

I. Disposal Activities

Table 1. Status of Vermont landfills that were permitted for waste acceptance in 2021

Solid Waste Landfills	Location	Status	Permitted Fill Rate (tons/year)
New England Waste Services, Vermont (NEWSVT): Phase VI	Coventry	Operating	600,000
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 2021

	Total Tons	OOS Tons	VT Tons
	(as reported by disposal facilities)		(Total tons minus OOS tons)
MSW	401,509	---	401,509
C&D	12,244	9,340	2,904
Sludge (WWTP)	38,689	22,955	15,735
Asbestos	529	179	351
Ash	15	0	15
Contaminated Soil	7,578	6,329	1,249
Sewer Grit	1,858	981	877
Paper Sludge	2,800	---	2,800
Medical Waste	118	---	118
MRF Residue	23,465	23,465	--
Other	6,785	642	6,143
TOTAL	495,590	63,889	431,701

Table 3. Solid waste sourced in Vermont but sent for management at an Out-of-State facility in 2021

	Massachusetts	New Hampshire	New York	Total
MSW	88	28,125	43,096	71,308
C&D	---	7,351	12,086	19,437

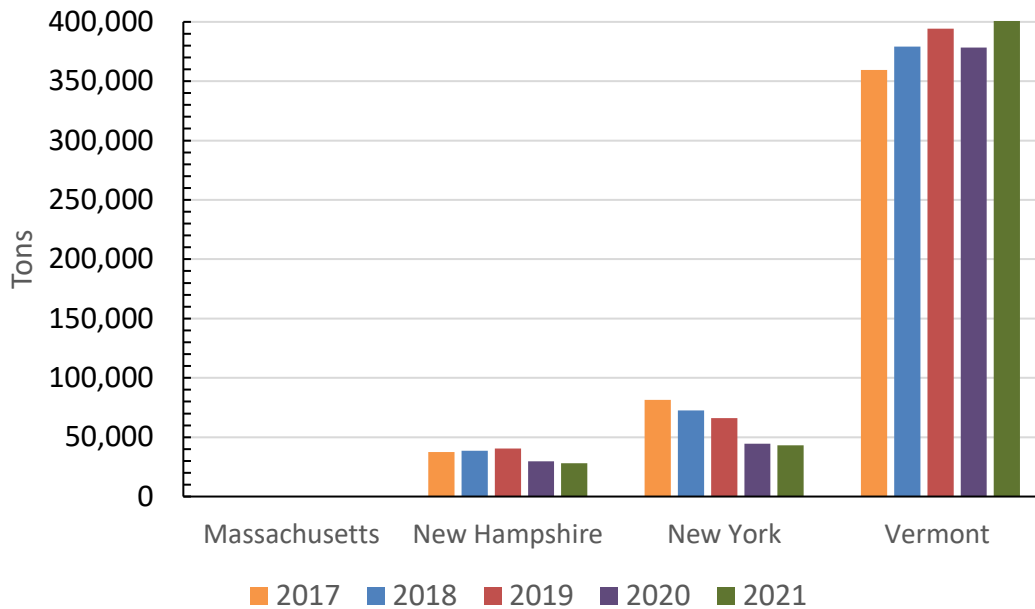


Figure 1: Destination of disposed MSW that was generated in Vermont in 2021, with recent years for comparison.

Table 4. Approved use of solid waste materials within Vermont landfill operations in 2021

Material	Use	Tonnage
Paper Sludge	Landfill Alternative Daily Cover	285
Contaminated Soils	Landfill Alternative Daily Cover	15,126
Sludge – cut with soil	Landfill Alternative Daily Cover	2,585
Sand Blast Grit	Landfill Alternative Daily Cover	13
Treated Wood Waste	Landfill Road Base	79
Asphalt, Brick, Concrete	Landfill Road Base	0
Processed C&D	Landfill Road Base	10,520
Sawdust	Landfill Road Base	991
Total		29,520

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	401,509	44,568	356,941
Vermont MSW Out-of-State Disposal	71,308	7,915	63,393
Total Vermont MSW Disposal			420,334

II. Diversion Activities

Table 6. Summary of Vermont's 2021 diversion activities

(in tons)	Fibers	Containers	Single Stream	C&D	Scrap Metal	Organics	Foodbank Food Rescue	Miscellaneous
A- Reporting Facility to Market	69,456	16,846	364	2,126	12,764	15,018		74
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	484	354		13			3,521 [‡]	20
D- Estimated Household Composting						16,418 [§] 35,843 [†]		
TOTALS	90,647	37,366	364	2,139	14,380	69,831	3,521	1,253
	A + B + C + D = 219,501							

