ASHLAND COUNTY SOLID WASTE MANAGEMENT DISTRICT

APPROVED
OHIO ENVIRONMENTAL PROTECTION AGENCY

AUG 2 0 2018

AS EVIDENCED BY COPY OF LETTER OF APPROVAL HERETO ATTACHED

2018 – 2032
RATIFIED
SOLID WASTE MANAGEMENT
PLAN UPDATE

June 1, 2018

Prepared by:



Table of Contents

SI	ECTIONS	
	Section i – Solid Waste Management District Information	l-'
CI	HAPTERS	
	Chapter 1 – Introduction	1-1
	Chapter 2 – District Profile	2-1
	Chapter 3 – Waste Generation	3-1
	Chapter 4 – Waste Management	4-1
	Chapter 5 – Waste Reduction and Recycling	5-1
	Chapter 6 – Budget	6-1
AF	PPENDICES	
	Appendix A – Reference Year, Planning Period, Goal Statement, Material Change in Circumstances, Explanations of Differences in Data	A-1
	Appendix B – Recycling Infrastructure Inventory	B-1
	Appendix C – Population Data	C-1
	Appendix D – Disposal Data	D-1
	Appendix E – Residential/Commercial Reduction and Recycling Data	E-1
	Appendix F – Industrial Sector Reference Year Recycling	F-1
	Appendix G – Waste Generation	G-1
	Appendix H – Strategic Evaluation	H-1
	Appendix I – Conclusions, Priorities, and Program Descriptions	I-1
	Appendix J – Reference Year Opportunity to Recycle and Demonstration of Achieving Goal 1	J-1

Appendix K – Waste Reduction and Recycling Rates and Demonstration of Achieving Goal 2	K-1
Appendix L – Minimum Required Education Programs: Outreach and Marketing Plan and General Education Requirements	L-1
Appendix M – Waste Management Capacity Analysis	M-1
Appendix N – Evaluating Greenhouse Gas Emissions	N-1
Appendix O – Financial Data	0-1
Appendix P – Designation	P-1
Appendix Q – District Rules	Q-1
Appendix R – Blank Survey Forms and Related Information	R-1
Appendix S – Siting Strategy	S-1
Appendix T – Miscellaneous Plan Documents	T-1
Appendix U – Ratification Results	U-1
Appendix V – Miscellaneous Documents Required by Ohio Revised Code	V-1

Section i. Solid Waste Management District Information

Table i-1. Solid Waste Management District Information

SWMD Name	Ashland County Solid Waste Management District
Member Counties	Ashland
Coordinator's Name (main contact)	Cindy Brady
Job Title	District Coordinator
Street Address	1270 Middle Rowsburg Road
City, State, Zip Code	Ashland, Ohio 44805
Phone	419-289-8862
Fax	419-281-7616
E-mail address	cbrady@ashlandcounty.org
Webpage	www.ashlandcounty.org/recycling/

Table i-2. Members of the Policy Committee/Board of Trustees

Member Name	Representing	
Ashland County		
Denny Bittle	County Commissioners	
Duane Fishpaw	Municipal Corporations (City of Ashland)	
Dennis Edwards	Townships (Troy Township)	
Sarah Humphrey	Health Departments	
Matt Portner	Industrial Generators (Ashland University)	
George Smith	Citizens	
Sue Quinn	Public	

Table i-3. Chairperson of the Policy Committee or Board of Trustees

Name	Commissioner Denny Bittle
Street Address	110 Cottage St.
City, State, Zip Code	Ashland, OH 44805
Phone	419-282-4354
Fax	419-281-6939
E-mail address	dbittle@ashlandcounty.org

Table i-4. Board of County Commissioners/Board of Directors

Commissioner Name	County	President
Denny Bittle		
Mike Welch	Ashland	✓
Jim Justice	1900000	

Technical Advisory Committee

The District did not establish a technical advisory committee (TAC) for the preparation of this *Plan Update*.

CHAPTER 1. INTRODUCTION

A. Brief Introduction to Solid Waste Planning in Ohio

In 1988, Ohio faced a combination of solid waste management problems, including rapidly declining disposal capacity at existing landfills, increasing quantities of waste being generated and disposed, environmental problems at many existing solid waste disposal facilities, and increasing quantities of waste being imported into Ohio from other states. These issues, combined with Ohio's outdated and incomplete solid waste regulations, caused Ohio's General Assembly to pass House Bill (H.B.) 592. H.B. 592 dramatically revised Ohio's outdated solid waste regulatory program and established a comprehensive solid waste planning process.

There are three overriding purposes of this planning process: (1) to reduce the amount of waste Ohioans generate and dispose of; (2) to ensure that Ohio has adequate capacity at landfills to dispose of its waste; and (3) to reduce Ohio's reliance on landfills.

B. Requirements of County and Joint Solid Waste Management Districts

Structure

Because of H.B. 592, each of the 88 counties in Ohio must be a member of a solid waste management district (SWMD). A SWMD is formed by county commissioners. A board of county commissioners has the option of forming a single-county SWMD or joining with the board(s) of county commissioners from one or more other counties to form a multi-county SWMD. Ohio currently has 52 SWMDs. Of these, 37 are single-county SWMDs and 15 are multi-county SWMDs.¹

A SWMD is governed by two bodies. The first is the board of directors which consists of the county commissioners from all counties in the SWMD. The second is a policy committee. The policy committee is responsible for developing a solid waste management plan for the SWMD. The board of directors is responsible for implementing the policy committee's solid waste management plan.²

¹ Counties have the option of forming either a SWMD or a regional solid waste management authority (Authority). The majority of planning districts in Ohio are SWMDs, and Ohio EPA generally uses "solid waste management district", or "SWMD", to refer to both SWMDs and Authorities.

² In the case of an Authority, it is a board of trustees that prepares, adopts, and submits the solid waste management plan. Whereas a SWMD has two governing bodies, a policy committee and board of directors, an Authority has one governing body, the board of trustees. The board of trustees performs all of the duties of a SWMD's board of directors and policy committee.

2. Solid Waste Management Plan

In its solid waste management plan, the policy committee must, among other things, demonstrate that the SWMD will have access to at least 10 years of landfill capacity to manage all of the SWMD's solid wastes that will be disposed. The solid waste management plan must also show how the SWMD will meet the waste reduction and recycling goals established in Ohio's state solid waste management plan and present a budget for implementing the solid waste management plan.

Solid waste management plans must contain the information and data prescribed in Ohio Revised Code (ORC) 3734.53, Ohio Administrative Code (OAC) Rule 3745-27-90. Ohio EPA prescribes the format that details the information that is provided and the manner in which that information is presented. This format is very similar in concept to a permit application for a solid waste landfill.

The policy committee begins by preparing a draft of the solid waste management plan. After completing the draft version, the policy committee submits the draft to Ohio EPA. Ohio EPA reviews the draft and provides the policy committee with comments. After revising the draft to address Ohio EPA's comments, the policy committee makes the plan available to the public for comment, holds a public hearing, and revises the plan as necessary to address the public's comments.

Next, the policy committee ratifies the plan. Ratification is the process that the policy committee must follow to give the SWMD's communities the opportunity to approve or reject the draft plan. Once the plan is ratified, the policy committee submits the ratified plan to Ohio EPA for review and approval or disapproval. From start to finish, preparing a solid waste management plan can take up to 33 months.

The policy committee is required to submit periodic updates to its solid waste management plan to Ohio EPA. How often the policy committee must update its plan depends upon the number of years in the planning period. For an approved plan that covers a planning period of between 10 and 14 years, the policy committee must submit a revised plan to Ohio EPA within three years of the date the plan was approved. For an approved plan that covers a planning period of 15 or more years, the policy committee must submit a revised plan to Ohio EPA within five years of the date the plan was approved.

C. District Overview

On April 17, 1989, the Ashland County Board of Commissioners created the Ashland County Solid Waste Management District. The District was created to provide for the management of solid waste in a safe, environmentally-sound, and effective manner.

The District's mission is to develop and enhance programs which enable residents to easily recycle common household wastes as well as to assist business and industry with the implementation of waste reduction and recycling programs, with programs/services to reduce, reuse and recycle.

The District's offices are located at 1270 Middle Rowsburg Road, Ashland, Ohio 44805. The phone number for the District is (419) 289-7382.

D. Waste Reduction and Recycling Goals

As explained earlier, a SWMD must achieve goals established in the state solid waste management plan. The current state solid waste management plan is the 2009 Solid Waste Management Plan (2009 State Plan). The 2009 State Plan established nine goals as follows:

2009 State Plan Goals

Goal 1

 The SWMD shall ensure that there is adequate infrastructure to give residents and commercial businesses opportunities to recycle solid waste.

Goal 2

 The SWMD shall reduce and recycle at least 25 percent of the solid waste generated by the residential/commercial sector and at least 66 percent of the solid waste generated by the industrial sector.

Goal 3

 The SWMD shall provide the following required programs: a Web site; a comprehensive resource guide; an inventory of available infrastructure; and a speaker or presenter.

Goal 4

 The SWMD shall provide education, outreach, marketing and technical assistance regarding reduction, recycling, composting, reuse and other alternative waste management methods to identified target audiences using best practices.

Goal 5

 The SWMD shall provide strategies for managing scrap tires, yard waste, lead-acid batteries, household hazardous waste and obsolete/end-of-life electronic devices.

Goal 6

 The SWMD shall explore how to incorporate economic incentives into source reduction and recycling programs.

Goal 7

 The SWMD will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of recycling programs on reducing greenhouse gas emissions.

Goal 8

•The SWMD has the option of providing programs to develop markets for recyclable materials and the use of recycled-content materials.

Goal 9

 The SWMD shall report annually to Ohio EPA regarding implementation of the SWMD's solid waste management plan. All nine SWMD goals in this state plan are crucial to furthering solid waste reduction and recycling in Ohio. However, by virtue of the challenges posed by Goals 1 and 2, SWMDs typically have to devote more resources to achieving those two goals than to the remaining goals. Thus, Goals 1 and 2 are the primary goals of the state plan.

Each SWMD is encouraged to devote resources to achieving both goals. However, each of the 52 SWMDs varies in its ability to achieve both goals. Thus, a SWMD is not required to demonstrate that it will achieve both goals. Instead, SWMDs have the option of choosing either Goal 1 or Goal 2 for their solid waste management plans. This affords SWMDs with two methods of demonstrating compliance with the State's solid waste reduction and recycling goals. Many of the programs and services that a SWMD uses to achieve Goal 1 help the SWMD make progress toward achieving Goal 2 and vice versa.

A SWMD's solid waste management plan will provide programs to meet up to eight of the goals. Goal 8 (market development) is an optional goal. Goal 9 requires submitting annual reports to Ohio EPA, and no demonstration of achieving that goal is needed for the solid waste management plan.

See Chapter 5 Section B and Appendix I for descriptions of the programs the SWMD will use to achieve the nine goals.

CHAPTER 2. DISTRICT PROFILE

A. Profile of Political Jurisdictions

1. Counties in the Solid Waste Management District

As its name suggests, the Ashland County Solid Waste Management District is a single-county district comprised of Ashland County, plus the portion of the Village of Loudonville which is located in neighboring Holmes County. The population of Loudonville that resides in Holmes County has been included in the Ashland County Solid Waste Management District (SWMD) because the majority of the Village's population resides in Ashland County.¹

2. County Overview

In comparison to other counties in Ohio, Ashland County is the 47th most populous county in Ohio based on 2012 population estimates. It ranks as the 49th largest county in Ohio by land area. Ashland County consists of the following communities:

- Ashland is the only city. In 2014, it had a population of 20,218 people which comprised approximately 38 percent of the county's population.
- Loudonville had a population of 2,566 in 2014.
- · Perrysville had a population of 722 in 2014.
- There are a total of eight villages ranging in population from 137 people to 2,566 people.
- There are fifteen townships ranging in population from 921 people to 3,920 people.

B. Population

1. Reference Year Population

After adding the population of Loudonville that was partially located in another SWMD (Holmes County SWMD), the District had a total of adjusted population of 53,095 people in 2014.

Table 2-1 presents the adjusted population, the largest city, and the population of the largest city in the SWMD during the 2014 reference year:

¹ When a community's population resides in more than one SWMD, the entire community's population is added to the SWMD where the majority of the community's population is located. The SWMD where the minority of the population lives subtracts the community's population when calculating the total SWMD's population.

Table 2-1. Population of Ashland County SWMD in 2014

Co	ounty	Larg	est Political Ju	urisdiction
Name	Population	Community Name	Population	Percent of Total County Population
Ashland	53,095	City of Ashland	20,218	38%
Total	53,095		100	

Source(s) of information: Ohio Development Services Agency, "2014 Population Estimates by County, City, Village, and Township." May 2015.

2. Population Distribution

Table 2-2 below presents the distribution of Ashland County's population in cities, villages, and unincorporated areas.

Table 2-2. Population Distribution

County	Percent of	Percent of	Percent of Population
	Population in	Population in	in Unincorporated
	Cities	Villages	Townships
Ashland	38%	11%	51%

Source(s) of information: Ohio Development Services Agency, "2014 Population Estimates by County, City, Village, and Township." May 2015.

According to the Ohio Development Services Agency's profile for Ashland County, it is comprised of mostly cultivated acreage for agriculture and forests. The bullet points below show the largest uses of land in the county:

- 41% of land use is agricultural
- 33% of land use is forest
- 9% of land is classified as developed

3. Population Change

Table 2-3 presents the data regarding the District's population change.

4.42%

 Time Period
 Area
 Ashland

 2000 to 2010
 County
 1.17%

 Largest City
 -4.17%

 Unincorporated areas
 3.19%

 County
 4.42%

 Planning Period
 Largest City
 4.42%

Table 2-3. District Population Change

Sources of information: Ohio Development Services Agency, "Population Projections: County Totals" (2010-2040). Prepared March 2013. Ohio Development Services Agency, "2014 Population Estimates by County, City, Village, and Township." May 2015.

Unincorporated areas

Based on the results of the 2000 and 2010 censuses, the District experienced an overall increase in its population from 2000 to 2010. According to population projections developed by the Ohio Development Services Agency, the County's population is projected to continue increasing slightly during the planning period. The projected rate of increase during the planning period is greater than that experienced from 2000 to 2010.

The population of the City of Ashland, the largest city in Ashland County, decreased 4.17% from 2000 to 2010. Five of the eight villages in the County also lost population during this time period.

During the planning period, Ashland County's overall population is projected to continue increasing a total of 4.42%. Due to the lack of information regarding population projections pertaining to the City of Ashland and the unincorporated areas, the District has assumed that these jurisdictions will grow at the same rate as the County during the planning period.

4. Implications for Solid Waste Management

As the information above illustrates, population was moving out of the City of Ashland and a number of villages from 2000 through 2014. At the same time, the rural unincorporated areas in the townships was gaining population. A trend of this nature, if it were to accelerate, could result in more difficulty providing cost efficient solid waste services to all residents of the County.

C. Profile of Waste Management Infrastructure

Solid waste generated within Ashland County is currently collected by both private and public haulers and delivered to a number of different facilities depending on the type of material collected. In 2014, trash was directly hauled to seven landfills. All of these landfills are located in other SWMDs within Ohio.

The Noble Landfill received almost 94 percent of Ashland County's direct-hauled waste. This landfill is located in Richland County adjacent to Ashland County.

Transfer stations also received a substantial portion of the District's waste which was sent for disposal (45 percent). The Richland County Transfer Station processed nearly all of the transferred waste originating from Ashland County.

Recyclables were collected and hauled to processors for sorting, and to prepare and ship recyclables to end markets which use the materials to manufacture new products. The Ashland Recycling Center handled approximately 27 percent of all residential/commercial recyclables from the District in 2014.

Yard waste was collected and processed by three private companies and one political subdivision to produce compost which could then be used as a beneficial soil amendment.

D. Profile of Commercial and Institutional Sector

Ashland County includes a number of relatively large commercial and institutional entities. Ashland County is home to Ashland University with over 700 employees and nearly 6,000 total students. The Samaritan Regional Health Systems and WIL Research Laboratories are also large businesses within the County, each employing more than 600 people.

The following table presents the ten largest commercial/institutional sector employers in Ashland County.

Table 2-4. Major Commercial/Institutional Sector Employers in District

Company Name	# of Employees	Type of Business/Institution
Ashland University	744	Private University
Samaritan Regional Health Systems	639	Medical
WIL Research Laboratories	619	Biomedical Research
Ashland City Schools	406	Public Schooling
Ashland County	350	County Government
Walmart	320	Big Box Retailer
Brethren Care Village	297	Assisted Living

Company Name	# of Employees	Type of Business/Institution
City of Ashland	240	City Government
Kingston	210	Assisted Living
Loudonville-Perrysville Exempted Schools	160	Public Schooling

Source: ReferenceUSA on-line database.

Ashland County's commercial/institutional sector included approximately 980 establishments in 2014. Education and health services businesses employed the greatest number of people at more than 3,700 people. Trade, transportation, and utilities was the next highest category in this sector, employing more than 3,300 individuals.

Approximately 930 active businesses were located in Ashland County in 2014 and 69 new business start-ups were recorded. Since 2011, the number of active businesses in Ashland County decreased slightly 948.²

Employment in the commercial/institutional sector (service-providing industries) is projected to increase in all but one of major categories from 2010 to 2020 in the Northeast Ohio JobsOhio Region³. Therefore, it is possible that the District will experience an increase in the amount of waste generated by the commercial and institutional sector in the upcoming planning period.

E. Profile of Industrial Sector

Ashland County is home to several medium-sized manufacturers which are listed in Table 2-5 below. As evidenced in the table, there is a variety of types of manufacturing within the District.

