

APPENDIX G Waste Generation

A. Historical Year Waste Generated

Table G-1 Reference Year and Historical Waste Generated

Sources of Information: The residential/commercial and industrial tons disposed are from the OEPA Annual District Report Reviews, "Disposal, Recycling, and Generation Summary for the years 2014 through 2018. The residential/commercial recycling is the corrected total of recycling as reported in APPENDIX E Table E-7, "Historical Residential/Commercial Recovery by Program/Source" The data was originally compiled for the 2014 through 2018 Annual District Reports. As explained in Appendix E, some errors were found in the data and have been corrected for this Plan. Industrial Recycling is as reported in APPENDIX F Table F-6. Disposal and recycling data was available for 2019 by the time this Plan was reviewed and revised. 2019 data has been added to Table G-1.

Year	Population	Residential/ Commercial				Industrial			Total (tons)
		Disposed (tons)	Recycled (tons)	Generated (tons)	Per Capita Generated (ppd)	Disposed (tons)	Recycled (tons)	Generated (tons)	
2014	52,363	34,830	10,423	45,253	4.74	955	17,307	18,262	63,515
2015	51,359	35,480	14,828	50,308	5.37	1,312	17,180	18,492	68,800
2016	50,968	38,482	11,511	49,993	5.37	1,387	15,734	17,121	67,114
2017	50,682	40,207	11,887	52,094	5.63	1,924	14,113	16,037	68,131
2018	50,469	42,786	10,515	53,301	5.79	2,721	14,696	17,417	70,718
2019	50,447	45,410	8,719	54,129	5.88	1,535	14,200	15,735	69,864

Sample Calculations: The "Generated" columns are the sum of disposed waste and recycled material. The "Total" column is the sum of residential/commercial and industrial generation.

Per capita generation rate = ((tons generated x 2000) ÷ 365) ÷ population) to arrive at pounds per person per day generation.

The calculation for 2014 Res/Com: $(45,253 \times 2000) \div 365 \div 52,363 = 4.74$ ppd.

Total tons = Res/Com tons generated + Industrial tons generated.

1. Residential/Commercial Waste

Table G-1 shows that although the estimated population of the District decreased slightly from 2014 through 2018, the amount of residential/commercial waste generated, and the amount of waste sent for disposal increased. Appendix D, Table D-5a, showed the disposal rate for selected rural and partly rural SWMDs and the average disposal rate for Ohio in 2018. Table G-1a that follows shows the waste generation rate in pounds per person per day (ppd) for the same SWMDs listed in Table D-5a and for Ohio.

Table G-1a Historic Data 2014 through 2018 showing Residential/Commercial Disposal Rates for Selected SWMDs and Ohio using ppd

Year	All Ohio	North Central SWD	Miami SWD	Mercer SWD	Preble SWD	Auglaize SWD	Darke SWD
2014	6.29	4.9	5.12	5.11	3.4	4.69	4.73
2015	6.35	5.4	5.73	5.17	3.6	4.01	5.37
2016	6.32	4.74	5.93	4.99	3.96	4.03	5.37
2017	6.64	5.05	5.9	4.99	4.02	5.00	5.63
2018	6.85	5.81	6.08	5.21	3.92	4.70	5.79

These Districts were selected because they are in the same part of the state and are primarily rural with some industrial activity. With the exception of the North Central District, which is a six county District, they are single county Districts. It should be noted that, with the exception of Mercer and Auglaize Counties where the per person disposal rate rose by less than .1 ppd from 2014 to 2018. The other Districts, including Darke County, and the State of Ohio show an increase in average per person disposal of between ½ pound to one pound per person per day. Although this trend is not unique to Darke County, it is a trend that concerns the District.

2. Industrial Waste

The total amount of residential/commercial waste generated in the District is a little more than double the amount of industrial waste generated. However, due to the high rate of industrial waste recovery, industrial waste disposal in the highest year, 2018, was only 6% of total waste disposal. The industrial recycling rate in 2018 was 84%. Although the District is always looking for ways that they can work with industry to reduce waste, the District believes that the majority of the District's resources should continue to be aimed at reducing the amount of residential/commercial materials that require disposal.

3. Excluded Waste

In the reference year, 2018, excluded waste was less than 4.2% of the waste sent for disposal and was only 2.8% of total waste generation. The District has chosen not to address excluded waste in detail in this Plan.

B. Generation Projections

The generation projections for the District are explained in Appendices D, E, and F. Table G-2 is a composite of the projections. Residential/commercial waste generation is expected to decrease slowly during the planning period. Disposal is expected to decrease as the percent of waste diverted through recycling participation increases. Industrial generation is expected to increase modestly over the planning period.

Table G-2: Generation Projections

Year	Pop.	Residential/ Commercial				Industrial			Total (tons)	Annual % Change
		Disposal (tons)	Recycle (tons)	Generation (tons)	Per Capita Generation (ppd)	Disposal (tons)	Recycle (tons)	Generation (tons)		Total
2018	50,469	42,784	10,515	53,299	5.79	2,719	14,695	17,414	70,714	-----
2019	50,447	45,410	8,719	54,129	5.88	1,535	14,200	15,735	69,864	-1.2%
2020	50,422	45,366	8,894	54,260	5.90	1,689	12,780	14,469	68,729	-1.6%
2021	50,107	45,083	9,605	54,688	5.98	1,857	14,200	16,057	70,745	2.9%
2022	49,793	44,800	9,899	54,699	6.02	2,043	14,700	16,743	71,442	1.0%
2023	49,478	44,517	10,709	55,226	6.12	2,247	14,700	16,947	72,173	1.0%
2024	49,163	44,233	10,833	55,066	6.14	2,472	14,700	17,172	72,238	0.1%
2025	48,848	41,454	10,955	52,409	5.88	2,719	14,700	17,419	69,828	-3.3%
2026	48,575	41,222	11,083	52,305	5.90	2,991	14,700	17,691	69,996	0.2%
2027	48,301	40,989	11,051	52,040	5.90	3,290	14,700	17,990	70,030	0.0%
2028	48,028	40,758	11,022	51,780	5.91	3,619	14,700	18,319	70,099	0.1%
2029	47,754	40,525	10,992	51,517	5.91	3,619	14,700	18,319	69,836	-0.4%
2030	47,481	40,294	10,963	51,257	5.92	3,619	14,700	18,319	69,576	-0.4%
2031	47,207	40,061	10,934	50,995	5.92	3,619	14,700	18,319	69,314	-0.4%
2032	46,934	39,829	10,905	50,734	5.92	3,619	14,700	18,319	69,053	-0.4%
2033	46,661	39,598	10,876	50,474	5.93	3,619	14,700	18,319	68,793	-0.4%
2034	46,387	39,365	10,847	50,212	5.93	3,619	14,700	18,319	68,531	-0.4%
2035	46,114	39,133	10,817	49,950	5.94	3,619	14,700	18,319	68,269	-0.4%
2036	45,996	39,033	10,805	49,838	5.94	3,619	14,700	18,319	68,157	-0.2%

Planning period 2022 to 2036.