* 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

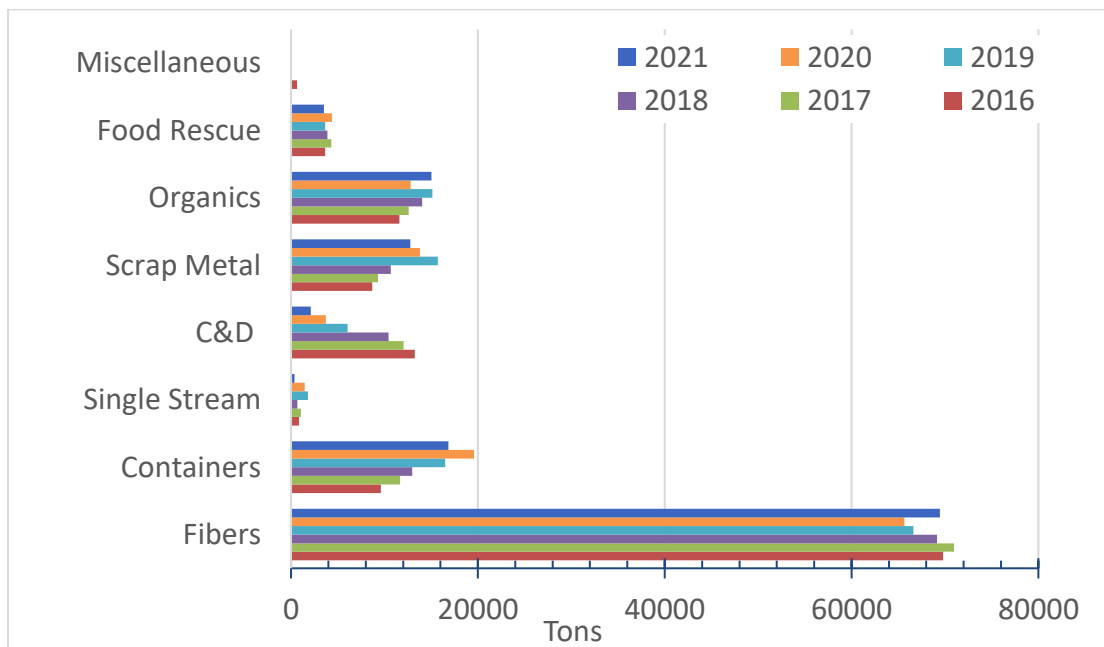


Figure 2: 2016-2021 comparison of materials marketed directly from Vermont solid waste facilities (Group A from Table 6 and Food Rescue).