Table 2-5. Largest Industrial Employers in Ashland County

Company Name	# of Employees	Type of Manufacturing
Mansfield Plumbing	610	Bathroom Fixture Manufacturing
Pentair Pump Group	290	Pump Manufacturing
Step 2 Corporation	248	Lawn, Garden, and Household Supplies
Snyder's-Lance	195	Cookies and Crackers Manufacturing
Hedstrom Plastics/Ball Bounce & Sport	271	Toys, Exercise and Sport Balls Manufacturing

² Ohio Development Services Agency, "Ohio County Profiles: Ashland County," Office of Research, 2016 Edition. http://development.ohio.gov/files/research/C1004.pdf.

³ Ohio Department of Job and Family Services, "Ohio Job Outlook 2012-2022 - Northeast Ohio." http://ohiolmi.com/proj/OhioJobOutlook.htm

Company Name	# of Employees	Type of Manufacturing
American Augers	236	Geological Boring Equipment Manufacturing
BookMasters	200	Book Manufacturer
LiquiBox	162	Containers for Liquids Manufacturing
Packaging Corporation of America	150	Corrugated Cardboard Manufacturing

According to the Department of Job and Family Services' Ohio Labor Market Information for northeast Ohio⁴, employment in manufacturing is projected to decrease by 8.3 percent from 2012 to 2022. The decrease in annual manufacturing employment could mean lower waste generation from the industrial sector.

F. Other Characteristics

As stated above, Ashland County is host to Ashland University which has an undergraduate population of approximately 3,700 students. Approximately 54 percent, or slightly more than 2,000 students live in college-owned housing on campus. The students comprise a transitory population which fluctuates during the year and results in a variable solid waste generation from the University.

Ashland County is home to a number of recreational facilities which attract large numbers of visitors throughout the year, but especially during warmer months. State-owned facilities include:

- Mohican State Park
- Mohican-Memorial State Forest
- Clear Fork Gorge State Nature Preserve
- Funk Bottoms Wildlife Area
- Muskingum Watershed Conservancy District

These facilities have the potential to increase solid waste generation substantially during certain periods of the year.

⁴ Ashland County is included in this region.

CHAPTER 3. WASTE GENERATION

This chapter of the Solid Waste Management Plan provides a summary of the solid waste management district's historical and projected solid waste generation. The District's Policy Committee needs to understand the amounts and types of waste the solid waste management district (SWMD) will generate before it can make decisions regarding how to manage the waste. Thus, the District analyzed the amounts and types of waste that were generated within the SWMD in the past and that could be generated in the future.

The District calculated how much solid waste was generated for the residential/commercial and industrial sectors. Residential/commercial waste is essentially municipal solid waste and is the waste that is generated by a typical community. Industrial solid waste is generated by manufacturing operations. In order to calculate how much waste was generated, the District added the quantities of waste disposed of in landfills and reduced/recycled.

Reduction and recycling data was obtained by surveying communities, recycling service providers, collection and processing centers, commercial and industrial businesses, owners and operators of composting facilities, and other entities that recycle. Responding to a survey is voluntary, meaning that the District relies upon an entity's ability and willingness to provide data. When entities do not respond to surveys, only a partial picture of recycling activity can be developed. How much data the District obtains has a direct effect on the SWMD's waste reduction and recycling and generation rates.

The District obtained disposal data from Ohio EPA. Owners/operators of solid waste facilities submit annual reports to Ohio EPA. In these reports, owners/operators summarize the types, origins, and amounts of waste that were accepted at their facilities. Ohio EPA adjusts the reported disposal data by adding in waste disposed in out-of-state landfills. The District also obtains disposal information from facilities that are under contract, authorizing them to receive waste generated within Ashland County.

The District also analyzed historic quantities of waste generated to project future waste generation. The details of this analysis are presented in Appendix G. The Policy Committee used the projections to make decisions on how best to manage waste and to ensure future access to adequate waste management capacity, including recycling infrastructure and disposal facilities.

A. Solid Waste Generated in Reference Year

Table 3-1 shows the amounts of residential/commercial (R/C) and industrial waste generated within the District during 2014 (the reference year). The amount generated is defined by the tons disposed in landfills plus the tons recycled, composted, and otherwise diverted from landfill disposal.

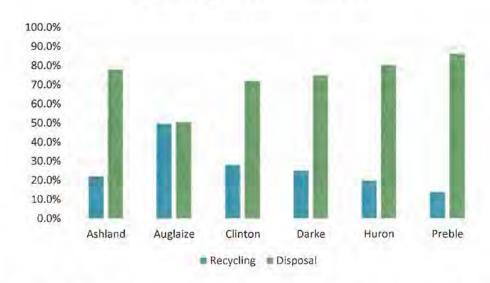
Table 3-1. Solid Waste Generated in the Reference Year

Type of Waste	Tons Generated
Residential/ Commercial	37,512
Industrial	25,092
Excluded	8,266
Total	70,870

1. Residential/Commercial Waste Generated in Reference Year

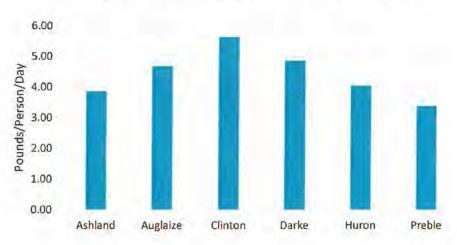
Disposal comprises a much larger percentage of total residential/commercial sector generation than recycling for the District. This relationship is also true for most of the other rural solid waste districts in Ohio, which is illustrated in the following figure. For these solid waste districts in 2014, disposal ranged from 51 to 85 percent of total generation while recycling was estimated at 14 to 50 percent.

Residential/Commercial Sector Disposal and Recycling as Percentage of Generation: 2014



In terms of the residential/commercial sector generation rate, Ashland County residents, commercial businesses, and institutions produced daily amounts of waste during 2014, which was in the mid-range compared to other rural Ohio SWMDs. The following figure shows that the R/C generation rate for the District was approximately 3.9 pounds per person per day (PPD) in 2014.

Residential/Commercial Generation Rates: 2014

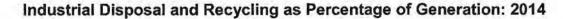


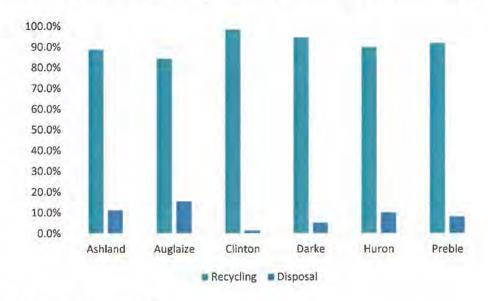
The statewide residential/commercial sector generation for 2014 was approximately 6.25 PPD, while the average generation rate for all SWMDs was 5.85 PPD. The national residential/commercial sector generation rate, according to a recent U.S. EPA publication, is approximately 4.4 PPD.

As discussed in Chapter 2, the District is home to the Ashland University which potentially contributes substantial amounts of waste from the residential/commercial sector. The waste generated by the University also has the potential to fluctuate quite significantly throughout the year due to changes in the student population as the school year begins and ends.

2. Industrial Waste Generated in Reference Year

In contrast to the residential/commercial sector, recycling and waste reduction contribute a much larger share of total generation in the industrial sector. The relative percentages in other rural solid waste districts for disposal vs. recycling are similar to Ashland County's percentages (see the following figure).



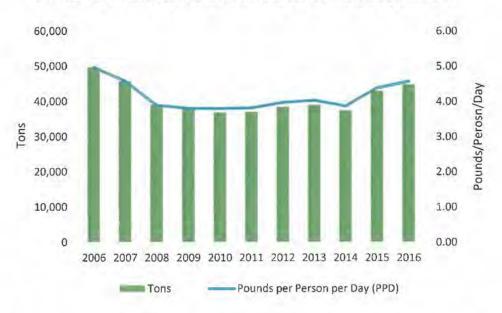


B. Historical Waste Generated

1. Historical Residential/Commercial Waste Generated

Although it has fluctuated some over the past eleven years, the generation of residential/commercial sector waste in the District generally decreased from 2006 to 2014, then increased from 2014 to 2016 (see following figure).

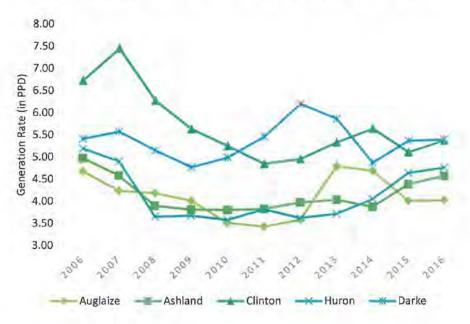
Ashland County Historical R/C Generation: 2006 - 2016



The trends in Ashland County are similar to those experienced in other rural SWMDs. In general, the residential/commercial sector waste generation

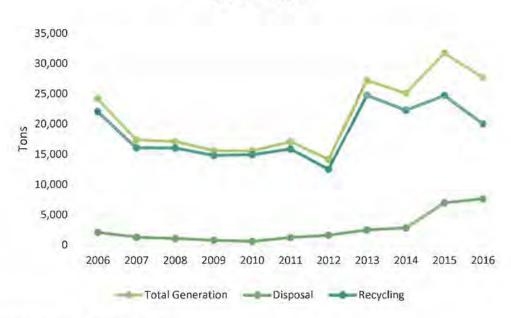
rates for rural SWMDs in Ohio have declined during the last eleven years. While each of the SWMDs depicted in the following figure has experienced some fluctuation in the amount of waste produced, the overall trends exhibit that generation rates were lower in 2016 than they were in 2006.

Residential/Commercial Generation Rates: 2006-2016



2. Historical Industrial Waste Generated

The generation of industrial waste during the past eleven years has fluctuated to a greater extent than the residential/commercial sector generation. As illustrated in the following figure, changes in industrial generation have been caused primarily by increases or decreases in the amount of recycling rather than disposal. The historical generation of industrial waste also seems to suggest that this sector is more influenced by the state of the economy than the residential/commercial sector. The chart shows a substantial decrease in industrial generation in 2007 when industries may have begun to feel the effects of the most recent economic recession.



Ashland County's Historical Industrial Generation: 2006 – 2016

C. Waste Generation Projections

Table 3-2 shown below demonstrates that waste generation within the District is expected to decrease approximately 8.6% during the first six years of the planning period. From 2018 to 2023, total waste generation is projected to continue decreasing, then increase slightly from 2023 to 2032.

Year	Residential/ Commercial Waste	Industrial Waste	Excluded Waste	Total
2018	42,911	28,473	20,159	91,543
2019	42,903	27,356	25,681	95,939
2020	42,895	26,238	25,110	94,243
2021	42,962	25,121	22,634	90,717
2022	43,028	24,004	20,159	87,191
2023	43,095	22,887	17,683	83,665

Table 3-2. Waste Generation Projections

The following figure shows the percentage of solid waste generated in the residential/commercial vs. industrial sectors for the first year of the planning period (2018). Projections for both sectors have been developed by first analyzing historical disposal data, determining trends for the historical data, and then estimating future disposal amounts by incorporating any known changes which may affect the tons landfilled. The same process has been used to establish the projections for waste reduction and recycling, and the sum of the disposal and

waste reduction/recycling projections comprise the total waste generation projections.

Residential/Commercial vs. Industrial Waste Generation: 2018



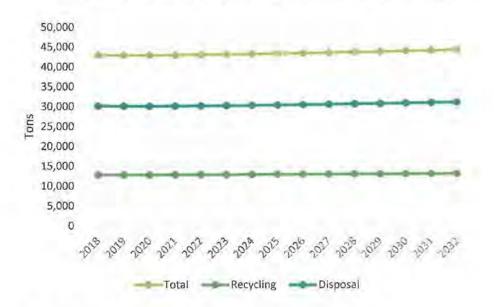
1. Residential/Commercial Waste Projections

As stated above, projections for the residential/commercial sector were developed for disposal and recycling in order to determine total generation. Slightly decreasing disposal tonnage is projected for 2015 through 2020 which is consistent with historical data and disposal rates experienced in other SWMDs.

The District does not anticipate significant changes in recycling program efforts, and as a result, the recyclables recovered from the residential/commercial sector are expected to increase at a modest rate based on increases in population and historic trends.

The following figure shows that tonnages for the residential/commercial sector are expected to change very little during the planning period.

Residential/Commercial Waste Generation: 2018-2032



2. Industrial Waste Projections

Waste generation in the industrial sector is normally influenced to a lesser degree by solid waste district programming than the generation totals from the residential/commercial sector. As depicted in the figure above, industrial generation tonnages within the District have shown a somewhat greater degree of variability over time than waste from the residential/commercial sector. This is especially true with respect to waste reduction and recycling, even though the District programs to assist and encourage waste reduction and recycling in the industrial sector have remained relatively consistent over time.

In order to take a somewhat conservative approach, and to address the historical variability and uncertainty associated with determining industrial generation into the future, the following assumptions have been used to project industrial generation for planning purposes:

- Recycling. Actual recycling totals were used for 2014-2016. Tonnage is projected in 2023 as the average tonnage collected over the five-year period from 2012 to 2016 (20,849 tons). Intermediate years (2017-2022) are projected using a straight-line average. The District feels that modestly increasing recycling totals during the first six years of the planning period are realistic considering the District attempts to expand the number of industrial sector clients it serves each year. Recycling totals remain flat from 2023-2032.
- Disposal. The significant increase in industrial sector disposal for years 2015 and 2016 does not appear to correlate with any events

that would increase industrial sector waste generation, such as a new factory beginning to operate or an existing manufacturing facility increasing production. However, the increase does correlate with an increase in exempt waste disposal that was the result of two factory demolitions. It is suspected that the increase in industrial disposal during 2015 and 2016 is the result of miscategorized exempt waste. At the time this Plan Update was prepared, the first three Quarterly Fee Reports were available for 2017. The overall disposal reported for the first three guarters of 2017 was 29,685 tons, which included residential/commercial and industrial waste (but not exempt). The average quarterly tonnage (9,895 tons) was used to project the fourth guarter totals, resulting in a projected total of 39,581 tons for 2017. For the industrial sector, 2017 tonnage was calculated by subtracting the projected residential/commercial total (30,143 tons) from the 2017 projected total (39,581 tons). Industrial sector disposal in 2023 was projected to be equal with the average industrial sector disposal from 2011-2014. These years represented what the District believes are typical disposal patterns for the industrial sector. Intermediate years (2018-2022) were projected using a straight-line average. Disposal from 2023-2032 is projected to remain flat. Projections decrease from 2017 to 2023 to correlate with the tapering off of construction and demolition projects which have impacted the industrial sector disposal totals.

The result of these assumptions is that waste generation for the industrial sector will peak in 2017, decrease from 2017 to 2023, then remain constant until the end of the planning period.

Excluded Waste

Excluded waste disposed was significantly greater in 2015 and 2016 due to the demolition of two major factories. Demolition projects are expected to taper off throughout the planning period. The total excluded waste disposed in 2023 is based on an average of the waste disposed from 2010 to 2014. A straight-line average was used to project intermediate years (2017-2022). Excluded waste disposal patterns are not linked to changes in population, economics, or other easily isolated patterns. The District believes it is reasonable to hold these disposal projections constant after 2023 due to the notion that projections become more uncertain the father into the future they are extended.

CHAPTER 4. WASTE MANAGEMENT

Chapter 3 provided a summary of how much waste the solid waste management district (SWMD) generated in the reference year and how much waste the Policy Committee estimates the SWMD will generate during the planning period. This Chapter summarizes the Policy Committee's strategy for how the SWMD will manage that waste during the planning period.

A SWMD must have access to facilities that can manage the waste the SWMD will generate. This includes landfills, transfer facilities, incinerator/waste-to-energy facilities, compost facilities, and facilities to process recyclable materials. This Chapter describes the Policy Committee's strategy for managing the waste that will be generated within the SWMD during the planning period.

In order to ensure that the SWMD has access to facilities, the solid waste management plan identifies the facilities the District expects will take the SWMD's trash, compost, and recyclables. Those facilities must be adequate to manage all of the SWMD's solid waste. The SWMD does not have to own or operate the identified facilities. In fact, most solid waste facilities in Ohio are owned and operated by entities other than the SWMD. Further, identified facilities can be any combination of facilities located within and outside of the SWMD (including facilities located in other states).

Although the Policy Committee needs to ensure that the SWMD will have access to all types of needed facilities, Ohio law emphasizes access to disposal capacity. In the solid waste management plan, the District must demonstrate that the SWMD will have access to enough landfill capacity for all of the waste the SWMD will need to dispose of. If there isn't adequate landfill capacity, then the Policy Committee develops a strategy for obtaining adequate capacity.

Ohio has more than 40 years of remaining landfill capacity. That is more than enough capacity to dispose of all of Ohio's waste. However, landfills are not distributed equally around the state. Therefore, there is still the potential for a regional shortage of available landfill capacity, particularly if an existing landfill closes. If that happens, then the SWMDs in that region would likely rely on transfer facilities to transport waste to an existing landfill instead of building a new landfill.

Finally, the SWMD has the ability to control which landfill and transfer facilities can, and by extension cannot, accept waste that was generated within the SWMD. The SWMD accomplishes this by designating solid waste facilities (often referred to flow control). A SWMD's authority to designate facilities is explained in more detail later in this Chapter.

A. Waste Management Overview

The solid waste generated within Ashland County is managed through four major categories: recycling, composting, processing at transfer facilities, and landfilling. The waste delivered to transfer facilities is ultimately sent to landfills for disposal.

