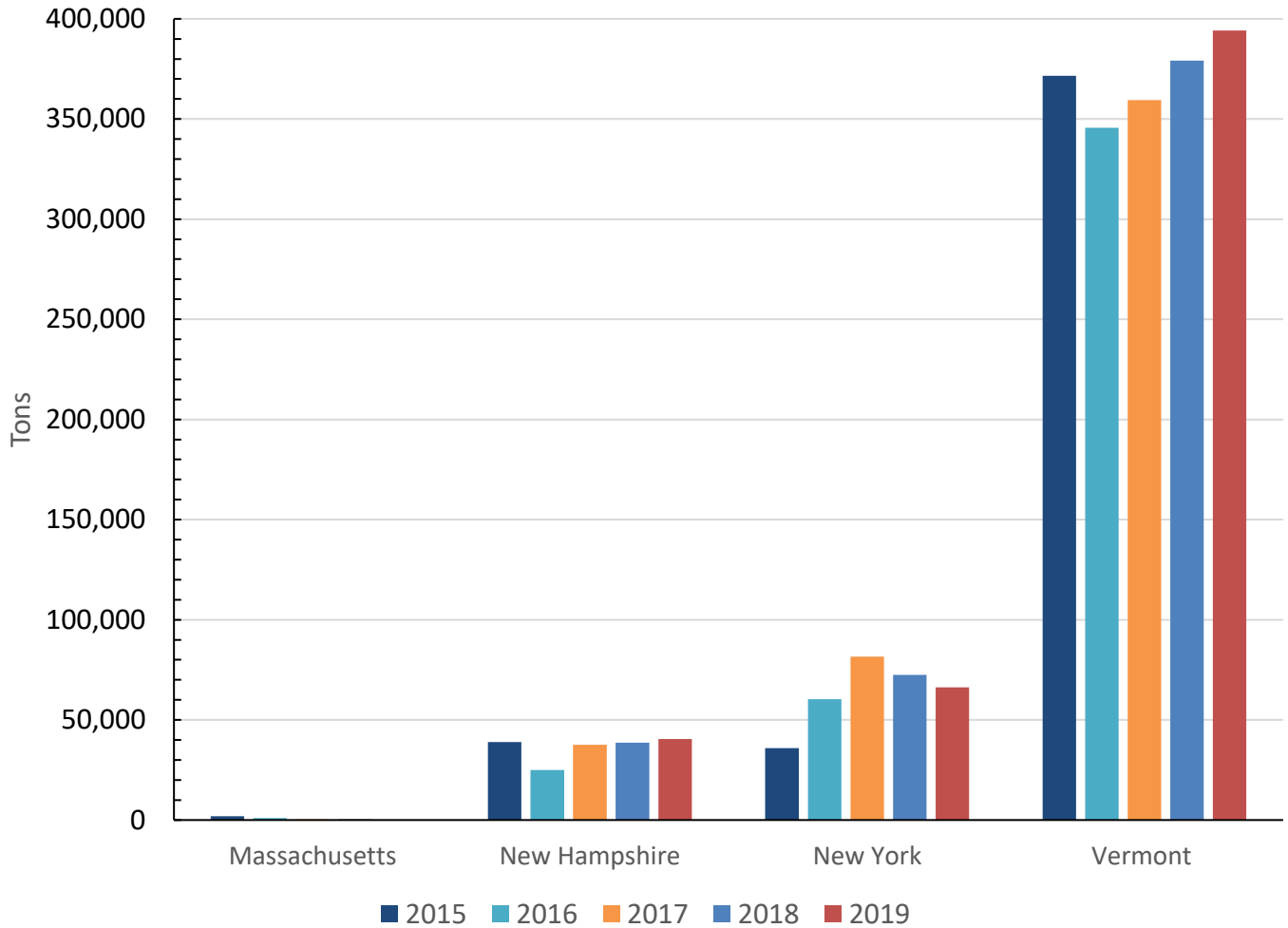


Figure 1: Destination of disposed MSW that was generated in Vermont in 2019, with recent years for comparison.