III. Total Municipal Solid Waste Generation and Summary

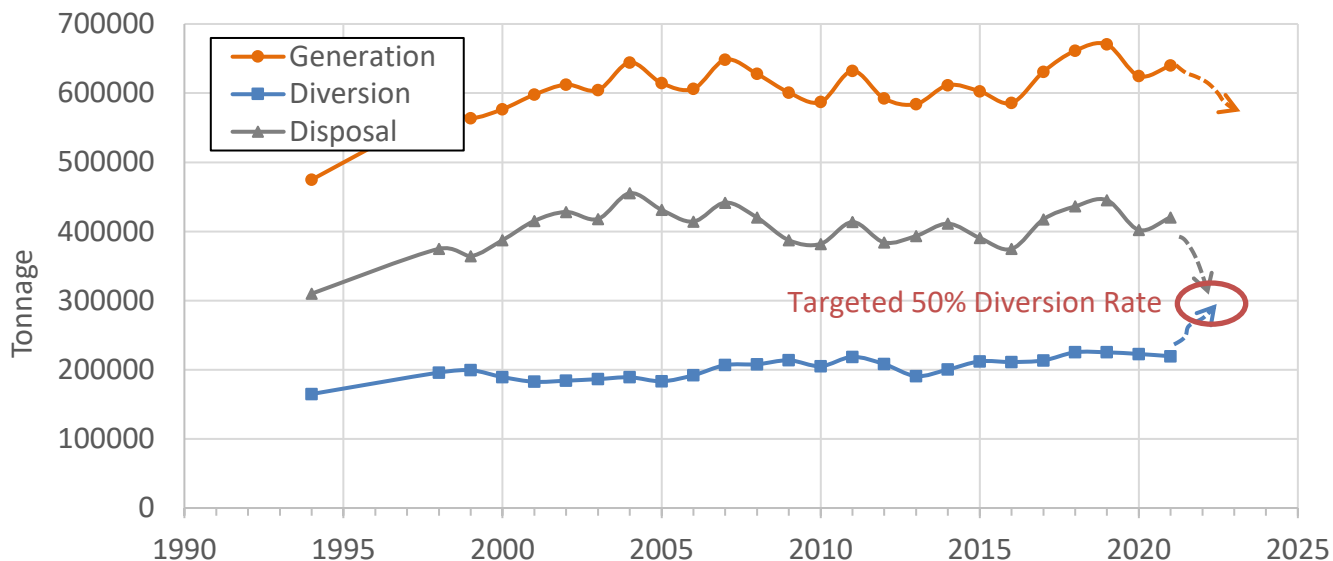


Figure 3: Projections of municipal solid waste generation, diversion, and disposal with the implementation of Universal Recycling over coming years.

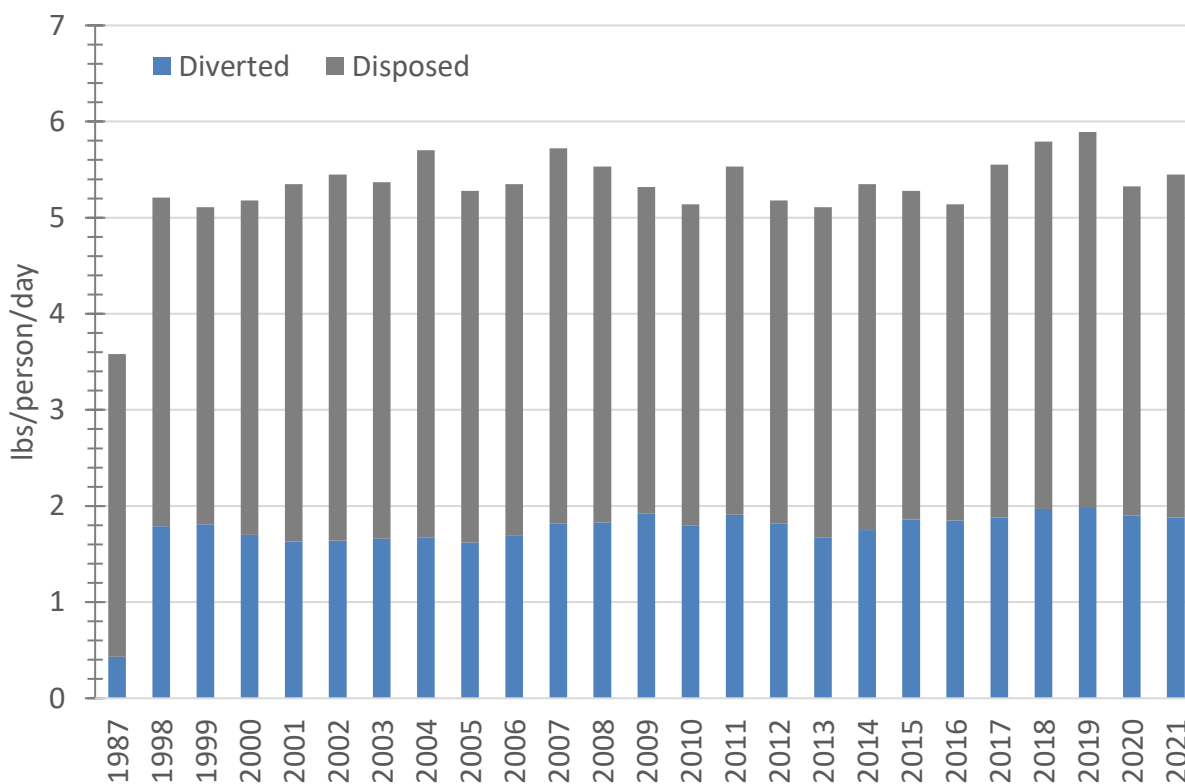


Figure 4: Pounds of waste generated per day per person (disposed + diverted) by Vermonters.