These methods of waste management are anticipated to continue handling the District's solid wastes throughout the planning period. Table 4-1 shows the projections for each management method for the first six years of the planning period, and indicates that disposal ("Transfer" plus "Landfill") will continue to comprise the largest category.

Table 4-1. Methods for Managing Waste

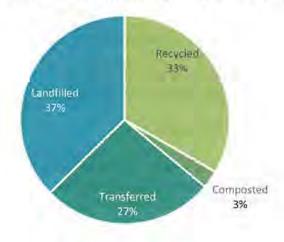
Year	Generate ¹	Recycle ²	Compost ³	Transfer ⁴	Landfill ⁵
2018	91,543	30,525	2,531	24,291	34,196
2019	87,942	30,648	2,535	22,743	32,016
2020	84,340	30,772	2,538	21,194	29,836
2021	80,815	30,907	2,546	19,670	27,691
2022	77,288	31,043	2,555	18,146	25,545
2023	73,762	31,178	2,563	16,622	23,399

¹ "Generate" represents the total of the other four columns.

The following figure shows that recycling as a percentage of total generation for 2018 is projected to be 33 percent and compost is projected to be 3 percent while the amount of waste sent to transfer stations prior to final disposal in a landfill is approximately 27 percent. The tonnage sent directly to landfills for disposal is expected to be 37 percent of total generation.

By 2023, recycling as a percentage of total generation is projected to increase to 42 percent and compost is projected to remain at 3 percent while the amount of waste sent to transfer stations prior to final disposal in a landfill is projected to remain at 27 percent. The tonnage sent directly to landfills for disposal is projected to decrease to 32 percent of total generation.

Percent of Generation Managed by Each Method



² "Recycle" is the total amount reduced and recycled minus composting.

^{3 &}quot;Transferred" is the amount sent to transfer stations prior to delivery to a landfill.

^{4 &}quot;Landfilled" plus the "Transferred" amount equals the total disposal.

B. Profile of Solid Waste Infrastructure and Solid Waste Facilities Used in the Reference Year

The District does not have any solid waste landfills or transfer stations within Ashland County. There are a number of composting and recycling facilities which are located in the County. All the facilities used by the District during 2014 are discussed below.

1. Landfill Facilities

All the landfills which received waste directly (without first being processed at a transfer station) from the District during the reference year of 2014 are shown in Table 4-2 below. This table illustrates that more than 89 percent of the direct-hauled waste was disposed at the Noble Road Landfill, which is a publicly-available and a privately-owned facility. Noble Road Landfill had 9.1 years of remaining capacity available for disposal at the end of year 2014. Other landfills which received waste from the District in 2014, such as Countywide Recycling and Disposal Facility and American Landfill, had much greater capacity available.

Table 4-2. Landfill Facilities Used by the District in the Reference Year

Facility Name	Locatio	Location		% of all SWMD Tons	Remaining Years
	County	State	from SWMD	Disposed	Icars
In-District					
None.					
Out-of-District					
Kimble Sanitary Landfill	Tuscarawas	ОН	15	0.07%	35.9
Countywide Recycling & Disposal Facility	Stark	ОН	77	0.35%	63.6
American Landfill	Stark	ОН	64	0.29%	74.9
Noble Rd. Landfill	Richland	ОН	19,932	89.37%	9.1
Mahoning Landfill	Mahoning	OH	4	0.02%	3.8
Pine Grove Regional Facility	Fairfield	ОН	164	0.74%	72.6
Crawford Co. Sanitary Landfill	Crawford	ОН	2,047	9.18%	10.0
Out-of-State					
None.					
		Total	22,303	100%	-

Note: The "tons accepted from SWMD" represents only the amount of waste which was directly-hauled to landfills. It does not include the tonnage which was sent to transfer stations, then delivered to a landfill.

2. Transfer and Processing Facilities

The transfer facilities receiving waste from District entities during 2014 are listed in Table 4-3. A slightly smaller percentage of the total waste ultimately sent for disposal was processed by transfer stations compared to the amount of waste which was directly hauled to landfills. Table 4-3 also includes a processing facilities located in Indiana which handled a small amount of District solid waste in 2014.

Table 4-3. Transfer and Processing Facilities Used by the District in the Reference Year

Facility Name	Location		Tons Accepted from	% all District Waste	Final Waste Destination
	County	State	District	Transferred	
In-District					
None					
Out-of-District					
Kimble Transfer & Recycling - Canton	Stark	ОН	25	0%	Kimble Sanitary Landfill
Richland Co. Transfer Station	Richland	ОН	17,904	99%	Noble Rd. Landfill
Republic - Mt. Vernon	Knox	ОН	88	0%	Pine Grove Regional Facility
Out-of-State					
Indianapolis Resource Recovery Facility	Marion	IN	111	1%	South Side Landfill (IN)
		Total	18,128	100%	

3. Composting Facilities

Table 4-4 shows the composting facilities which received yard waste from the District in 2014.

Table 4-4. Composting Facilities Used by the District in the Reference Year

Facility Name	Location	Tons Composted	Percent of all Material Composted
Markleys Co. Butchering	550 TR 101 West Salem, OH	0	0%
Howards Nursery	179 SR 58 Medina, OH	240	36%
Willo'dell Yard Waste	1398 US Rte. 42 Ashland, OH	278	42%
#1 Landscape	3775 Ridge Rd. Medina, OH	139	21%
	Total	658	

Note: This table does not include the 163 tons of food waste which was reported by haulers, Kroger, and Walmart, and listed in Ohio EPA's composting report.

4. Processing Facilities

Table 4-5 shows the companies and facilities which reported processing recyclables from the District during the reference year. This list was compiled by analyzing data resulting from the District's survey efforts, as well as data published by Ohio EPA.

Table 4-5. Processing Facilities Used by the District in the Reference Year

	Locati	on	Facility	Recyclables	
Name of Facility	County State		Type	Accepted from District	
In-District					
Abibow Recycling-C	Ashland	ОН	Processor	*	
Aldi Inc. Hinckley Division	Ashland	ОН	Retail	95	
Ashland County Recycling Center	Ashland	ОН	MRF	2,025	
Buehler's	Ashland	ОН	Retail	128	
Dollar General	Ashland	ОН	Retail	94	
Home Depot	Ashland	ОН	Retail	152	
Walmart Recycling in Ohio	Ashland	ОН	Retail	825	
Out-of-District					
Gateway Recycling	Cuyahoga	ОН	MRF	*	
Medina Recycling	Medina	ОН	MRF	*	

Name of Facility	Location		Facility	Recyclables	
	County	State	Туре	Accepted from District	
Milliron	Richland	OH	MRF	*	
Pinnacle Recycling	Summit	ОН	Processor, MRF	*	
River Valley	Summit	ОН	Processor, manufacturer	*	
Recycle It	Cuyahoga	ОН	Processor	*	
Sims Metal Management	Delaware	ОН	MRF, Single Material Processor	÷	
Waste Management - Akron MRF	Summit	ОН	MRF	469	
Out-of-State					
None.					
			Total	26,0	

^{*} Tonnage for this entity has not been included in order to protect the confidentiality of their survey response. The total tons represents the amount of residential/commercial and industrial recyclables reported by scrap yards, MRFs, and other processors receiving materials from the District. The total tons also includes the tons of recycling reported by industries responding to the District's survey for calendar year 2014.

5. Other Waste Management

The District did not identify any other methods used for waste management during the reference year.

C. Use of Solid Waste Facilities During the Planning Period

In general, the District anticipates that facilities which were used to manage District-generated waste during the reference year will continue to be available throughout the planning period, and in aggregate, will continue to provide adequate capacity for the District's needs. Each landfill which received a substantial percentage of District-generated waste during 2014 is estimated to have a minimum of 9 years remaining capacity.

Transfer stations have processed a substantial percentage of the District's waste in past years, and are expected to do so throughout the planning period. No information currently available to the District suggests that the existing transfer stations used by Ashland County generators will close in the near future.

The amount of materials composted throughout the planning period is expected to be higher than the 2014 reported amount. However, the projected increase will remain below the highest composted tonnage historically. As the number of operating composting facilities processing the majority of yard waste from the

District is not expected to change, composting facility capacity should be adequate throughout the planning period.

D. Siting Strategy

The District Siting Strategy for solid waste facilities ensures that proposals to construct a new solid waste facility within the District or modify an existing in-District solid waste facility are in compliance with the Plan. The District Board of Directors (Board of County Commissioners) shall not approve the general plans and specifications for any proposed solid waste facility or modification of an existing in-District solid waste facility where the modification, construction and operation of the proposed solid waste facility, as determined by the Board, will:

- 1. Adversely affect the Board's ability to finance and implement the Plan;
- Interfere with the Board's obligation to provide for the maximum feasible utilization of existing in-District solid waste facilities;
- Materially and adversely affect the quality of life of residents within 300 feet of the proposed modification or construction of a solid waste facility; or
- 4. Materially and adversely affect the local community, including commercial businesses within 500 feet of the proposed modification or construction of a solid waste facility and the adequacy of existing infrastructure to serve the proposed solid waste facility as modified or constructed.

For a more detailed explanation of the District's siting strategy, see Appendix S of this *Plan Update*.

E. Designation

Ohio law gives each SWMD the ability to control where waste generated from within the SWMD can be taken. Such control is generally referred to as flow control. In Ohio, SWMDs establish flow control by designating facilities. SWMDs can designate any type of solid waste facility, including recycling, transfer, and landfill facilities.¹

Even though a SWMD has the legal right to designate, it cannot do so until the policy committee (or the Board in the case of an Authority) specifically conveys that authority to the board of directors. The policy committee does this through a solid waste management plan. If the SWMD desires to have the ability to designate facilities, then the policy committee includes a clear statement in the

¹ Source-separated recyclables delivered to a "legitimate recycling facility" as defined in Ohio law are not subject to the requirements of designation. (A legitimate recycling facility is loosely defined as a facility which consistently recycles a majority of the materials processed on-site.)

solid waste management plan giving the designation authority to the board of directors. The policy committee can also prevent the board of directors from designating facilities by withholding that authority in the solid waste management plan.

Even if the policy committee grants the board of directors the authority to designate in a solid waste management plan, the board of directors decides whether to act on that authority. If it chooses to use its authority to designate facilities, then the board of directors must follow the process that is prescribed in ORC Section 343.013, 343.014 and 343.015. If it chooses not to designate facilities, then the board of directors simply takes no action.

Once the board of directors designates facilities, only designated facilities can receive the SWMD's waste. In more explicit terms, no one can legally take waste from the SWMD to undesignated facilities and undesignated facilities cannot legally accept waste from the SWMD. The only exception is when the board of directors grants a waiver to allow an undesignated facility to take the SWMD's waste. Ohio law prescribes the criteria that the board must consider when deciding whether to grant a waiver and the time period available to the board for making a decision on a waiver request.

1. Description of the SWMD's Designation Process

For this *Plan Update*, the District is hereby authorized to establish facility designations in accordance with ORC Section 343.013, 343.014 and 343.015.

In the event that any person desires to use a facility other than a designated facility for the disposal or transfer of solid waste generated within the District, the person must submit a written request for a waiver of designation to the Board of Directors. The request must state the type and amount of material, the facility to be used, the intended duration of the waiver, and the reason for requesting the waiver.

2. List of Designated Facilities

The currently designated facilities for the solid waste generators are shown in the following table. These facilities were designated in 2011.

Table 4-6. Facilities Currently Designated

County Crawford Mahoning	State	Туре
	011	
	011	
	011	
Mahoning	OH	Landfill
3	ОН	Landfill
Lorain	OH	Landfill
Richland	ОН	Landfill
Stark	ОН	Landfill
Stark	ОН	Landfill
Wood	ОН	Landfill
Perry	ОН	Landfill
Montgomery	ОН	Landfill
Wyandot	ОН	Landfill
Tuscarawas	ОН	Landfill
Gallia	ОН	Landfill
Coshocton	ОН	Landfill
Ashtabula	ОН	Landfill
Marion	ОН	Transfer Facility
Carroll	ОН	Transfer Facility
Guernsey	ОН	Transfer Facility
Knox	ОН	Transfer Facility
Stark	ОН	Transfer Facility
Summit	ОН	Transfer Facility
Lorain	ОН	Material Recovery Facility
Cuyahoga	ОН	Transfer Facility
Richland	ОН	Transfer Facility
I S S I S S S S S S S S S S S S S S S S	Richland Stark Stark Wood Perry Montgomery Wyandot Tuscarawas Gallia Coshocton Ashtabula Marion Carroll Guernsey Knox Stark Summit Lorain Cuyahoga	Richland OH Stark OH Stark OH Wood OH Perry OH Montgomery OH Wyandot OH Tuscarawas OH Gallia OH Coshocton OH Ashtabula OH Carroll OH Guernsey OH Chox OH Stark OH Coshocton OH Carroll OH Carroll OH Carroll OH Carroll OH Coshocton OH Carroll OH Coshocton OH Carroll OH Coshocton OH Carroll OH Coshocton OH

CHAPTER 5. WASTE REDUCTION AND RECYCLING

As was explained in Chapter 1, a SWMD must have programs and services to achieve reduction and recycling goals established in the state solid waste management plan. A SWMD also ensures that there are programs and services available to meet local needs. The SWMD may directly provide some of these programs and services, may rely on private companies and non-profit organizations to provide programs and services, and may act as an intermediary between the entity providing the program or service and the party receiving the program or service.

Through achieving the goals of the *State Plan* and meeting local needs, the SWMD ensures that a wide variety of stakeholders have access to reduction and recycling programs. These stakeholders include residents, businesses, institutions, schools, and community leaders. Programs and services collectively represent the SWMD's strategy for furthering reduction and recycling within its jurisdiction.

Before deciding upon the programs and services that are necessary and will be provided, the Policy Committee performed a strategic, in-depth review of the District's existing programs and services, recycling infrastructure, recovery efforts, finances, and overall operations. This review consisted of a series of 13 analyses that allowed the Policy Committee to obtain a holistic understanding of the District by answering questions such as:

- . Is the SWMD adequately serving all waste-generating sectors?
- · Is the SWMD recovering high volume wastes such as yard waste and cardboard?
- How well is the SWMD's recycling infrastructure being used, and how well is it performing?
- · What is the District's financial situation and ability to fund programs?

Using what it learned, the Policy Committee drew conclusions about the District's abilities, strengths and weaknesses, operations, existing programs and services, outstanding needs, available resources, etc. The Policy Committee reviewed a list of actions the SWMD could take, programs that the District could implement, or other steps the SWMD could take to address its conclusions. The Policy Committee used that list to make decisions about the programs and services that will be available in the SWMD during the upcoming planning period. (For more in-depth information regarding the analyses of District programs and the development of priorities, see Appendix H and Appendix I, respectively.)

After deciding on programs and services, the Policy Committee reviewed projections of the quantities of recyclable materials that would be collected through those programs and services. This in turn allowed the Policy Committee to project its waste reduction and recycling rates for both the residential/commercial sector and the industrial sector. (See Appendix E for details regarding the residential/commercial sector and Appendix F for the industrial sector.)

Finally, the District and Policy Committee realize that the highest priorities identified during this *Plan Update* process were to implement all existing programs, develop a regional recycling facility, develop a permanent HHW facility and enhance its education, awareness and outreach programs. The District reserves the right to ensure the implementation of these programs and initiatives first and before all other secondary new programs or initiatives. The District and Policy Committee also realize that the existing staff resources and budgetary constraints are limited and can also be a reason that certain newly identified programs or initiatives may or may not be implemented. This explains why many of the newly identified programs and initiatives contained in Appendix I and this Chapter may be considered for implementation versus will be implemented.

A. Program Evaluation and Priorities

1. Strategic Analysis

All existing District programs have been evaluated qualitatively in terms of the suggestions included within Ohio EPA's guidance document (i.e., Format v4.0), and the strengths and weaknesses identified for each program. For programs which have data available, quantitative evaluations were incorporated, also. The District conducted additional analyses for subject areas or issues not necessarily related to an existing program where appropriate.

The following table lists the 13 analyses conducted by the District, and defines the programs which were evaluated within each analysis. For example, the first analysis involved evaluating programs as well as topics/needs for residential recycling infrastructure. This analysis was subdivided into sections addressing drop-off recycling, curbside recycling, and recycling provided at special events. Two existing programs were evaluated under drop-off recycling:

- Drop-off Recycling for Public Sites; and
- Drop-offs at Schools.

Listing of District's 13 Analyses: Strategic Evaluation

#	Section Name	Subsection	District Program or Topic Name/Description
1 Rec	2 77 46 7	A. Drop-off	Drop-off Recycling for Publicly- Available Sites
	Residential	Recycling	Drop-offs at Schools
	Recycling Infrastructure Analysis	B. Curbside	City of Ashland Curbside Recycling Program
	Allalysis	Recycling	Village of Loudonville Curbside Recycling Program

#	Section Name	Subsection	District Program or Topic Name/Description				
Ŧ			Tons Recovered				
		C. Special	Recycling Container Loan Program				
		Events/Collections	Prescription Drug Drop-off				
2	Commercial S	Sector Analysis					
3	Industrial Sec	ctor Analysis					
4	Residential/C	ommercial Waste Co	mposition Analysis				
5	Economic Inc	entive Analysis					
		A. Scrap Tires					
		B. HHW					
	Special Waste Streams	C. Lead-Acid Batteries					
6		D. Electronic Waste					
		E. Appliances					
		F. Household Batteries					
		G. Bulk Items					
7	Diversion	A. Residential/Com	mercial Sector				
1	Analysis	B. Industrial Sector					
8	Special Progr	am Needs					
		A. Revenues					
9	Financial	B. Expenditures					
	k.	C. Balances					
10	Regional Ana	lysis					
11	Population						
12	Data Collection	A. Data Reporting P	rogram				
13	Material Proce	essing Capacity					

Each of the District programs or topics listed in the table above were evaluated using the information which was available. For drop-off recycling, the District examined:

- The locations of drop-offs to determine if the current number of sites is adequate and convenient for residents in each city, village, and township;
- · The types of materials accepted at each drop-off;
- The operation of the drop-off program;
- The education and awareness efforts used to inform residents how to use the program effectively.