Table 4. Beneficial use of solid waste materials within Vermont landfill operations in 2019

| Material | Use | Tonnage |
|--------------------------|----------------------------------|---------------|
| Paper Sludge | Landfill Alternative Daily Cover | 282 |
| Contaminated Soils | Landfill Alternative Daily Cover | 30,335 |
| Sludge – cut with soil | Landfill Alternative Daily Cover | 2,104 |
| Sand Blast Grit | Landfill Alternative Daily Cover | 77 |
| Asphalt, Brick, Concrete | Landfill Road Base | 0 |
| Processed C&D | Landfill Road Base | 3,228 |
| Sawdust | Landfill Road Base | 866 |
| Mixed, Crushed Glass | Landfill Road Base | 0 |
| Total | | 36,892 |

Table 5. Adjustment of MSW tonnage for estimated C&D component

| | Reported Tonnages | C&D tonnage (11.1% of reported MSW) | Remaining MSW Tonnage |
|-----------------------------------|-------------------|-------------------------------------|-----------------------|
| Vermont MSW In-state Disposal | 394,168 | 43,753 | 350,415 |
| Vermont MSW Out-of-State Disposal | 106,649 | 11,838 | 94811 |
| Total Vermont MSW Disposal | | | 445,226 |

II. Diversion Activities

Table 6. Summary of Vermont's 2019 diversion activities

| (in tons) | Fibers | Containers | Single Stream | C&D | Scrap Metal | Organics | Foodbank Food Rescue | Miscellaneous |
|--|--------------------------------|-------------------------------|---------------|--------------|--------------------|--|----------------------|--------------------|
| A- From Reporting Facility to Market | 66,631 | 16,518 | 1,810 | 6,053 | 15,730 | 15,145 | | 67 |
| B- Estimate of Direct to Broker or Market (Economic Recycling) | 20,707 [†] | 17,480* 2,686 [†] | | | 1,616 [†] | 2,552 [†] | | 1,159 [†] |
| C- Reported Reuse Activities | 541 | 5 | | 8 | | | 3,658 | 89 |
| D – Estimated Household Composting | | | | | | 16,548 [§] 36,127 [†] | | |
| TOTALS | 87,879 | 36,689 | 1,810 | 6,053 | 17,346 | 70,372 | 3,658 | 1,315 |
| | A + B + C + D = 225,122 | | | | | | | |

* Denotes an estimate derived from the System Analysis of the Impact of Act 148 on Solid Waste management in Vermont (2013, DSM Environmental Services, Inc.)

[†] Denotes an estimate derived from the 2018 Vermont Waste Characterization Report (2018, DSM Environmental). See above descriptions of the diversion groups for details.

[‡] Denotes values determined from tonnages provided by the Vermont Foodbank.

[§] Denotes a leaf and yard waste estimate derived from the Vermont's Municipal Solid Waste Diversion Rate 2001 study (2002, DSM Environmental). See above descriptions of the diversion groups for details