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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Generation	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	624,869	639,835
Diversion	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	222,769	219,501
Disposal	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	402,100	420,334
Population [1]	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	643,077	645,570
Per Capita MSW Generation (Tons/Year)	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	0.97	0.99
(Pounds/Day)	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	5.30	5.43
Per Capita MSW Diversion (Tons/Year)	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	0.35	0.34
(Pounds/Day)	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	1.90	1.86
Per Capita MSW Disposal (Tons/Year)	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	0.62	0.65
(Pounds/Day)	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	3.40	3.57
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Generation	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Diversion	28%	28%	29%	32%	31%	31%	31%	33%	33%	35%	36%	34%	34%	34%	36%	34%
Disposal	72%	72%	71%	68%	69%	69%	69%	67%	67%	65%	64%	66%	66%	66%	64%	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

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total HHW and VSQG tons	489	467	460	525	452	899	1,069	865	906	935	788	984
% Participating VT Households	6%	7%	9%	7%	7%	6%	8%	10%	9%	11%	7%	8%
Pounds Collected per Household (avg.)	46	47	34	62	102	131	86	60	60	55	80	88

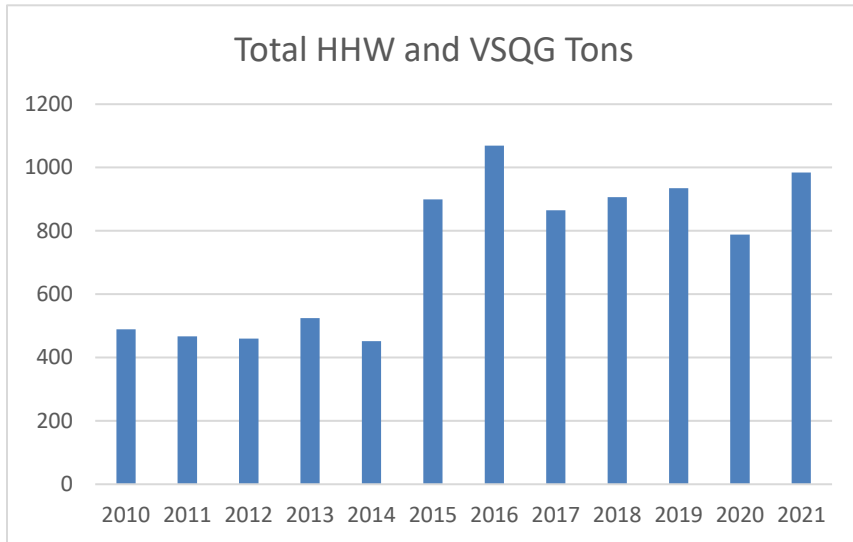


Figure 5. Trends in HHW and VSQG hazardous waste collected.

Table 9. Summary of historic mercury collections

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
# Mercury Lamps	125,36	154,15	205,15	233,82	191,06	158,07	209,40	186,65	144,75	159,75
	1	7	5	0	0	9	0	2	1	0
# Mercury Thermostats	3,036	2,111	2,169	2,000	2,246	2,468	2,369	2,069	1,897	1,846