2. Conclusions and Priorities

The strategic analysis conducted by the District identified strengths and weaknesses for existing programs and challenges the District faces to improve certain programs. The topics or issues potentially needing to be addressed through some type of new initiative were also identified through this process.

After compiling a list of all the existing programs and the new initiatives, the District staff and the Policy Committee employed a ranking system to prioritize solid waste management efforts within Ashland County. Each existing program and new initiative were ranked from 1 to 5 based upon its importance and feasibility/ease of implementing. All programs and initiatives with a ranking of "4" or "5" are recommended for implementation, as well as some with a ranking of "3." All others are not recommended at this time.

The ranking process recommends that all existing programs be continued through the planning period associated with this *Plan Update* (2018 – 2032). Several new initiatives are also recommended for potential implementation, and are listed in the following table. For a complete listing of all existing programs and initiatives, including those with a ranking of "1", "2", or "3", see Appendix I. In many cases, the new initiatives are intended to address problems identified for an existing program, or to enhance an existing program.

A complete listing and description of all District programs and new initiatives recommended for implementation with this *Plan Update* is provided below in Section B, "Program Descriptions."

District Conclusions and Priorities: Strategic Analysis

Program Category	Action or Program Name	
Residential Recycling In	frastructure	
	Continue existing programs	
2.750 U.760	Facilitate implementation of non-subscription curbside collection in villages and townships	
Curbside Recycling Services	Facilitate the formation of collection consortiums	
	Explore the possibility of securing grants with communities to improve the recovery rates of existing curbside programs	
Drop-off Recycling:	Continue existing program	
Publicly-Available Sites	Minimize contamination and littering	
Drop-off at Schools	Continue existing program	

Program Category	Action or Program Name			
	Continue existing program			
Special Events	Promote use of recycling container program to community event organizers			
Commercial/Institutional	Sector Reduction/Recycling			
Drop-off Recycling	Continue existing program			
Education/Awareness	Continue existing program			
Industrial Sector Reducti	on/Recycling			
Recycling Center Access	Continue existing program			
Waste Assessments and Audits	Continue existing program			
Technical Assistance	Continue existing program			
Restricted/Difficult to Ma	nage Wastes			
Scrap Tires	Explore ways of reducing collection event costs			
Scrap Tires	Encourage residents to turn in old tires at dealer			
HHW	Explore collection options for HHW materials no accepted locally			
Lead Acid Batteries	Continue existing program			
E-Waste	Develop sustainable options for collection of TVs			
	Evaluate cost containment options			
Appliances	Continue existing program			
Household Batteries	Continue existing program			
Bulk Items	Continue existing program			
Outreach, Education, Awa	areness, and Technical Assistance			
	Track the number of visits to the website.			
	Minimize the website's "down time" by fixing pages that are under construction as quickly as possible.			
District Website	Include the Recycling Guide online as a downloadable, printable PDF.			
	Improve user-friendliness by reorganizing information and adding a tab for each target audience, such as residents, businesses, governments, etc.			
Presentations	Promote availability of presentations to non- school groups (civic groups) using a variety of means, such as posting on the District website and employing the support of related organizations to promote presentations to members, such as the Chamber of Commerce.			

Program Category	Action or Program Name
Presentations	Begin tracking the number of individuals reached by each presentation and the name of each school so the District can identify the number of students and schools reached each year.
5.63.61060.776	Request that educators or group leaders complete a feedback form after a presentation has been completed.
Adopt-a-Road	Identify groups that have a volunteer requirement or organizations that typically perform community service and target these groups to receive information about the District's Adopt-a-Road program.
	Begin tracking additional program statistics, such as the number of bags collected, weight of bags collected, and/or number of hours volunteered.
Educational Display at Fairgrounds and Community Events	Ensure promotional items display the District's contact information and that flyers for each target audience are available at the display.
Contests	Inform more school districts about contests to increase participation.
Business/Industrial Sector Waste Audits	Follow up with entities who participated in an assessment to identify whether the companies were able to implement changes to realize the waste reduction and cost savings identified in their analysis.
waste Addits	Request feedback from establishments that participated in an audit to identify how the District can further serve this audience more effectively.
Funding	
Funding	Continue existing funding sources
runding	Apply for community development grants for recycling center improvements
Grants	Promote community development grant to communities and institutions
	Promote market development grant to businesses
Facilities	
Recyclables Processing	Converting a part time laborer to full time to increase productivity
TANDELL SALDINGS	Replace existing baler
Data Collection	
Data Collection	Contact set number of businesses annually
	I .

B. Program Descriptions

1. Residential Recycling Infrastructure

Curbside Recycling Services

The existing non-subscription curbside recycling services available to residents of the District in the reference year are expected to continue. The two programs are shown below in the following table. The Sanitation Department for the City of Ashland operates the curbside recycling program, and collects recyclables once per week. The materials which residents can recycle through curbside collection include:

- Newspaper
- Magazines
- Books
- Miscellaneous paper/shredded paper
- Boxboard, cereal boxes, etc.
- Corrugated cardboard
- Aluminum/steel/tin cans, and #1 and #2 plastic containers
 Plastic grocery bags/shrink/stretch film

Subscription curbside collection of recyclables is available to the residents of the Village of Loudonville through a contract with a private hauler and the Village. Single-stream collection is offered once per week for plastics, glass, metal cans, cardboard, paper, newspaper, magazines, and books. For additional details regarding these curbside programs, see Appendix B.

In addition to the existing curbside programs, the District's strategic analysis and ranking process identified two programs/initiatives to be considered for implementation during the planning period:

- Facilitate implementation of non-subscription curbside collection in villages and townships.
- Facilitate the formation of collection consortiums.

Drop-off Recycling: Publicly-Available Sites

The drop-off recycling program for publicly-available sites will continue. A map of drop-off recycling sites within the District is shown below as well as a listing of those sites in the following table.

TROY UGGLES SULLIVAN 8 SAVANNAH JACKSON ORANGE 8 CLEAR CREEK 42 MILTON PERRY MONTGOMERY 8 EROMESVILLE MIFFLIN MI PRIN HAYESVILLE 8 VERMILION MOHICAN 3 LAKE GREEN 0 1.25 2.5 5 Miles LOUDONVILLE HANOVER Full-Time Drop-Off 3 8 Part-Time Drop-Off

Map of Drop-Off Recycling Sites

Note: Orange Twp. drop-off was removed after the reference year due to contamination issues. It has been removed from this map but remains on maps reflecting sites that operated during the reference year.

The publicly-available drop-off program includes two sites categorized as "full-time urban" (one of these is located at the Ashland Recycling Center) and 7 sites which are "full-time rural." All of these locations except the one

at the Ashland Recycling Center are open seven days per week for 24 hours each day. Four additional sites are classified as part-time rural, and are available one weekend per month.

Through the strategic analysis, the District determined that it would be appropriate to initiate a program designed to minimize contamination and littering at the drop-off locations. This program will be implemented beginning 2018. In addition, the District will initiate a program to evaluate adding, removing, or adjusting sites on an ongoing basis.

The District's container use loan program will continue as well. The District will initiate efforts to promote this program to more communities beginning in 2018. The following table summarizes all the programs and initiatives anticipated for District residential recycling infrastructure.

Residential Recycling Infrastructure Programs: 2018-2032

Program Category	Sub- category	ID	Name	Start Date	End Date	Goal(s)
	Non- subscription	NSC1	City of Ashland	1990	Continue; no changes	1, 2,7
	Subscription	SC1	Loudonville Village	Ongoing	Continue; no changes	1,2,7
Curbside Recycling Services	Technical assistance		Facilitate implementation of non-subscription curbside collection in villages and townships	2018	2032	1,2,7
	Technical ass	sistance	Facilitate the formation of collection consortiums	2018	2032	3,4
	Full-time urban	FTU1	Buehler's Market Sugarbush Dr. Ashland, OH	2009	Continue; no changes	1,2,7
Drop-off Recycling		FTU2	Ashland Co. Recycling Ctr. 1270 Middle Rowsburg Rd. Ashland, OH	1990	Continue; no changes	1,2,7
	Part-time urban	None	None	N/A	N/A	N/A

Program Category	Sub- category	ID	Name	Start Date	End Date	Goal(s)
	Full Time Rural	FTR2	Ashland Co. Service Ctr. (Vermillion Twp.) 1763 SR 60 S Ashland, OH	2009	Continue; no changes	1,2,7
		FTR3	Stake's IGA (Hanover Twp.) N. Jefferson St. Loudonville, OH	2000	Continue; no changes	1,2,7
		FTR4	Clear Creek Township 37 S. Main St. Savannah, OH	Ongoing	Continue; no changes	1,2,7
		FTR5	Troy Twp. Garage US 224, Nova, OH	2005	Continue; no changes	1,2,7
		FTR6	Mifflin Twp. Garage 36 Maine St. Mifflin, OH	Ongoing	Continue; no changes	1,2,7
		FTR7	Perrysville Fire Dept. SR 39 Perrysville, OH	2000	Continue; no changes	1,2,7
		FTR8	Cinnamon Lake CR 620 Jackson, OH	2012	Continue; no changes	1,2,7
		PTR1	Lake Twp. Garage 2499 CR 3374 Loudonville, OH	Ongoing	Continue; no changes	1,2,7
	Part-time rural	PTR2	Jackson Twp. Polk Ballfield Congress St. Polk, OH	Ongoing	Continue; no changes	1,2,7
		PTR3	Sullivan/Clear Creek Twp. Garage 245 Twp. Hwy. 501 Sullivan, OH	Ongoing	Continue; no changes	1,2,7
		PTR4	Mohican Twp. Garage	Ongoing	Continue; no changes	1,2,7

Program Category	Sub- category	ID	Name	Start Date	End Date	Goal(s
		n/a	Add, remove or adjust sites as needed	2018	2032	1,2,7
		n/a	Minimize contamination and littering	2018	2032	n/a
Special Events		n/a	Container loan program	Ongoing	Ongoing	2,7
		n/a	Promote use of recycling container program to community event organizers	2018	2032	3,4

2. Commercial/Institutional Sector Reduction and Recycling Programs

Drop-Off Recycling: Schools

The District currently provides recycling collection service to a number of schools within Ashland County, and this service will continue. Sites will be added, removed, or services modified as needed throughout the planning period.

Drop-Off Recycling: Small Businesses

The District's drop-off collection services for small businesses will continue. This service will be evaluated throughout the planning period to determine the need for additional collections or modifications to existing service.

Waste Assessments/Waste Audits

The District will continue to offer waste assessment and waste audits to businesses within the County. No changes are anticipated for this program.

Commercial/Institutional Sector District Programs: 2018-2032

Program Category	ID	Name	Start Date	End Date	Goal(s)
School Drop-Off Sites	8458	Black River Elementary	2012	Continue; no changes	2,7

Program Category	ID	Name	Start Date	End Date	Goal(s)
	8459	Hillsdale Elementary	1995	Continue; no changes	2,7
	8460	Hillsdale High School	1995	Continue; no changes	2,7
	8582	Hillsdale Middle School	1995	Continue; no changes	2,7
	8461	Kno-Ho-Co Head Start	1995	Continue; no changes	2,7
	8463	Mapleton High School	2010	Continue; no changes	2,7
	8465	Montgomery Elementary	n/a	2015	2,7
	9419	Mapleton Elementary School	2012	Continue; no changes	2,7
	New	Black River High School	2015	Ongoing	2,7
	N/A	Add, remove or adjust sites as needed	2018	2032	2,7
Collection Services for Small Businesses	N/A	Armstrong Cable TV; Ashland Publishing; Cleveland Avenue Market; Family Dollar Store; ODOT District 3 Facility; Round Lake Christian Assembly Camp; Dor-Lo Pizza; Eagles Club; Wil Research; UPS Store; Thiel's Replacement Systems	Ongoing	Continue; no changes	2,7
		Add, remove or adjust sites as needed	2018	2032	2,7

Program Category	ID	Name	Start Date	End Date	Goal(s)
Waste Assessments/ Waste Audits	N/A	Waste Audits and Assessments	Ongoing	Continue; no changes	3,4

3. Industrial Sector Reduction and Recycling Programs

The waste assessment/waste audit program will continue for the industrial sector. No changes are anticipated.

Industrial Sector District Programs: 2018-2032

Program Category	Program ID	Name	Start Date	End Date	Goal(s)
Waste Audits and Assessments	N/A	Waste Audits and Assessments	Ongoing	Continue; no changes	3,4

4. Restricted/Difficult to Manage Wastes

Yard Waste

The District anticipates that all of the yard waste programs which operated during the reference year will continue. The existing yard waste programs which will continue include the leaf collection program operated by the City of Ashland. Food waste collection is also expected to continue at Walmart and other entities within the District.

Household Hazardous Waste

The District will continue to provide education and information to the public regarding the proper disposal of household hazardous wastes. In addition, the District's existing collection service for HHW will continue. In 2019, the District will initiate an evaluation of options for HHW materials not currently collected locally.

Scrap Tires

The District will continue to offer education and outreach to the public through its website and other means with regard to the proper management of scrap tires. Scrap tire collections will also continue. The District will

explore ways of reducing costs for collection events and encourage residents to turn in old tires at dealers when buying new tires.

Electronic Equipment

The District will continue to publicize the collection of electronic equipment within Ashland County. Reduction of collection costs and options for TV recycling will be explored by the District beginning in 2019.

Lead-Acid Batteries, Appliances, Household Batteries

The District provides information on its website and in paper flyers which list numerous businesses that accept lead-acid batteries. Collection programs and education for residents for proper management of lead-acid batteries, appliances, and household batteries will continue.

District Programs for Restricted/Hard-to-Manage Waste Streams: 2018-2032

Program Category	ID	Name	Start Date	End Date	Goal(s)
Yard Waste	YW1	Markleys Co. Butchering	Ongoing	Ongoing	2,7
	YW2	Howards Nursery	Ongoing	Ongoing	2,7
	YW3	Willo'dell Yard Waste	Ongoing	Ongoing	2,7
	YW4	#1 Landscape	Ongoing	Ongoing	2,7
	YW5	Hauler and Walmart Food Waste Data	Ongoing	Ongoing	2,7
	YW6	City of Ashland Yard Waste and Leaf Collection	Ongoing	Ongoing	2,7
	204	Education Program for HHW, Electronics, and Lead-acid Batteries	1990	Continue; no changes	3,4
Household Hazardous Waste	201	HHW Collection Program	1992	Continue; no changes	2,5,7
ruste	N/A	Evaluate collection options for new materials not collected locally	2019	2020	2,5,7
Scrap Tires	198	Year-round tire collection at Collection Center	Ongoing	Continue; no changes	2,5,7

Program Category	ID	Name	Start Date	End Date	Goal(s)
	N/A	Explore ways of reducing collection event costs	2019	2020	5
	N/A	Encourage residents to turn in old tires at dealers	2020	2021	3,4
	5365	Electronics Collection	2000	Continue; no changes	5,7
	N/A	N/A Develop sustainable options for collection of TVs		2020	5,7
	N/A	Evaluate cost containment options	2021	2022	5,7
Lead-Acid Batteries	212	Lead Acid Battery Collection	1990	Continue; no changes	2,5,7
Appliances	181	Year-round appliance collection at Collection Center	1996	Continue; no changes	2,5,7
Household Batteries	N/A	Household battery collection	1990	Continue; no changes	2,5,7

5. Outreach, Education, Awareness, and Technical Assistance

The District will continue to offer a number of programs designed to provide education, technical assistance, and raise awareness of solid waste and recycling issues. New initiatives and programs will be developed as well.

District Website

The District has maintained a website since 1992, providing many different types of information to the public. The website will continue, and the District will develop three initiatives designed to improve the ease of using the site and enable evaluation of its use:

- Track the number of visits to the website.
- Minimize the website's "down time" by fixing pages that are under construction as quickly as possible.
- Include the Recycling Guide online as a downloadable, printable PDF.
- Improve user-friendliness by reorganizing information and adding a tab for each target audience, such as residents, businesses, governments, etc.

Resource Guide

Each year and as changes occur, the District updates the Recycling Guide, which is a comprehensive List identifying recycling opportunities for residents and businesses. In the future, the District will make printed copies available for distribution at community events and District presentations.

Education Provider

During the reference year, the District employed an Education Coordinator to perform education and outreach activities. The Education Coordinator conducts in-school and civic group presentations, organizes and runs recycling contests for students, plans and manages recycling facility tours, and participates in special community events, such as hosting a booth at the County fair. These activities are expected to continue and will be enhanced by promoting the availability of presentations to non-school groups (civic groups) using a variety of means, such as posting on the District website and employing the support of related organizations to promote presentations to members, such as the Chamber of Commerce.

Infrastructure Inventory

The District's Solid Waste Management Plan includes an infrastructure inventory. In the future, the District will create a stand-alone document containing Ashland County's solid waste and recycling infrastructure inventory that can be posted on the website.

Adopt-a-Road

This program provides residents, schools, non-profit groups, and other organizations with the opportunity to play an active role in their community. The District provides collection bags, safety vests, and safety signs. The District also posts recognition signs in each group's designated area identifying which group is responsible for keeping the roadway clean. During the planning period, the District will identify groups that have a volunteer requirement or organizations that typically perform community service and target these groups to receive information about the Adopt-a-Road program.