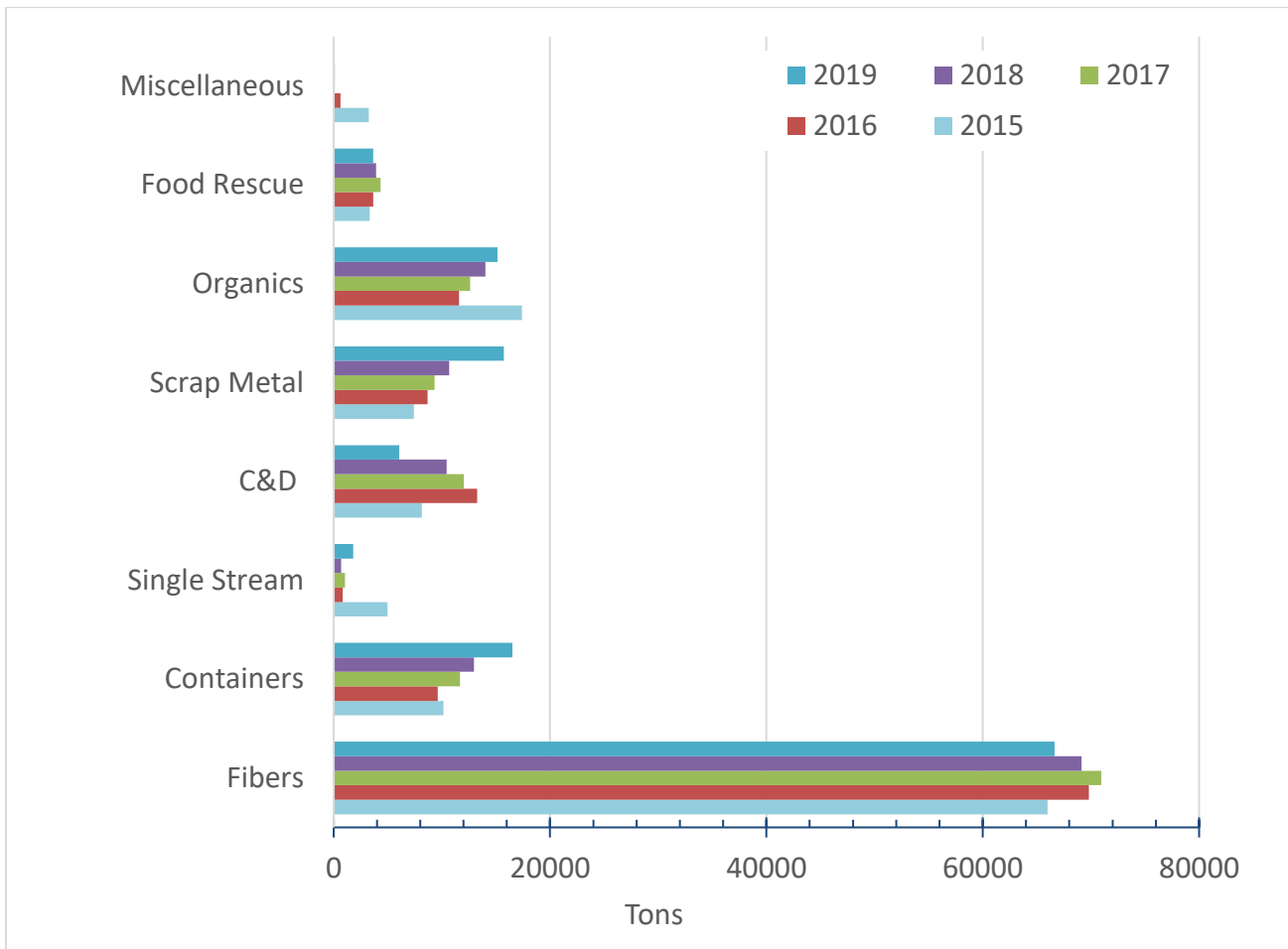


Figure 2: 2014-2019 comparison of materials marketed directly from Vermont solid waste facilities (Group A from Table 6 and Food Rescue).