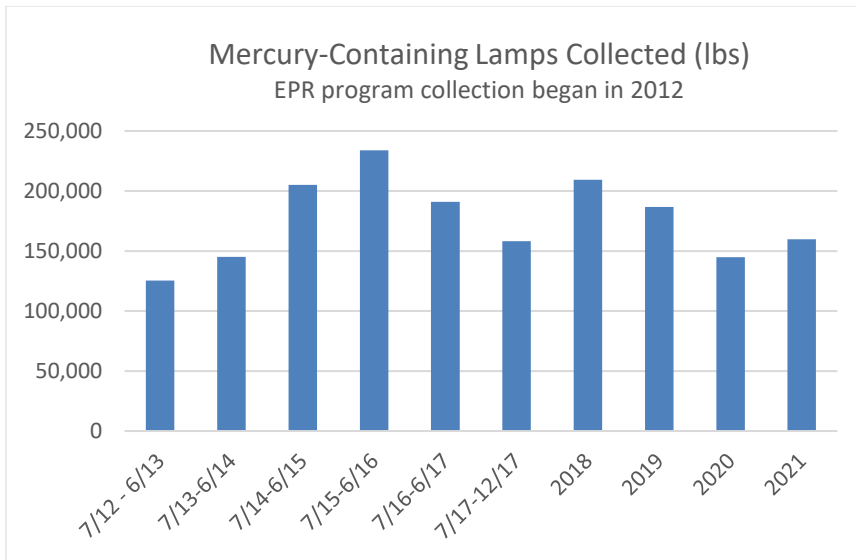


Figure 7. Trends in lamp collections

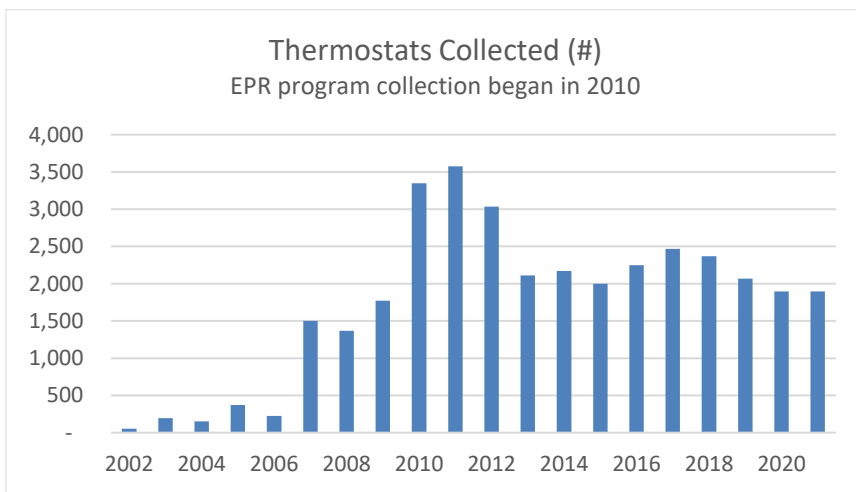


Figure 8. Trends in thermostat collections

Table 10. Summary of historic electronics collections

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Lbs Electronics	4,865,26	4,888,40	4,897,77	4,814,18	4,312,38	3,685,44	3,460,05	3,028,99	2,955,50
	6	0	8	8	1	8	1	6	1

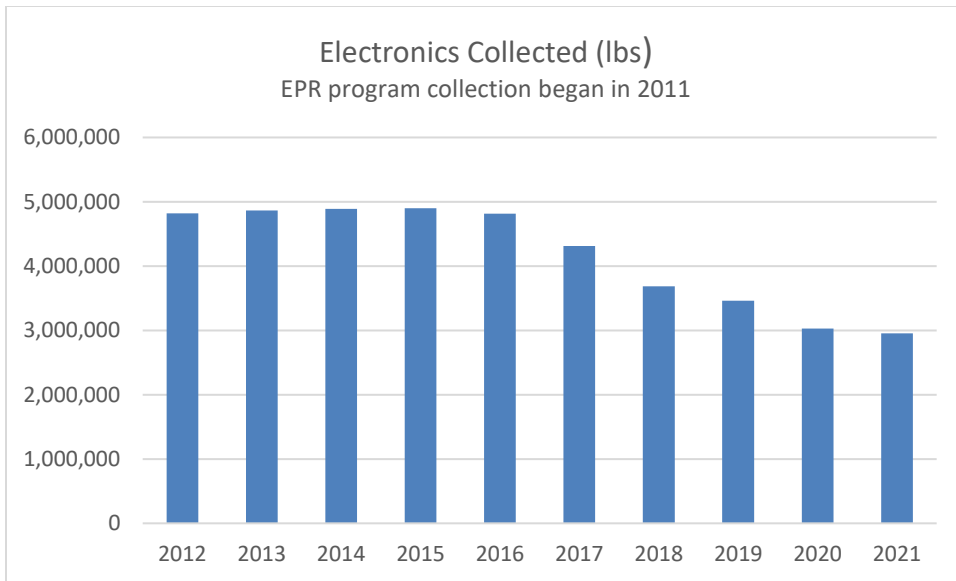


Figure 9. Trends in electronics collections

Table 11. Summary of historic battery collections

	2015	2016	2017	2018	2019	2020	2021
Lbs Primary Batteries	3,350	64,366	81,381	94,424	113,451	101,275	148,340
Lbs Rechargeable Batteries	36,477	52,617	52,238	51,677	53,426	45,122	68,424