Outreach and Marketing Plan

The District evaluated the existing education and outreach programs in terms of effectiveness and in the context of the State Plan's minimum requirements for reaching the required target audiences. The following table provides a summary of the evaluation, and shows for instance, that the District website addresses four of the five target audiences. The District

will continue to offer all the existing education and outreach programs to residents of Ashland County.

Outreach, Education, Awareness, and Technical Assistance: 2018-2032

			Target Au	dience	
Existing Programs	Residents	Schools	Industries	Institutions & Commercial Businesses	Communities & Elected Officials
District Website	1	1	1	1	
Presentations	1	1	1	1	1
Adopt-a-Road	1	1		1	
Educational Display at Fairgrounds and Community Events	1	V	1	1	
Contests	1	V			
Business/ Industrial Sector Waste Audits		1	~	1	
Total Programs per Group	5	6	4	6	1

6. Funding, Grants, and Economic Incentives

Funding

The District will continue to apply for community development grants as needed to improve the recycling center.

Grants

The District has offered a community development grant program for several years, and will continue to make this program available within the County.

Economic Incentives

The District will continue to provide technical assistance to communities and businesses with regard to the design of recycling and waste reduction programs. As part of the technical assistance, the District promotes the use of collection strategies which provide economic incentives encouraging waste reduction.

Funding, Grants, and Economic Incentives: 2018-2032

Program Category	Name	Start Date	End Date	Goal(s)
	Continue existing funding sources	N/A	Ongoing	Varies
Funding	Apply for community development grants for recycling center improvements	N/A	2018	Varies
Grants	Promote community development grant to communities and institutions	N/A	2018	Varies
	Promote market development grant to businesses	2018	2032	Varies
Economic Incentives	Technical assistance	Ongoing	Ongoing	Varies

7. Facilities and Data Collection

Materials Recovery Facilities/Recycling Centers

The District will continue to operate the Ashland County Recycling Center throughout the planning period. In order to facilitate more effective operations at the recycling center, the District plans include upgrading a part-time employee to full-time status, and upgrading the existing baler.

Data Collection

The District collects data each year from entities located both within Ashland County and facilities located outside the County. Disposal data is reported to the District by solid waste facilities which are under contract to remit a fee to the District. The District also receives data from Ohio EPA each year.

Each year the District also conducts a survey to obtain recycling data, composting data, and hauling information as a part of preparing the annual district report to be submitted to the Ohio EPA. The District will continue its existing data collection program which is described in detail in Appendix H. In addition, the District intends to contact a set number of businesses each year to facilitate data collection and provide technical assistance.

Facilities, Data Collection, and Other Programs: 2018-2032

Program Category	ID	Name	Start Date	End Date	Goal(s)
MRFs/Recyc	ling Cen	ters			
Ashland County	8455	Continue operating Ashland County Recycling Center	Ongoing	Ongoing	1,2,3,4,5,7,8
Recycling Center	N/A	Transition part time employee to full time	2018	2018	N/A
	N/A	Upgrade baler	2020	2021	N/A
Data Collect	ion				
Surveying	8471 8472	District sends surveys to commercial and industrial businesses annually	Ongoing	Ongoing	9
	N/A	Contact set number of businesses annually	2018	2032	9

C. Waste Reduction and Recycling Rates

1. Residential/Commercial Recycling in the District

Waste reduction and recycling in the residential/commercial sector is expected to increase slightly during the first six years of the planning period based upon the tons collected (see following table).

Residential/Commercial Waste Reduction and Recycling Rate

Year	Projected Tons Collected	Residential/ Commercial WRR ¹
2018	12,787	30%
2019	12,799	30%
2020	12,810	30%
2021	12,837	30%
2022	12,865	30%
2023	12,892	30%

1 "WRR" means waste reduction and recycling rate.

The program areas expected to provide the waste reduction and recycling for the amounts shown in the table above are depicted in the following figure. The largest amount of reduction and recycling is projected from the category entitled, "Organics" which includes yard waste composting and food waste recovery.

All Other 2% Commercial Survey 35% Curbside 5% Ohio EPA Scrap Tire Data 6% Ohio EPA Commercial

R/C Waste Reduction and Recycling in 2018 by **Program Area**

2. Industrial Recycling in the District

Retail Data 12%

The following table shows the projected amount of waste reduction and recycling for the industrial sector during the first six years of the planning is C e n

	ioi tilo illadotilal coote		11100 0111 100	no or the pronting
period.	As illustrated in the tab	le, the tons	collected ar	re not expected to
change d	luring this time period.	The waste	reduction ar	nd recycling rate is
expected	to be 88 percent, which	h is substant	ially higher t	han the State Plan
industrial	sector goal of 66 perce	ent.		

Industrial Waste Reduction and Recycling Rate

Projected Tons Collected Industrial WRR¹ Year 2018 24,716 88% 2019 24,716 88% 2020 24,716 88% 2021 24,716 88% 2022 24,716 88% 88% 2023 24,716

5-20

1 "WRR" means waste reduction and recycling rate.

The tonnage of waste reduction and recycling is projected to be estimated based upon the industrial surveys.

CHAPTER 6. BUDGET

Ohio Revised Code Section 3734.53(B) requires a solid waste management plan to present a budget. This budget accounts for how the SWMD will obtain money to pay for operating the SWMD programs and how the SWMD will spend that money. For revenue, the solid waste management plan identifies the sources of funding the SWMD will use to implement its approved solid waste management plan. The plan also provides estimates of how much revenue the SWMD expects to receive from each source. For expenses, the solid waste management plan identifies the programs the SWMD intends to fund during the planning period and estimates how much the SWMD will spend on each program. The plan must also demonstrate that planned expenses will made in accordance with ten allowable uses that are prescribed in ORC Section 3734.57(G).

Ultimately, the solid waste management plan must demonstrate that the SWMD will have adequate money to implement the approved solid waste management plan. The plan does this by providing annual projections for revenues, expenses and cash balances.

If projections show that the SWMD will not have enough money to pay for all planned expenses or if the SWMD has reason to believe that uncertain circumstances could change its future financial position, then the plan must demonstrate how the SWMD will balance its budget. This can be done by increasing revenues, decreasing expenses, or some combination of both.

This Chapter of the solid waste management plan provides an overview of the SWMD's budget. Detailed information about the budget and District budget policies are provided in Appendix O.

A. Overview of the District's Budget

During the 2014 reference year, the District's overall revenue was \$811,631. In the first year of the planning period (2018), revenue is projected to be \$828,109. Revenue is projected to increase annually, ending in 2032 with a projected revenue of \$838,498. Current revenue is generated through recycling revenue, user fees, miscellaneous sources, and contract fees.

Projected expenditures were developed based on the programmatic needs identified in Appendix H, I, an L. During the first five years of the planning period, annual expenditures range from approximately \$815,000 to \$876,000. Based on projections, the District will have ample revenue to finance the implementation of the programs and initiatives described throughout this Plan Update. The District is projected to begin the planning period in 2018 with a carryover balance of approximately \$235,000 and end the planning period with a carryover balance of approximately \$50,000.

B. Revenue

Overview of How Solid Waste Management Districts Earn Revenue

There are several mechanisms SWMDs can use to raise the revenue necessary to finance their solid waste management plans. Two of the most commonly used mechanisms are disposal fees and generation fees.

Before a SWMD can collect a generation or disposal fee it must first obtain approval from local communities through a ratification process. Ratification allows communities in the SWMD to vote on whether they support levying the proposed fee.

Disposal Fees (See Ohio Revised Code Section 3734.57(B))

Disposal fees are collected on each ton of solid waste that is disposed at landfills in the levying SWMD. There are three components, or tiers, to the fee. The tiers correspond to where waste came from – in-district, out-of-district, and out-of-state. In-district waste is solid waste generated by counties within the SWMD and disposed at landfills in that SWMD. Out-of-district waste is solid waste generated in Ohio counties that are not part of the SWMD and disposed at landfills in the SWMD. Out-of-state waste is solid waste generated in other states and disposed at landfills in the SWMD.

Ohio's law prescribes the following limits on disposal fees:

- The in-district fee must be at least \$1.00 and no more than \$2.00;
- The out-of-district fee must be at least \$2.00 and no more than \$4.00; and
- The out-of-state fee must be equal to the in-district fee.

Generation Fees (see Ohio Revised Code Section 3734.573)

Generation Fees are collected on each ton of solid waste that is generated within the levying SWMD and accepted at either a transfer facility or landfill located in Ohio. The fee is collected at the first facility that accepts the SWMD's waste. There are no minimum or maximum limits on the per ton amount for generation fees.

Rates and Charges (see Ohio Revised Code Section 343.08)

The board of directors can collect money for a SWMD through what are called rates and charges. The board can require anyone that receives solid waste services from the SWMD to pay for those services.

Contracts (see Ohio Revised Code Sections 343.02 and 343.03)

The board of directors can enter into contracts with owners/operators of solid waste facilities or transporters of solid waste to collect generation or disposal fees on behalf of a SWMD.

Other Sources of Revenue

There are a variety of other sources that SWMDs can use to earn revenue. Some of these sources include:

- · Revenue from the sale of recyclable materials;
- User fees (such as fees charged to participate in scrap tire and appliance collections):
- County contributions (such as from the general revenue fund or revenues from publicly-operated solid waste facilities (i.e. landfills, transfer facilities));
- Interest earned on cash balances;
- Grants;
- Debt; and
- Bonds.

The following summarizes the actual funding sources for the District:

1. Generation Fees

The District does not have a generation fee.

2. Designation Fees

The District has designated solid waste facilities pursuant to ORC 343.014 and has entered into contracts with designated facilities pursuant to which the District currently receives a Contract Fee for solid waste generated in the District and received at the designated facility. The per ton contract fee from 2010 to May 31, 2015 was \$7.50. Pursuant to ORC 343.08(C), the District adopted a fifty cent (\$0.50) per ton Contract Fee increase on June 1, 2015, and intends to adopt a fifty cent (\$0.50) per ton Contract Fee increase on January 1, 2021. This rate is not anticipated to change for the remainder of the planning period. However, the District shall renegotiate all Designation Agreements as necessary to ensure continued transfer and disposal capacity and funding to implement the Plan.

The District's designation contracts include a requirement that an additional contract fee be paid to the County for the purpose of covering the cost of the post closure care of the Ashland County landfill. The landfill post closure care contract fee collected in 2015 was \$2.00 per ton. In 2016, the fee increased to \$2.50 per ton and in 2017, the rate was capped at \$3.00 per

ton. The fee is direct deposited into the Ashland County Landfill Post Closure Account. The District does not manage this account nor does the District procure for any post closure expenditures.

3. Rates & Charges

The District does not utilize rates and charges.

4. Other Sources of Revenue

Other sources of revenue include:

- Grants Grants obtained by the District are competitive and therefore not a guaranteed source of revenue. Potential revenue from future grants has been excluded from the projections in Table O-5.
- Recycling Revenue This revenue came from the sale of commodities processed at the Ashland County Recycling Center.
- User Fees User fees are collected at the Ashland County Recycling Center for special materials or items such as electronics, tires, and Freon-containing appliances.
- Miscellaneous Revenue Miscellaneous revenue represents total
 of funds transferred from the Solid Waste District fund over to the
 Recycling Fund plus any amounts we collected from the sale of
 recycling bags and paint hardener.

Revenue from other sources totaled \$576,090 in 2014. Throughout the planning period (2018-2032), the average annual revenue from other sources is projected to be \$545,063. The decrease in funding is due to decreases in recycling revenue.

5. Summary of Revenue

The following table presents the District's total revenue by source for the 2014 reference year and the first six years of the Plan (2018 to 2023).

Table 6-1. Summary of Revenue

			Other Revenue					
Year	Contract Fees	Grants	Recycling Revenue	User Fees	Miscellaneous	Total Revenue		
Referen	ce Year				1015.00			
2014	\$235,541	\$0	\$407,123	\$3,627	\$165,339	\$811,631		
Plannin	g Period							
2018	\$296,603	\$0	\$324,655	\$6,782	\$169,728	\$797,768		
2019	\$286,582	\$0	\$335,508	\$6,846	\$169,728	\$798,664		
2020	\$294,346	\$0	\$346,361	\$6,912	\$169,728	\$817,347		
2021	\$284,196	\$0	\$357,215	\$6,978	\$169,728	\$818,117		
2022	\$274,044	\$0	\$368,068	\$7,046	\$169,728	\$818,886		
2023	\$274,881	\$0	\$378,921	\$7,115	\$169,728	\$830,646		

Source(s) of information: Plan Tables O-3 and O-5.

C. Expenses

Overview of How Solid Waste Management Districts Spend Money

Ohio's law authorizes SWMDs to spend revenue on 10 specified purposes (often referred to as the 10 allowable uses). All the uses are directly related to managing solid waste or for dealing with the effects of hosting a solid waste facility. The 10 uses are as follows:

- Preparing, monitoring, and reviewing implementation of a solid waste management plan.
- Implementing the approved solid waste management plan.
- Financial assistance to approved boards of health to enforce Ohio's solid waste laws and regulations.
- Financial assistance to counties for the added costs of hosting a solid waste facility.
- Sampling public or private wells on properties adjacent to a solid waste facility.
- Inspecting solid wastes generated outside of Ohio and disposed within the SWMD.
- Financial assistance to boards of health for enforcing open burning and open dumping laws, and to law enforcement agencies for enforcing antilittering laws and ordinances.
- Financial assistance to approved boards of health for operator certification training.
- Financial assistance to municipal corporations and townships for the added costs of hosting a solid waste facility that is not a landfill.

 Financial assistance to communities adjacent to and affected by a publicly-owned landfill when those communities are not located within the SWMD or do not host the landfill.

In most cases, most of a SWMD's budget is used to implement the approved solid waste management plan (allowable use 2). There are many types of expenses that a solid waste management district incurs to implement a solid waste management plan. Examples include:

- · Salaries and benefits;
- Purchasing and operating equipment (such as collection vehicles and drop-off containers);
- Operating facilities (such as recycling centers, solid waste transfer facilities, and composting facilities);
- Offering collection programs (such as for yard waste, HHW and scrap tires);
- Providing outreach and education;
- · Providing services (such as curbside recycling services); and
- Paying for community clean-up programs.

Table 6-2 presents a summary of expenses for the 2014 reference year and for the first six years of the planning period (2018 to 2023) broken into specific expense categories.

Table 6-2. Summary of Expenses

Expense Category	Year Planning Period									
	2014	2018	2019	2020	2021	2022	2023			
Plan Preparation/ Monitoring	\$4,684	\$3,800	\$0	\$0	\$17,510	\$5,356	\$3,914			
Direct Admin.	\$54,604	\$60,229	\$61,110	\$62,004	\$62,912	\$63,833	\$64,768			
Ashland County Recycling Center Operation and Maintenance	\$734,921	\$724,205	\$707,538	\$738,356	\$721,689	\$771,689	\$721,689			
Special Collections	\$2,295	\$6,782	\$19,560	\$6,912	\$19,946	\$7,046	\$20,342			
Education/ Awareness	\$18,622	\$21,480	\$21,845	\$22,216	\$22,594	\$22,978	\$23,369			
Health Department Financial Assistance	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000			
Other	\$9,819	\$0	\$0	\$0	\$0	\$0	\$0			
Total Expenses	\$829,944	\$821,496	\$815,053	\$834,488	\$849,651	\$875,902	\$839,082			

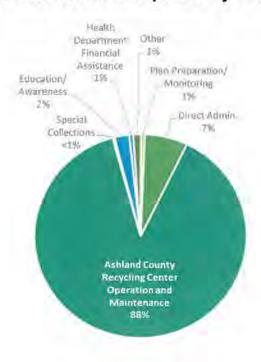
Source(s) of information: Plan Table O-7.

Expense categories in Table 6-2 include the following:

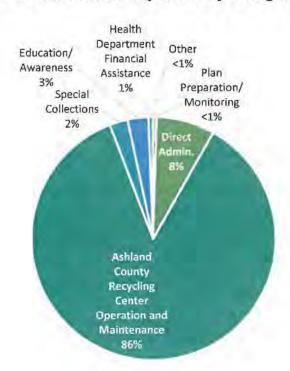
- Plan Preparation/Monitoring Represents expenditures for assistance from consultants with developing solid waste plan updates.
- Direct Administration Budget includes expenditures for salaries, OPERS, FICA, unemployment compensation, workers' compensation, health insurance, and office overhead such as postage, office rent, utilities, telecommunications, and other supplies.
- Ashland County Recycling Center Operation and Maintenance Reflects the base operating budget plus funding allocated for planned capital improvements and equipment replacements. Funding allocated for improvements and equipment replacements will only be used if the District receives grant funding (see Appendix O for full description).
- Special Collections Includes funding for tire, HHW, and electronics collections.
- Education/Awareness Reflects expenditures for education staff, advertisement, and promotion costs.
- Health Department Financial Assistance Reflects funding allocated to the County Health Department for solid waste enforcement activities.
- Other This line item reflects funding allocated for litter prevention and education and other miscellaneous expenditures.

In 2014, 88% of the District's expenses were attributed to operating and maintaining the Ashland County Recycling Center.

2014 Distribution of Expenses by Category



Throughout the first six years of the planning period, the distribution of expenses among categories remains nearly the same. In 2023, the sixth year of the planning period, the top three expense categories include operating and maintaining the Ashland County Recycling Center (86%), direct administration (8%), and education/awareness (3%).