III. Total Municipal Solid Waste Generation and Summary

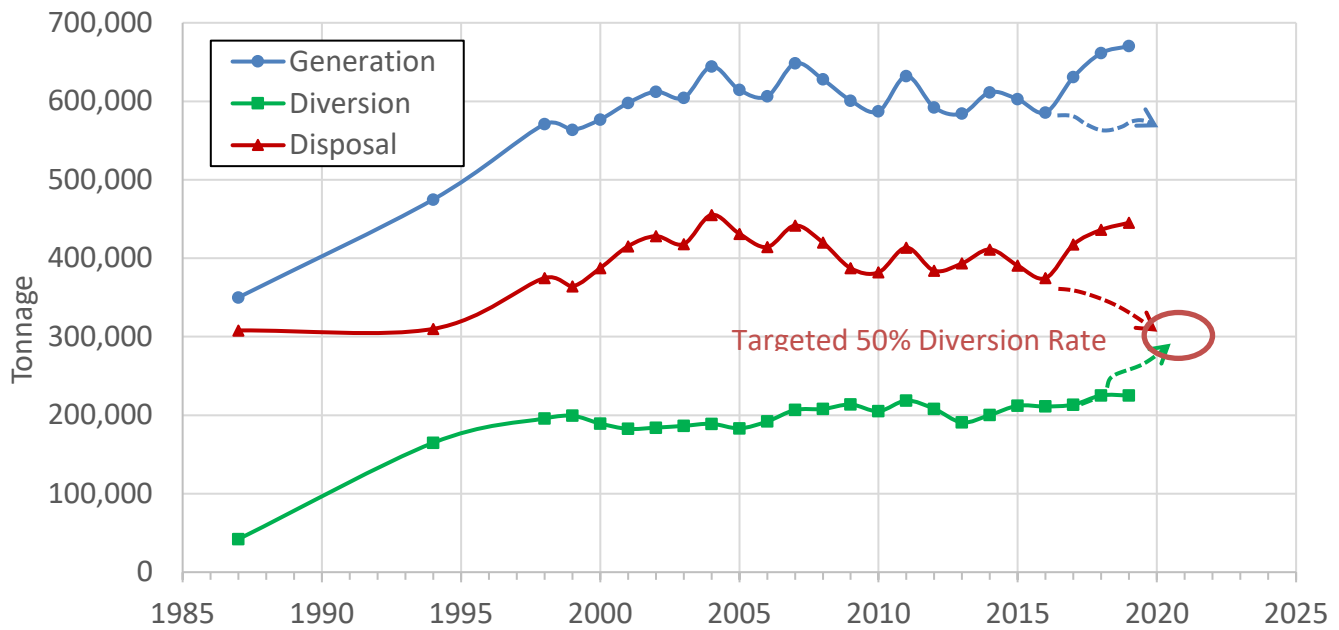


Figure 3: Projections of municipal solid waste generation, diversion, and disposal with the implementation of Universal Recycling over coming years.

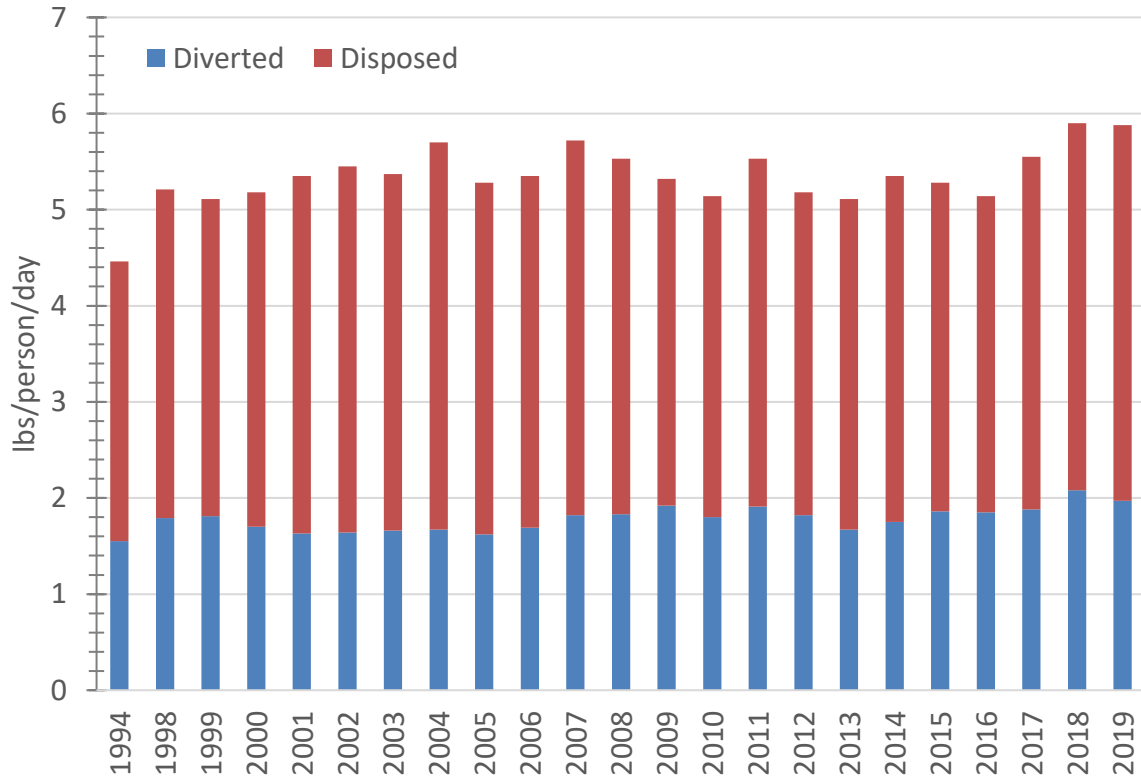


Figure 4: Pounds of waste generated per day per person (disposed + diverted) by Vermonters.