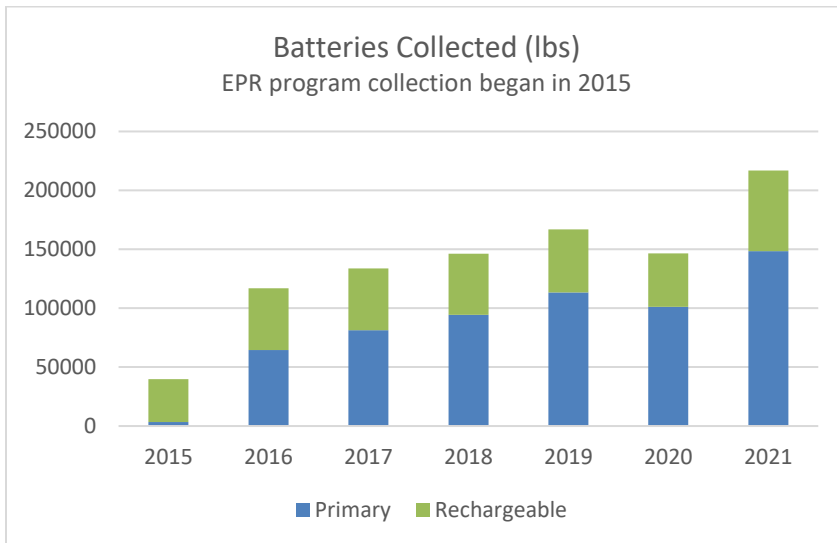


Figure 10. Trends in battery collections

Table 12. Summary of historic paint collections

	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Gallons of Paint	60,000	116,691	108,466	96,109	110,567	115,142	99,838	111,847

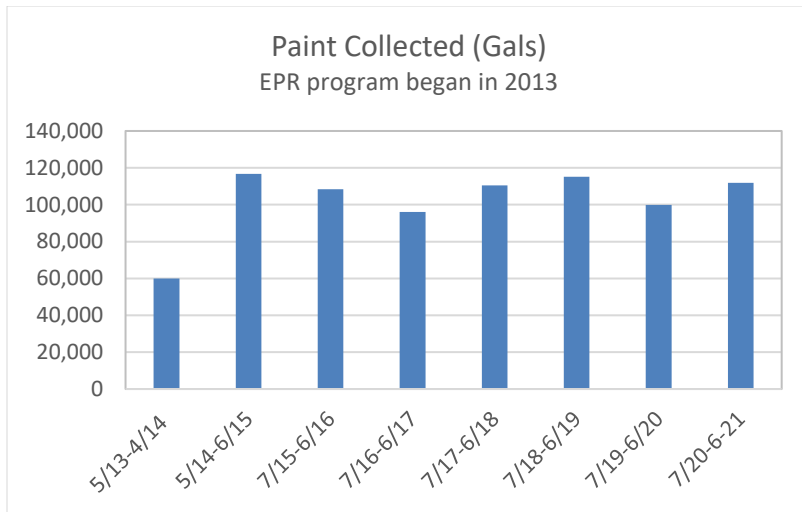


Figure 11. Trends in paint collections

Table 12. Summary of recent tire collections

	2016	2017	2018	2019	2020	2021
Tons Tires	4,315	2,733	4,274	3,878	3,551	3,712

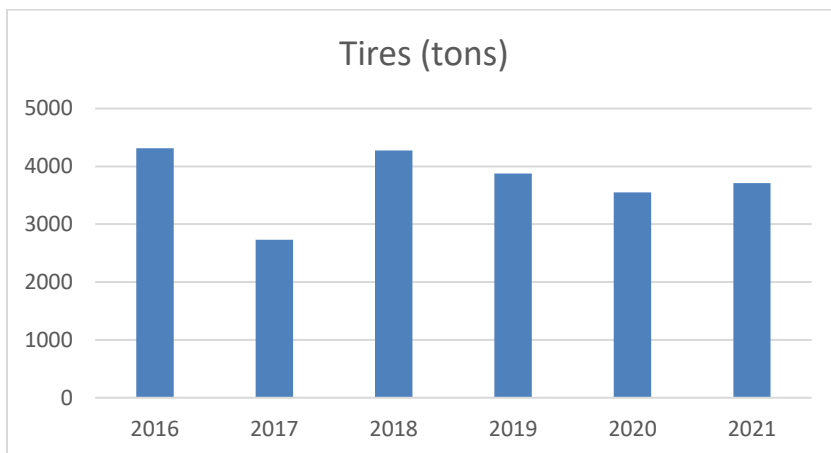


Figure 12. Summary of recent tire collections