2023 Distribution of Expenses by Category

D. Budget Summary

Table 6-3 presents a summary of the budget for the 2014 reference year and the first six years of the planning period (2018 to 2023). The summary includes revenue, expenditures, net balance, and year-end fund balance. Revenue fluctuates from a low of \$807,789 in 2020 to a high of \$963,310 in 2019; expenses fluctuate; in 2014, annual expenses totaled approximately \$830,000. The average annual expenditures from 2018 to 2032 are \$835,840. The District's ending balance during the first six years of the planning period ranges from a low of \$88,000 in 2018 to a high of nearly \$235,000 in 2019. Ample funding should be available to operate the programs outlined throughout this Plan.

Table 6-3. Budget Summary

Year	Revenue	Expenses	Net Difference	Ending Balance
Reference Year				
2014	\$811,631	\$829,944	-\$18,313	\$58,273
Planning Period				
2018	\$886,467	\$876,951	\$9,516	\$88,970
2019	\$963,310	\$817,403	\$145,907	\$234,877
2020	\$807,789	\$821,496	(\$13,707)	\$221,170
2021	\$808,686	\$815,053	(\$6,367)	\$214,803
2022	\$809,583	\$834,488	(\$24,905)	\$189,897
2023	\$828,267	\$849,651	(\$21,384)	\$168,513

APPENDIX A

REFERENCE YEAR, PLANNING PERIOD, GOAL STATEMENT, MATERIAL CHANGE IN CIRCUMSTANCES, EXPLANATIONS OF DIFFERENCES IN DATA

APPENDIX A. Reference Year, Planning Period, Goal Statement, Material Change in Circumstances, Explanations of Differences in Data

A. Reference Year

The reference year for this Solid Waste Management Plan is: 2014.

B. Planning Period (first and last years)

The planning period for this Solid Waste Management Plan is: 2018 to 2032

C. Goal Statement

The SWMD will achieve the following Goal(s): Goal 1

D. Material Change in Circumstances/Contingencies

The Ashland County Board of County Commissioners, acting as the Solid Waste Management District's Board of Directors, may determine at any time that "...circumstances have materially changed from those addressed in the approved initial or amended Plan of the District..." [ORC Section 3734.56(D)]. To make this determination, the Board shall consider the following criteria as valid reason(s) for the submittal of an amended Plan:

 Significant change(s) in waste generation, including the increase or decrease of industrial waste generation, commercial waste generation, and/or residential waste generation.

The primary factor toward determination of a "significant change" is a waste generation variance of +/- of 10% from projected levels listed in this Plan, if this variance adversely affects Plan implementation. This could include the loss of significant levels of revenues, due to a decrease in solid waste disposal, causing a shortfall in District revenues that may alter or affect Plan implementation. This also could include the District running a negative balance for two consecutive years.

Significant change in the availability of capacity, causing a capacity shortfall prior to the next planned five-year update of the District Plan.

The primary factor toward determination of a "significant change" could include the solid waste disposal and recycling capacity available is limited to three years or less, and the itemized contingencies are not deemed suitable for the situation.

 Significant change regarding waste reduction and/or recycling strategies, limiting the ability of the District to honor the reduction goals itemized in the State Plan.

One factor that could determine a "significant change" is a 10 percent (or greater) reduction in the Per Capita Waste Reduction Rate (PCWR), as calculated in the District's Annual District Report (ADR) submitted each June to Ohio EPA. Additionally, another factor that could determine a "significant change" is a change in, or loss of, recycling programs that results in a 10 percent (or greater) reduction in the population that has access to recycling opportunities.

4. Significant change in the availability of revenues for Plan implementation.

The primary factor toward determination of a "significant change" is a 10 percent (or greater) reduction in received revenues from the annual projected revenues of this Plan, should this reduction adversely affect Plan implementation, or in the event that it is determined that contingencies available in the future do not adequately suffice when the reduction in revenues is greater than 10 percent. These factors will be reviewed each year at a minimum upon preparation of the Annual District Report.

Significant change in the procedures to be followed for Plan implementation.

The primary factor toward determination of a "significant change" shall be the adverse significant variance from planned procedures for Plan implementation as stated by the Policy Committee, through a formal vote presented to the Board of County Commissioners.

Significant change in the timetable for implementation of programs and/or activities.

The primary factor toward determination of a "significant change" shall be the adverse significant variance from the planned implementation timetable as stated by the Policy Committee, through a formal vote presented to the Board of County Commissioners.

The Solid Waste Management District Office will monitor possible significant changes which could cause a material change in circumstances. In many instances, this monitoring will be ongoing and continuous as many of the items listed as possible causes of a significant change can occur at any time during the year and would need to be addressed as quickly as possible. The Annual Ohio Facility Data Report (or other information available from Ohio EPA) will be used to analyze remaining capacity at facilities used by the District on an annual basis.

The District Board of County Commissioners will determine if a material change in circumstance has occurred once all other management, budgeting and programmatic adjustments have been made to avert a material change in circumstances. Only at this point will a material change in circumstances decision be made by the Board of County Commissioners. The Board of County Commissioners may determine that a material change in circumstances has not occurred even if some of the trigger points listed in this policy have occurred. The final decision as to whether a material change in circumstances will be made after considering all factors.

Within 60 days of determining that there may be a significant change in circumstances the Solid Waste District Office shall present the information to the Board of County Commissioners as Directors of the Solid Waste District to review the Plan. In addition, the Policy Committee may present information to the Board of Directors concerning possible significant changes that might require a Plan update or revision.

The Committee will consider any such information and will, by formal vote, forward conclusions and recommendations to the Board of Directors for final determination. The Board of Directors will review all information and recommendations and will take final action if they determine a significant change has occurred, and will direct the Policy Committee to proceed within 180 days with a Plan amendment or revision according to the required statutory procedures.

- E. Explanations of differences between data previously reported and data used in the solid waste management plan.
 - Differences in quantities of materials recovered between the annual district report and the solid waste management plan.

The District's previous annual reports were prepared by a third-party consultant. Upon receiving the raw data files used to calculate totals reported in the reference year Annual District Report (ADR), the following issues were identified and revised:

- Some industrial sector survey responses were categorized as residential/commercial sector, and vice-versa
- Tonnage accepted at the Ashland County Recycling Center was not included in calculations.

The appropriate adjustments were made to the ADR totals and used throughout the Plan.

2. Differences in financial information reported in quarterly fee reports and the financial data used in the solid waste management plan.

None.

APPENDIX B

RECYCLING INFRASTRUCTURE INVENTORY

APPENDIX B. Recycling Infrastructure Inventory

This Appendix provides a review of the recycling infrastructure available in the 2014 reference year, which includes curbside recycling programs, drop-off recycling sites, collection service providers, and compost facilities/activities.

A. Inventory of Residential Recycling Infrastructure Available in the Reference Year

Table B-1. Inventory of Curbside Recycling Services Available in the Reference Year

County	ID#	Name of Curbside Service		e of side S	How Service Is Provided	Pick- Up	Materials Collected ⁽¹⁾	Type of Collection	PAYT	Tons
Ashland	NSC1	City of Ashland	1		City Sanitation Dept.	Weekly	N, Mg, B, Mp, Cc, Ac, Sc, #1-#2 Pl, Ph	Dual stream, manual		612
Ashland	SC1	Village of Loudonville		1	Contract between Village and Rumpke	Weekly	PI, GI, Ac,	Single stream, manual		195
Totals										807

¹ Mg = Magazines, Mp = Mixed Paper, N = Newspaper, Cc = Corrugated Cardboard, As = Aseptic Containers, GI = Glass Bottles, PI = Plastic Bottles and Jugs, Ac = Aluminum Cans, Sc = Steel Cans, Ph = Phone Books, NS = Non-Subscription, S = Subscription, PAYT = Pay-As-You-Throw

The following table summarizes the number of curbside recycling programs and the tons recycled by the programs:

Table B-1b. Total Number of Curbside Programs and Total Quantity

County	Total # of Non-Subscription Curbside Programs	Total # of Subscription Curbside Programs	Total Tons from all Curbside Programs
Ashland	1	1	807

In 2014, there was one non-subscription curbside recycling program operated in the City of Ashland and one subscription based curbside recycling program operated in the Village of Loudonville. A total of 807 tons of curbside recycling was collected from two curbside recycling programs in the District during 2014.

Table B-2. Inventory of Drop-off Sites Available in the Reference Year

					ype	1		ii	Harris Orange			7
County	ID#	Name of Drop-off Site	Uri	ban PT		ıral PT	0	How Service is Provided	Open to Public	Materials Accepted	Access Credit	from SWMI
Ashland	FTU1	Buehler's Market Sugarbush Dr. Ashland, OH	1					The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph, PC	Yes	N/A
Ashland	FTU2	Ashland Co. Recycling Ctr. 1270 Middle Rowsburg Rd. Ashland, OH	~					The SWMD	8AM- 4PM M-F	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph, PC, EW, FM, NFM, WG, BR, Ph	Yes	N/A
Ashland	FTR1	Orange Twp. Garage 930 CR 801 Ashland, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph, PC	Yes	N/A
Ashland	FTR2	Ashland Co. Service Ctr. (Vermillion Twp.) 1763 SR 60 S Ashland, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph, PC	Yes	N/A
Ashland	FTR3	Stake's IGA (Hanover Twp.) North Jefferson St. Loudonville, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	FTR4	Clear Creek Township 37 S. Main St. Savannah, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	FTR5	Troy Twp. Garage US 224, Nova, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	FTR6	Mifflin Twp. Garage 36 Maine St. Mifflin, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	FTR7	Perrysville Fire Dept. SR 39 Perrysville, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	FTR8	Cinnamon Lake CR 620 Jackson, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A

					уре			North		***		-
County	ID#	Name of Drop-off Site	Url	ban PT		iral PT	0	How Service is Provided	Open to Public	Materials Accepted	Access Credit	from SWME
Ashland	PTR1	Lake Twp. Garage 2499 CR 3374 Loudonville, OH				~		The SWMD	1 st wknd/ month	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	PTR2	Jackson Twp. Polk Ballfield Congress St. Polk, OH				1		The SWMD	2 nd wknd/ month	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	PTR3	Sullivan Garage 245 Twp. Hwy. 501 Sullivan, OH				~		The SWMD	3 rd wknd/ month	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	PTR4	Mohican Twp. Garage 2008 SR 89 Jeromesville, OH				1		The SWMD	4 th wknd/ month	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Total												N/A

¹ Mg = Magazines, Mp = Mixed Paper, N = Newspaper, Cc = Corrugated Cardboard, As = Aseptic Containers, GI = Glass Bottles, PI = Plastic Bottles and Jugs, AI = Aluminum Cans, Sc = Steel Cans, Ph = Phone Books, EW = Electronic Waste, FM = Ferrous Metal, NFM = Non-Ferrous Metal, WG = White Goods/Appliances, O = Other, B = Books, BR = Batteries (Rechargeable), F = Furniture, FT = Full-Time, PT = Part-Time, DNR = Did Not Report

The following table summarizes the number of drop-offs and the total tons recycled:

Table B-2b. Total Number of Drop-offs by Type and Total Quantity
Collected

County	Total # of FT, Urban	Total # of PT, Urban	Total # of FT, Rural	Total # of PT, Rural	Total # of "Other"	Tons of Materials Collected
Ashland	2	0	8	4	0	N/A

FT = Full-Time, PT = Part-Time

The District is not able to identify the total tons collected from the drop-off recycling sites. Materials collected from drop-offs are delivered to the Ashland County Recycling Center for sorting and processing. The Recycling Center accepts materials from other programs and haulers. The District records the total tonnage annually, but is not able to estimate the total tons from each source or program.

The District provides and services 4 full-time urban drop-offs, 6 full-time rural drop-offs, and 4 part-time rural drop-offs. One of the drop-offs, FTR6, is located in a private gated community.

Table B-3. Mixed Municipal Solid Waste Material Recovery Facility

Name of Facility	Communities Served	Types of Materials Recovered ⁽¹⁾	Tons of Materials Recovered	Waste Processed	Total Waste	Recovery Rate in 2014
None					0	0

Table B-4. Inventory of Curbside Recycling and Trash Collection Service
Providers in the Reference Year

Name of Provider	Trasl	n Collec	tion Ser	vice	Recycling Collection Service		
	PAYT	RES	COM	IND	RES	COM	IND
Waste Management			1				
Rumpke		1	1		1		
City of Ashland Sanitation Dept.	1	1	1		1		
Milliron Waste Management			1				
Republic Services		1	1				
Countryside Trash Removal		1					
Ashland University Facilities Mgmt.*			1			1	
Kurtz Rolloffs			1	1			
Monn's Trash Removal		1	1	1			
Trash Masters		1	1	1			

PAYT = Pay-As-You-Throw, RES = Residential, COM = Commercial, IND = Industrial

Note: Ashland University Facilities Management collects solid waste and recyclables from the Ashland University campus only.

The list of haulers was obtained through surveys.

Table B-5. Inventory of Composting/Yard Waste Management Activities
Available in the Reference Year

	E		Open		Tons Rece the SV	
ID#	Facility or Activity Name	Class	to Public	Location	Food Waste	Yard Waste
Comp	oost Facilities					
YW1	Markleys Co. Butchering	11		550 TR 101 West Salem, OH	0	0
YW2	Howards Nursery	Ш	1	179 SR 58 Medina, OH	0	240
YW3	Willo'dell Yard Waste	IV	1	1398 US Rte. 42 Ashland, OH	0	278
YW4	#1 Landscape	IV		3775 Ridge Rd. Medina, OH	0	139
YW5	Hauler and Walmart Food Waste Data	N/A		N/A	163	0
				Total	163	658
Comn	nunity Yard Waste Colle	ction Pro	ograms			
YW6	City of Ashland Yard Wa	aste and L	eaf Colle	ction		203
					Total	203
Mulch	ing Operations					
	None					
					Total	0
Land.	Application					
	None					
				Total	0	0
Anaer	robic Digestion					
	None					
				Total	0	0

Table B-5b. Total Number of Composting/Yard Waste Management Activities by Type and Total Quantity Managed

	Number of Ea	Quantities (tons)					
Compost Facilities	Community Collection Programs	Mulching Operations	Land Applications	Anaerobic Digestion		Yard Waste	Total Quantity of Materials
5	1	0	0	0	163.5	860.5	1,024

There were 4 registered compost facilities in Ohio that managed food waste and yard waste generated in the District. Table B-5b identifies 5 compost facilities; the additional compost facility listed in this summary table reflects materials that were diverted by haulers and Wal-Mart (YW5).

A total of 1,024 tons of organics were diverted from landfills in 2014 through a combination of registered compost facilities, organics haulers, and community collection programs.

APPENDIX B. Recycling Infrastructure Inventory

This Appendix provides a review of the recycling infrastructure available in the 2014 reference year, which includes curbside recycling programs, drop-off recycling sites, collection service providers, and compost facilities/activities.

A. Inventory of Residential Recycling Infrastructure Available in the Reference

Table B-1. Inventory of Curbside Recycling Services Available in the Reference Year

County	ID#	Name of Curbside Service		e of side S	How Service is Provided	Pick- Up	Materials Collected ⁽¹⁾	Type of Collection	PAYT	Tons
Ashland	NSC1	City of Ashland	1		City Sanitation Dept.	Weekly	N, Mg, B, Mp, Cc, Ac, Sc, #1-#2 Pl, Ph	Dual stream, manual		612
Ashland	SC1	Village of Loudonville		1	Contract between Village and Rumpke	Weekly	Pl, Gl, Ac,	Single stream, manual		195
Totals										807

¹ Mg = Magazines, Mp = Mixed Paper, N = Newspaper, Cc = Corrugated Cardboard, As = Aseptic Containers, GI = Glass Bottles, PI = Plastic Bottles and Jugs, Ac = Aluminum Cans, Sc = Steel Cans, Ph = Phone Books, NS = Non-Subscription, S = Subscription, PAYT = Pay-As-You-Throw

The following table summarizes the number of curbside recycling programs and the tons recycled by the programs:

Table B-1b. Total Number of Curbside Programs and Total Quantity

County	Total # of Non-Subscription Curbside Programs	Total # of Subscription Curbside Programs	Total Tons from all Curbside Programs
Ashland	1	1	807

In 2014, there was one non-subscription curbside recycling program operated in the City of Ashland and one subscription based curbside recycling program operated in the Village of Loudonville. A total of 807 tons of curbside recycling was collected from two curbside recycling programs in the District during 2014.