Table 7. Vermont generation, diversion and disposal totals for municipal solid waste. Includes tonnages, per capita breakdowns and percentage rates.

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------|---------|
| Generation | 609,497 | 579,689 | 571,446 | 613,517 | 592,981 | 566,042 | 552,297 | 597,254 | 557,302 | 584,235 | 611,472 | 602,617 | 585,789 | 630,851 | 661,385 *673,403 | 670,348 |
| Diversion | 154,217 | 148,459 | 157,173 | 171,818 | 173,024 | 178,796 | 170,326 | 183,737 | 173,258 | 190,797 | 200,272 | 212,065 | 211,152 | 213,449 | 225,219 *237,237 | 225,122 |
| Disposal | 455,281 | 431,230 | 414,273 | 441,699 | 419,957 | 387,246 | 381,971 | 413,517 | 384,044 | 393,438 | 411,200 | 390,552 | 374,637 | 417,402 | 436,166 | 445,226 |
| Population [1] | 618,794 | 619,736 | 620,778 | 621,254 | 621,270 | 621,750 | 625,741 | 626,592 | 625,953 | 626,630 | 626,562 | 626,042 | 624,594 | 623,657 | 626,299 | 623,989 |
| Per Capita MSW Generation (Tons/Year) | 0.98 | 0.94 | 0.92 | 0.99 | 0.95 | 0.91 | 0.88 | 0.95 | 0.89 | 0.93 | 1.0 | 0.96 | 0.94 | 1.01 | 1.08 | 1.08 |
| (Pounds/Day) | 5.40 | 5.13 | 5.04 | 5.41 | 5.23 | 4.99 | 4.84 | 5.22 | 4.88 | 5.11 | 5.35 | 5.27 | 5.14 | 5.54 | 5.89 | 5.88 |
| Per Capita MSW Diversion (Tons/Year) | 0.25 | 0.24 | 0.25 | 0.28 | 0.28 | 0.29 | 0.27 | 0.29 | 0.28 | 0.30 | 0.32 | 0.34 | 0.34 | 0.34 | 0.38 | 0.36 |
| (Pounds/Day) | 1.37 | 1.31 | 1.39 | 1.52 | 1.53 | 1.58 | 1.49 | 1.61 | 1.52 | 1.67 | 1.75 | 1.86 | 1.85 | 1.88 | 2.08 | 1.97 |
| Per Capita MSW Disposal (Tons/Year) | 0.74 | 0.70 | 0.67 | 0.71 | 0.68 | 0.62 | 0.61 | 0.66 | 0.61 | 0.63 | 0.66 | 0.62 | 0.60 | 0.67 | 0.70 | 0.71 |
| (Pounds/Day) | 4.03 | 3.81 | 3.66 | 3.90 | 3.70 | 3.41 | 3.34 | 3.62 | 3.36 | 3.44 | 3.60 | 3.41 | 3.29 | 3.67 | 3.82 | 3.91 |
| | | | | | | | | | | | | | | | | |
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| Generation | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Diversion | 25% | 26% | 28% | 28% | 29% | 32% | 31% | 31% | 31% | 33% | 33% | 35% | 36% | 34% | 34% | 34% |
| Disposal | 75% | 74% | 72% | 72% | 71% | 68% | 69% | 69% | 69% | 67% | 67% | 65% | 64% | 66% | 66% | 66% |

[1] Population Estimate, Vermont. US Census: <http://census.gov>

* There was an error in the 2018 diversion data. The corrected value is above.

IV. Other Material Management Activities – Not included in disposal or diversion tonnages

Table 8. Summary of historic hazardous waste collections and participation

| | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
|--|------|------|------|-------|------|------|------|------|------|------|------|------|
| Total HHW and CEG tons | 935 | 906 | 865 | 1,069 | 899 | 452 | 525 | 460 | 467 | 489 | 566 | 436 |
| % participating VT households | 11% | 9% | 10% | 8% | 6% | 7% | 7% | 9% | 7% | 6% | 8% | 9% |
| Pounds collected per household (avg.) | 55 | 60 | 60 | 86 | 131 | 102 | 62 | 34 | 47 | 46 | 45 | 30 |