Table B-2. Inventory of Drop-off Sites Available in the Reference Year

				- 8	Гуре			How	Open	Materials		Tons
County	ID#	Name of Drop-off Site		ban PT		ıral PT	0	Service is Provided	to Public	Accepted (1)	Access Credit	from SWME
Ashland	FTU1	Buehler's Market Sugarbush Dr. Ashland, OH	1					The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph, PC	Yes	N/A
Ashland	FTU2	Ashland Co. Recycling Ctr. 1270 Middle Rowsburg Rd. Ashland, OH	1					The SWMD	8AM- 4PM M-F	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph, PC, EW, FM, NFM, WG, BR, Ph	Yes	N/A
Ashland	FTR1	Orange Twp. Garage 930 CR 801 Ashland, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph, PC	Yes	N/A
Ashland	FTR2	Ashland Co. Service Ctr. (Vermillion Twp.) 1763 SR 60 S Ashland, OH			~			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph, PC	Yes	N/A
Ashland	FTR3	Stake's IGA (Hanover Twp.) North Jefferson St. Loudonville, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	FTR4	Clear Creek Township 37 S. Main St. Savannah, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	FTR5	Troy Twp. Garage US 224, Nova, OH			~			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	FTR6	Mifflin Twp. Garage 36 Maine St. Mifflin, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	FTR7	Perrysville Fire Dept. SR 39 Perrysville, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	FTR8	Cinnamon Lake CR 620 Jackson, OH			1			The SWMD	24/7	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A

				1	Гуре			10000	0	Managara		Tons
County	ID#	Name of Drop-off Site		ban		ıral	٥	How Service is Provided	Open to Public	Materials Accepted	Access Credit	from SWMD
			FT	PT	FI	PT						
Ashland	PTR1	Lake Twp. Garage 2499 CR 3374 Loudonville, OH				1		The SWMD	1 st wknd/ month	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	PTR2	Jackson Twp. Polk Ballfield Congress St. Polk, OH				1		The SWMD	2 nd wknd/ month	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	PTR3	Sullivan Garage 245 Twp. Hwy. 501 Sullivan, OH				1		The SWMD	3 rd wknd/ month	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Ashland	PTR4	Mohican Twp. Garage 2008 SR 89 Jeromesville, OH				1		The SWMD	4 th wknd/ month	N, Mg, B, Mp, Cc, Al, Sc, #1- #7 Pl, Ph	Yes	N/A
Total												N/A

¹ Mg = Magazines, Mp = Mixed Paper, N = Newspaper, Cc = Corrugated Cardboard, As = Aseptic Containers, GI = Glass Bottles, PI = Plastic Bottles and Jugs, AI = Aluminum Cans, Sc = Steel Cans, Ph = Phone Books, EW = Electronic Waste, FM = Ferrous Metal, NFM = Non-Ferrous Metal, WG = White Goods/Appliances, O = Other, B = Books, BR = Batteries (Rechargeable), F = Furniture, FT = Full-Time, PT = Part-Time, DNR = Did Not Report

The following table summarizes the number of drop-offs and the total tons recycled:

Table B-2b. Total Number of Drop-offs by Type and Total Quantity
Collected

County	Total # of FT, Urban	Total # of PT, Urban		Total # of PT, Rural	Total # of "Other"	Tons of Materials Collected
Ashland	2	0	8	4	0	N/A

FT = Full-Time, PT = Part-Time

The District is not able to identify the total tons collected from the drop-off recycling sites. Materials collected from drop-offs are delivered to the Ashland County Recycling Center for sorting and processing. The Recycling Center accepts materials from other programs and haulers. The District records the total tonnage annually, but is not able to estimate the total tons from each source or program.

The District provides and services 4 full-time urban drop-offs, 6 full-time rural drop-offs, and 4 part-time rural drop-offs. One of the drop-offs, FTR6, is located in a private gated community.

Table B-3. Mixed Municipal Solid Waste Material Recovery Facility

Name of Facility	Communities Served	Types of Materials Recovered ⁽¹⁾	Tons of Materials Recovered	Waste Processed	Total Waste	Recovery Rate in 2014
None					0	0

Table B-4. Inventory of Curbside Recycling and Trash Collection Service Providers in the Reference Year

Name of Provider	Trash Collection Service				Recycling Collection Service		
	PAYT	RES	COM	IND	RES	COM	IND
Waste Management			1				
Rumpke		1	1		1		
City of Ashland Sanitation Dept.	1	1	1		1		
Milliron Waste Management			1				
Republic Services		1	1				
Countryside Trash Removal		1					
Ashland University Facilities Mgmt.*			1			1	
Kurtz Rolloffs			1	1			
Monn's Trash Removal		1	1	1			
Trash Masters		1	1	1			

PAYT = Pay-As-You-Throw, RES = Residential, COM = Commercial, IND = Industrial

Note: Ashland University Facilities Management collects solid waste and recyclables from the Ashland University campus only.

The list of haulers was obtained through surveys.

Table B-5. Inventory of Composting/Yard Waste Management Activities
Available in the Reference Year

		Open	Mary State of State o	Tons Received from the SWMD		
ID#			Location	Food Waste	Yard Waste	
Comp	oost Facilities			A PARTY OF THE PAR		
YW1	Markleys Co. Butchering	11		550 TR 101 West Salem, OH	0	0
YW2	Howards Nursery	III	1	179 SR 58 Medina, OH	0	240
YW3	Willo'dell Yard Waste	IV	1	1398 US Rte. 42 Ashland, OH	0	278
YW4	#1 Landscape	IV		3775 Ridge Rd. Medina, OH	0	139
YW5	Hauler and Walmart Food Waste Data	N/A		N/A	163	0
				Total	163	658
Comn	nunity Yard Waste Colle	ction Pro	grams			
YW6	City of Ashland Yard Wa	aste and L	eaf Colle	ction		203
					Total	203
Mulch	ing Operations					
	None					
					Total	0
Land .	Application					
	None					
				Total	0	0
Anaer	obic Digestion					
	None					
				Total	0	0

Table B-5b. Total Number of Composting/Yard Waste Management Activities by Type and Total Quantity Managed

	Number of Ea	ich Type of F	acility/Progran	n	Qı	antities	(tons)
Compost Facilities	Community Collection Programs	Mulching Operations	Land Applications	Anaerobic Digestion		Yard Waste	Total Quantity of Materials
5	1	0	0	0	163.5	860.5	1,024

There were 4 registered compost facilities in Ohio that managed food waste and yard waste generated in the District. Table B-5b identifies 5 compost facilities; the additional compost facility listed in this summary table reflects materials that were diverted by haulers and Wal-Mart (YW5).

A total of 1,024 tons of organics were diverted from landfills in 2014 through a combination of registered compost facilities, organics haulers, and community collection programs.

APPENDIX C POPULATION DATA

APPENDIX C. Population Data

The population of Ashland County as of July 1, 2014 was estimated to be 53,035. The community populations which need to be added or subtracted to the Ashland County total in order to obtain the total district population for the reference year are shown in Table C-1. Estimates are based on Ohio Department of Development (ODOD) Office of Strategic Research document, "2014 Population Estimates for Cities, Villages and Townships", published in May of 2015. As indicated in the table, the population for the Village of Loudonville was added to the total to determine the total District population of 53,095.

Table C-1. Population Adjustments and Total Reference Year Population

Community	Ashland
Before Adjustment	53,035
Additions	
Village of Loudonville	60
Subtractions	
None.	
After Adjustment	53,095

Source(s) of Information: Village of Loudonville Population: Ohio Development Services Agency, "2014 Population Estimates by County, City, Village, and Township," May 2015. http://development.ohio.gov/files/research/P5027.pdf.

Ashland County Population: Ohio Development Services Agency, "2010 to 2040 Projected Population for Ohio Counties - Summary 2010 to 2040 Projected," March 30, 2013. http://www.development.ohio.gov/files/research/P6090,pdf.

Assumptions: The projected population of Ashland County for 2014 as shown in the May 2015 document cited above was used in the *Plan Update*, even though it resulted in an unusually large increase from 2014 to 2015, compared to subsequent years in the planning period.

Table C-2. Population Projections

Year	Ashland	Total District Population
2014	53,095	53,095
2015	53,680	53,680
2016	53,752	53,752
2017	53,824	53,824
2018	53,896	53,896
2019	53,968	53,968
2020	54,040	54,040
2021	54,218	54,218
2022	54,396	54,396
2023	54,574	54,574

Year	Ashland	Total District Population
2024	54,752	54,752
2025	54,930	54,930
2026	55,054	55,054
2027	55,238	55,238
2028	55,422	55,422
2029	55,606	55,606
2030	55,850	55,850
2031	56,034	56,034
2032	56,278	56,278

Source(s) of Information: Ohio Development Services Agency, "2010 to 2040 Projected Population for Ohio Counties - Summary 2010 to 2040 Projected," March 30, 2013. http://www.development.ohio.gov/files/research/P6090.pdf.

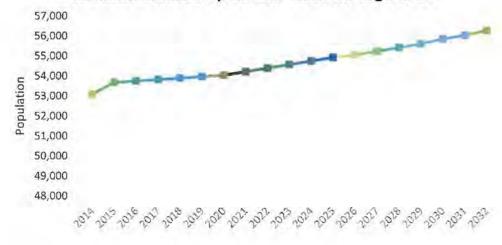
Sample Calculations: 2016 Adjusted Ashland County Population = 2015 Ashland County Population + ((2020 Adjusted Ashland County Population – 2015 Adjusted Ashland County Population) ÷ 5)

53,752 residents = 53,680 residents + ((53,980 residents - 53,620 residents) ÷ 5 years)

Assumptions: The population of the Village of Loudonville (non-Ashland County portion) which is added to the SWMD's population is assumed to remain constant at the reference year population of 60 residents.

The following figure shows a very modest but steady increase in the population throughout the planning period.





APPENDIX D DISPOSAL DATA

APPENDIX D. Disposal Data

A. Reference Year Waste Disposed

The majority of the District waste which was direct-hauled for disposal in the reference year was sent to the Noble Road out-of-district landfill in Richland County (see Table D-1a). The District also sent solid waste to six other landfills in smaller amounts. Noble Road landfill received more than 89 percent of the total district waste disposed in 2014.

Table D-1a. Reference Year Waste Disposed – Publicly-Available Landfills (Direct Haul)

The state of the s	Locatio	n	Waste Received from SWMD (TPY)				
Facility Name	County	State	Residential/ Commercial	Industrial	Excluded	Total	
In-district facilities							
None.						0	
Out-of-district facilities							
Kimble Sanitary Landfill	Tuscarawas	ОН	0	-	15	15	
Countywide Recycling & Disposal Facility	Stark	ОН	0	0	77	77	
American Landfill	Stark	ОН	0.0	37	27	64	
Noble Rd. Landfill	Richland	ОН	11,051	2,622	6,259	19,932	
Mahoning Landfill	Mahoning	ОН	4	0	0	4	
Pine Grove Regional Facility	Fairfield	ОН	0	164	0	164	
Crawford Co. Sanitary Landfill	Crawford	ОН	1,040	0	1,008	2,047	
Out-of-state facilities							
None.	3					0	
Total Direct Haul Waste Landfills	Disposed in		12,095	2,823	7,385	22,303	

Source(s) of Information: Ohio Environmental Protection Agency, "2014 Annual District Review Forms for Ashland County."

There were no captive landfills located within the District or used to manage waste generated within the District during the reference year.

Table D-1b. Reference Year Waste Disposed – Captive Landfills

Paullin Name	Locat	on	Tons Received from SWMD			
Facility Name	County	State	Industrial	Excluded	Total	
In-district facilities						
None			0	0	0	
Total Waste Disposed	in Captive L	andfills	0	0	0	

Source(s) of Information: Ohio Environmental Protection Agency

Transfer facilities used by the District in the reference year are shown in Table D-2. Nearly all of Ashland County waste sent to transfer facilities was received at the Richland County Transfer Station in Richland County, which then sent the waste to Noble Road Landfill.

Table D-2. Reference Year Waste Transferred

Facility	Locat	ion	Waste Red	ceived from	the SWMD (TPY)	
Name	County	State	Residential/ Commercial	Industrial	Excluded	Total	Destination
In-district fac	ilities						
None.						0	N/A
Out-of-distric	ct facilities						
Kimble Transfer & Recycling - Canton	Stark	ОН	25	0	0	25	Kimble Sanitary Landfill
Richland Co. Transfer Station	Richland	ОН	17,080	0	824	17,904	Noble Rd. Landfill
Republic - Mt. Vernon	Knox	ОН	31	0	57	88	Pine Grove Regional Facility
Out-of-state	facilities						
None.							
Total Tr	ansferred	Waste	17,136	0	881	18,017	

Source(s) of Information: Ohio Environmental Protection Agency, "2014 Annual District Review Forms for Ashland County."

Table D-3 shows the total waste disposed in the reference year for the District. Excluded waste has been included in this table since it accounted for 21% of the total waste disposed.¹

¹ Ohio EPA's Format v4.0 instructs solid waste management districts to include excluded waste if it comprises more than 10 percent of the total waste disposed.

Table D-3. Reference Year Total Waste Disposed

Disposal Method	Residential/ Commerical	Industrial	Excluded	Total	% of Total Waste Disposed
Direct Hauled	12,095	2,823	7,385	22,303	55%
Transferred	17,136	0	881	18,017	45%
Total	29,231	2,823	8,266	40,320	100%
% of Total	72%	7%	21%	100%	

Source(s) of Information: Ohio Environmental Protection Agency, "2014 Annual District Review Forms – Ashland County."

B. Historical Waste Analysis

Since the beginning of the development of this Plan Update, additional data has become available. Actual data for 2015 and 2016 has been added to the historical disposal data table. The amount of solid waste disposed from Ashland County from 2006 to 2012 decreased. However, during the past five years the disposal amounts have increased almost every year. The increase between 2014 and 2015 was the most substantial, increasing nearly 58% from the previous year. (See Table D-4.)

Table D-4. Historical Disposal Data

Year	Population	Residential/Commercial on Solid Waste		Industrial Solid Waste	Excluded Waste	Total Waste	
		Rate (ppd)	Tons	Tons	Weight	Tons	
2006	54,727	4.32	43,192	2,082	6,230	51,504	
2007	54,727	3.89	38,887	1,290	8,887	49,063	
2008	55,125	3.23	32,539	1,091	8,319	41,949	
2009	55,125	3.06	30,759	795	6,235	37,789	
2010	53,139	3.16	30,655	611	7,075	38,341	
2011	53,139	3.23	31,315	1,235	7,411	39,961	
2012	53,153	3.06	29,661	1,612	7,867	39,139	
2013	53,043	2.95	28,546	2,482	8,284	39,312	
2014	53,095	3.02	29,231	2,823	8,266	40,320	
2015	53,680	3.15	30,834	6,988	25,680	63,502	
2016	53,752	3.07	30,162	7,642	25,110	62,914	

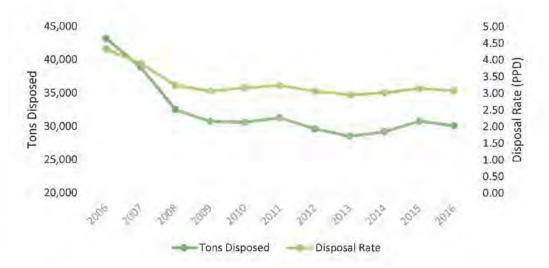
Source(s) of Information: Ohio EPA Facility Data Reports; Ashland County Annual District Reports.

During the five-year period from 2010-2014, residential/commercial (R/C) disposal ranged from a low of approximately 28,500 tons in 2013 to a high of

approximately 31,300 tons in 2011. The average per capita generation rate was 3.08 pounds per person per day (ppd). From 2006 to 2016, the per capita disposal rate decreased from 4.32 ppd in 2006 to 3.07 ppd in 2016, and the average disposal rate for this period was 3.29 ppd. Overall, R/C disposal rates are decreasing.

The figure below shows the tons disposed plotted with the disposal rate for R/C waste generated from the Ashland SWMD. In general, changes in these trends closely match each other.

Figure D-1. Residential/Commercial Tons Disposed vs. Disposal Rate for Ashland SWMD: 2006-2016



The R/C disposal rate for the Ashland County SWMD was also compared with other similar SWMDs in Ohio.² (See the figure below.) Each of these SWMDs experienced a decreasing R/C disposal rate from 2006 through 2016, with the variation in the disposal rate among the districts narrowing considerably during the most recent four or five-year period.

² In this context, "similar" is defined as SWMDs having a population between 40,000 and 55,000 without a regional landfill.

Figure D-2. Residential/Commercial Disposal Rate for Selected Rural SWMDs: 2006-2016

The residential/commercial tons disposed for Ashland is also shown in the following figure with a trend line included. The trend line suggests a disposal decrease of approximately 700 tons over the seven-year period.



Figure D-3. 2010-2016 Residential/Commercial Sector Disposal Trends

The actual disposal of residential/commercial waste from the District is somewhat lower than the amounts projected for 2010 through 2016 in the currently-approved Plan. The table below shows that the actual disposal totals were an average of 9.6% less than projected totals. A number of factors and circumstances may have influenced actual disposal and contributed to this discrepancy, including greater success in recycling and/or reduction than expected.

Table D-5. 2010-2016 Actual vs. Current Plan Projections for Residential/Commercial Disposal

Residential/Commercial Sector Tons Disposed								
Year	Actual Projected in Current Plan		% Difference (Actual vs. Projected)					
2010	30,655	32,538	-6.1%					
2011	31,315	32,712	-4.5%					
2012	29,661	32,818	-10.6%					
2013	28,546	32,920	-15.3%					
2014	29,231	33,019	-13.0%					
2015	30,835	33,116	-7.4%					
2016	30,162	33,179	-10.0%					

Except for 2010, actual industrial disposal has been higher than the tonnages projected in the current Plan. Industrial disposal continues to comprise a relatively small percentage of total disposal from the District. (See Table D-6.)

Table D-6. 2010-2014 Actual vs. Current Plan Projections for Industrial Sector Disposal

	Inc	lustrial Sector Tons	Disposed
Year	Actual	Projected in Current Plan	% Difference (Actual vs. Projected)
2010	611	1,091	-75.5%
2011	1,235	1,073	13.1%
2012	1,612	1,064	34.0%
2013	2,482	1,055	57.5%
2014	2,823	1,046	62.9%
2015	6,987	1,037	85.0%
2016	7,987	1,027	86.3%

C. Disposal Projections

Several methodologies can be used to project disposal for the planning period. One of the most straight-forward and frequently-used methods for the R/C sector is multiplying the population by the estimated disposal rate in pounds per person per day (PPD). Figure D-6 shows the results of using this methodology, assuming two different disposal rates:

- The average per capita disposal rate for 2010 through 2016 (3.09 PPD); and
- 2. The per capita disposal rate for 2014 (3.02 PPD).

These projections result in a very modest increase of roughly 1,300 tons during the planning period due to increasing population.

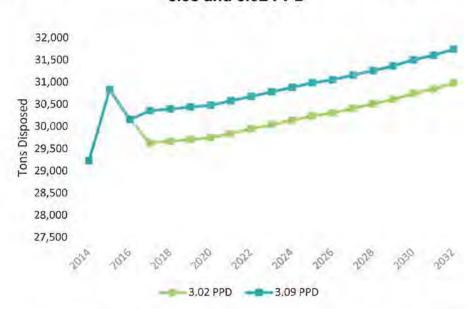
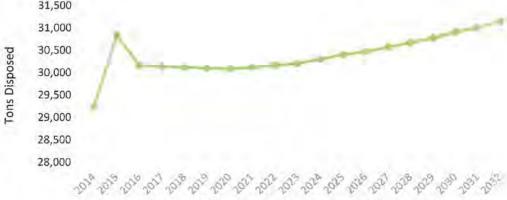


Figure D-4. Residential/Commercial Disposal Projections: 3.08 and 3.02 PPD

A comparison of the disposal rate for the District with other rural SWMDs in Ohio was shown above in Figure D-2. In general, this figure shows that most of these SWMDs have experienced a decline in the R/C disposal rate since 2006. Using Ashland's annual rate of change in the per capita disposal rate for 2010 through 2016 (-0.2%) to develop projections results in an increase of approximately 1,000 tons by the end of the planning period (see Figure D-5). Despite a decreasing per capita disposal rate, the growing population results in an overall increase in tons disposed.





Industrial disposal has fluctuated since 2006, most likely reflecting the impact of the economic recession in 2008 through 2010. Disposal steadily increased from 2010 to 2014, then increased significantly between 2014 and 2015. Disposal continued to increase modestly in 2016. (See Figure D-6.)

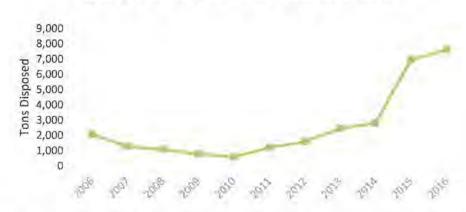


Figure D-6. Industrial Disposal: 2006-2016

The significant increase in industrial sector disposal for years 2015 and 2016 does not appear to correlate with any events that would increase industrial sector waste generation, such as a new factory beginning to operate or an existing manufacturing facility increasing production. However, the increase does correlate with an increase in exempt waste disposal that was the result of two factory demolitions. It is suspected that the increase in industrial disposal during 2015 and 2016 is the result of miscategorized exempt waste.

At the time this Plan Update was prepared, the first three Quarterly Fee Reports were available for 2017. The overall disposal reported for the first three quarters of 2017 was 29,685 tons, which included residential/commercial and industrial waste (but not exempt). The average quarterly tonnage (9,895 tons) was used to project the fourth quarter totals, resulting in a projected total of 39,581 tons for 2017.

Based upon the above discussion, the District believes that the following approaches are appropriate for establishing disposal projections:

- For the residential/commercial sector, tonnage for 2017-2032 was projected by applying the rate of change in the disposal rate based upon 2010 through 2016 data (-0.20% per year) to the projected annual population.
- For the industrial sector, 2017 tonnage was calculated by subtracting the projected residential/commercial total (30,143 tons) from the 2017 projected total (39,581 tons).

- Industrial sector disposal in 2023 was projected to be equal with the
 average industrial sector disposal from 2011-2014. These years
 represented what the District believes are typical disposal patterns for the
 industrial sector. Intermediate years (2018-2022) were projected using a
 straight-line average. Disposal from 2023-2032 is projected to remain flat.
 Projections decrease from 2017 to 2023 to correlate with the tapering off
 of construction and demolition projects which have impacted the industrial
 sector disposal totals.
- Excluded waste disposed was significantly greater in 2015 and 2016 due to the demolition of two major factories. Demolition projects are expected to taper off throughout the planning period. The total excluded waste disposed in 2023 is based on an average of the waste disposed from 2010 to 2014. A straight-line average was used to project intermediate years (2017-2022). Excluded waste disposal patterns are not linked to changes in population, economics, or other easily isolated patterns. The District believes it is reasonable to hold these disposal projections constant after 2023 due to the notion that projections become more uncertain the father into the future they are extended.

Table D-7 represents the results of using the approaches proposed above by the District for disposal projections. The estimates shown in the "Waste Transferred" column in Table D-7 are based upon the average percentage of waste which was first sent to transfer facilities from 2010 through 2016 prior to disposal in landfills, or approximately 42 percent. The percentage of waste sent to transfer facilities from Ashland County during this time period ranged from 34 to 46 percent.

Table D-7. Projections for Waste to be Disposed and Transferred

ı	Year	Residential/ Commercial Solld Waste	Industrial Solid Waste	Excluded Waste	Total Waste	Tons Trans (as part of Tota		
	2014	29,231	2,823	8,266	40,320	16,746		
	2015	30,835	6,987	25,681	63,503	26,374		
	2016	30,162	7,642	25,110	62,914	26,130		
	2017	30,143	9,438	22,634	62,215	25,839		
×	2018	30,123	8,205	20,159	58,487	24,291		
	2019	30,104	6,971	17,683	54,758	22,743		
	2020	30,085	5,738	15,207	51,030	21,194		
•	2021	30,124	4,504	12,732	47,361	19,670		
b	2022	30,164	3,271	10,256	43,691	18,146		
e	2023	30,203	2,038	7,781	40,021	16,622	41.53%	
D D	2024	30,301	2,038	7,781	40,120	16,663		
Planning Period	2025	30,400	2,038	7,781	40,218	16,704		
Plai	2026	30,468	2,038	7,781	40,287	16,732		
ō	2027	30,570	2,038	7,781	40,388	16,774		
Year of	2028	30,672	2,038	7,781	40,490	16,817		
st 7	2029	30,774	2,038	7,781	40,592	16,859		
-	2030	30,909	2,038	7,781	40,727	16,915		
	2031	31,011	2,038	7,781	40,829	16,957		
	2032	31,146	2,038	7,781	40,964	17,013		

APPENDIX E

RESIDENTIAL/COMMERCIAL REDUCTION AND RECYCLING DATA

APPENDIX E. Residential/Commercial Reduction and Recycling Data

This Appendix presents the reduction and recycling data for the residential and commercial sectors in the 2014 reference year. In order to avoid double-counting tonnage, adjustments made to tonnage reported by different types of entities, such as programs, brokers, and scrap yards, will be demonstrated. A historic analysis of the residential/commercial sector's recycling is included in this Appendix. Information in this section as well as information from other sources was used to calculate the recycling projections from 2015 to the end of the planning period (2032) which are included at the end of this Appendix.

Table E-1. Commercial Survey Results

NAICS	LAB	FM	NFM	MxP	PL	w	Other: Used Motor Oil	Total	Adj.	Adj. Total
42	0	25	0	8	0	24	10	67	25	42
44	0	0	0	0	0	0	0	0		0
45	0	0	0	0	0	0	0	0		0
48	0	0	0	0	0	0	0	0		0
49	0	0	0	0	0	0	0	0		0
51	0	4	0	432	104	0	0	540	108	432
52	13	30	0	1,063	17	107	0	1,231	17	1,213
53	0	0	0	0	0	0	0	0		0
54	0	1	0	36	1	0	0	39		39
55	0	0	0	0	0	0	0	0		0
56	0	0	0	0	0	0	0	0		0
61	0	0	0	0	0	0	0	0		0
62	0	0	0	69	0	0	0	70		70
71	0	0	0	0	0	0	0	0		0
72	0	0	0	0	0	0	0	0		0
81	0	0	0	0	0	0	0	0		0
92	0	0	0	0	0	0	0	0		0
Other: 73				2	0			2		2
Total	13	61	0	1,611	122	131	10	1,948	(150)	1,798
Adj. Total	0	29	0	0	121	0	0	150	-	1000
Adj. Total	13	32	0	1,611	1	131	10	1,798		

NAICS = North American Industrial Classification System , LAB = lead-acid batteries, FM = ferrous metals, NFM = non-ferrous metals, MxP = mixed paper, PL = plastics, W = wood, Adj. = Adjusted or Adjustments

Data from a total of eight commercial businesses was used to complete Table E-1. Companies reported recycling 1,948 tons of materials in 2014. Approximately 149.7 tons were adjusted to avoid double-counting.

Table E-2. 2014 Data from Other Recycling Facilities

		L.T	Ŧ				759			Ť		-	1000000	10		
Source of Materials	EW	LAB	GL	FM	NFM	occ	MxP	PI	W	ST	CoM	Other: Rbat	Other: TC	Total	Adj.	Adj. Total
Buybacks																
None														0		0
Scrap Yard	s															
None														0		0
Processors																
None														0		0
MRF's																
Ashland County Recycling Center	14	2	68	53	178	897	412	94	79	20	521	0.6	0.4	2,339	313.6	2,025
Total	14	2	68	53	178	897	412	94	79	20	521	0.6	0.4	2,339	313.6	2,025
Adj.	0	0	0	0	0	215	0	0	79	20	0	0.0	0.0	314		
Adj. Total	14	- 2	68	53	178	683	412	94	0	0	521	0.6	0.4	2,025		

EW = electronics, LAB = lead-acid batteries, GL = glass, FM = ferrous metals, NFM = non-ferrous metals, OCC = corrugated cardboard, MxP = mixed paper, PI = plastics, W = wood, ST = scrap tires, CoM = commingled, Rbat = rechargeable batteries, TC = toner cartridges

Source(s) of Information: District records

Table E-2 contains tonnage collected from the Ashland County Recycling Center. Adjustments were made to avoid double counting. For example, materials sent to registered composting facilities to be managed and scrap tires sent to a registered scrap tire hauler for processing were adjusted because the tonnage is also reflected in Table E-4.

Table E-3. 2014 Data Reported to Ohio EPA

Ohio EPA Data Source	PL	ONP	occ	MxP	NF	FM	W	CoM	Other	Total	Adj.	Adj. Total
Aldi, Inc.	1	0	94	0	0	0	0	0	0	95	0	95
Dollar General	0	0	94	0.1	0	0	0	0	0	94	0	94
Home Depot	2	0	67	0	0	6	77	0	0	152	0	152
Buehler's	0	0.1	127	1	0	0	0	0	0	128	0	128
WM - Residential	0	0	0	0	0	0	0	469	0	469	0	469
Wal-Mart	9	0	667	7	0.1	0.1	0	0	141	825	0	825

Ohio EPA Data Source	PL	ONP	осс	MxP	NF	FM	w	CoM	Other	Total	Adj.	Adj. Total
Total	12	0.1	1,048	8	0.1	6	77	469	141	1,763	0	1,763
Adjustments	0	0	0	0	0	0	0	0	0	0		
Adjusted Total	12	0.1	1,048	8	0.1	6	77	469	141	1,763		

PL = plastics, ONP = newspaper, FM = ferrous metals, NF = non-ferrous metals, OCC = corrugated cardboard, MxP = mixed paper, W = wood, CoM = commingled

Source(s) of Information: 2014 Ohio EPA MRF Report

Assumptions: No adjustments were made to data reported to Ohio EPA.

Table E-4. 2014 Other Recycling Programs/Other Sources of Data

Other Sources of Data	uo	EW	ST	FW	MxP	GL	FM	осс	CoM	YW	Total	Adj.	Adj. Total
Ohio EPA Scrap Tire Data			1,269								1,269		1,269
Curbside					219	13	6	301	268		807	379	428
Ohio EPA Compost Report										658	658		658
Paper Retriever Program					101						101		101
Food Waste Hauler Data				163							163	143	20
City of Ashland	1	15								203	219		219
Unadjusted Total	1	15	1,269	163	321	13	6	301	268	861	3,217	522	2,694
Adjustments	0	0	0	143	0	0	6	301	72	0	522		-
Adjusted Total	1	15	1,269	20	321	13	0	0	195	861	2,694		

UO = used motor oil, EW = electronic waste, ST = scrap tires, FW = food waste, MxP = mixed paper, GL = glass, FM = ferrous metals, OCC = corrugated cardboard, CoM = commingled, YW = yard waste

Source(s) of Information: 2014 Ohio EPA Scrap Tire Report, 2014 Ohio EPA Compost Report, Survey Data

Sample Calculations:

Curbside total - Adjustments = Adjusted Total

807 tons - 379 tons = 428 tons

Assumptions: Approximately 163 tons of food waste was reported by haulers. Approximately 20 tons of food waste was reported by Walmart in a previous year. In 2014, an estimate of 20 tons was counted toward commercial sector recycling; the remaining amount is credited to industrial sector recycling. Adjustments to curbside recycling totals were made for materials managed by another reporting entity (i.e., Ashland County Recycling Center).

Table E-5. Reference Year (2014) Residential/Commercial Material Reduced/Recycled

Material	Tons
Used Motor Oil	11
Electronics	29
Scrap Tires	1,269
Dry Cell Batteries	1
Lead-Acid Batteries	15
Food	20
Glass	82
Ferrous Metals	90
Non-Ferrous Metals	178
Corrugated Cardboard	1,731
All Other Paper	2,352
Plastics	107
Wood	208
Commingled Recyclables (Mixed)	1,186
Yard Waste	861
Other (Aggregated)	142
Recycling Subtotals	8,280
Incineration	0
Grand Total	8,280

Note: Tonnage presented in this Plan Update reflects the most up-to-date and accurate data available. Tonnage presented in the Plan Update differs from the amended Annual District Report.

Source(s) of Information: 2014 ADR Calculation Spreadsheets, 2014 Ohio EPA MRF Reports, 2014 Ohio EPA Scrap Tire Report, 2014 District program and survey data, 2014 Ohio EPA Compost Report, 2014 ADR Review Forms

Sample Calculations:

Recycling Subtotal + Waste Reduced by Incineration = Grand Total

8,280 tons + 0 tons = 8,280 tons

Table E-6, "Quantities Recovered by Program/Source," presents a summary of the sources of residential/commercial sector recycling tonnage. Tonnage listed in this table reflects quantities that were adjusted to avoid double-counting, so this table does not reflect the true tonnage from each source. For example, a total of 807 tons were collected from curbside recycling programs; however, Table E-6 only credits 428 tons toward curbside recycling.

Table E-6. 2014 Quantities Recovered by Program/Source

Source of R/C Recycling Data	Quantities (Tons)
Commercial Survey	1,798
MRFs	2,025
Ohio EPA Commercial Retail Data	1,763
Ohio EPA Scrap Tire Data	1,269
Curbside	428
Ohio EPA Compost Report	658
Paper Retriever Program	101
Food Waste Hauler Data	20
City of Ashland	219
Total	8,280

Source(s) of Information: Tables E-2, E-3, and E-4.

The District did not track historical annual recycling data in a format that was consistent with Table E-6b. Tables E-6a 1-3 have been omitted.

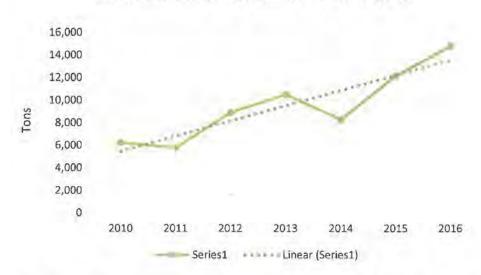
Table E-6b. Historical Recycling Analysis

			Re	sidential/C	ommercial	
Year	Organics	Tires	Recycling	Total	Annual Percentage Change	Annual Tonnage Change
2010	2,638	626	2,976	6,240	1-2-4	
2011	1,820	907	3,045	5,772	-8%	-468
2012	2,601	679	5,624	8,905	54%	3,133
2013	2,461	918	7,131	10,510	18%	1,605
2014	881	1,269	6,131	8,280	-21%	-2,229
2015	4,071	717	7,369	12,157	47%	3,876
2016	2,773	924	11,002	14,699	22%	2,653
			2010	-2016 Avera	age	
	Average A	nnual Per	cent Change		199	6
	Average T	ons over	7 Year Period		9,50	9
	Average A	nnual Ton	nage Change		1,41	.0

The District's historical recovery for the residential/commercial sector over a seven-year period spanning from 2010 to 2016 is presented in Table E-6b, "Historical Recycling Analysis." The table presents organics (food waste and yard waste), scrap tire tonnage, and all other recycling.

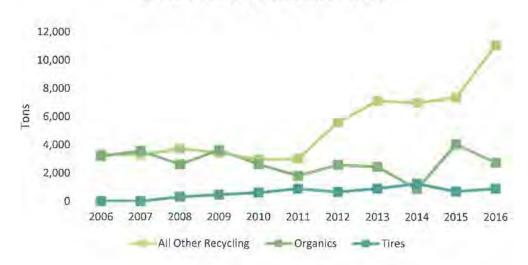
An examination of the recovery patterns over the seven-year period reveals that in 2011, a low of 5,772 tons were recovered and in 2016, a high of 14,699 tons were recovered. Waste recycling/reduction increased annually from 2011 to 2016, with the exception of 2014. Over the seven-year period, recovery increased by an average of 1,410 tons, or 19%, annually. The District's recovery of 8,280 tons during the 2014 reference year was approximately 13% less than the 2010-2016 average of 9,509 tons. The following figure presents the District's historical residential/commercial recovery totals from 2010 to 2016.

Historical Recycling Analysis: 2010-2016



The following figure shows recycling in Ashland County over a longer time period, 2006 through 2016, and separates recyclables into organics, tires, and all other recycling. With two exceptions, scrap tire recycling has increased each of the last ten years. Organics recycling generally seems to have decreased, with the notable exception of 2015 when it increased to its highest level. All other recycling decreased slightly during the first five years of this period, but then increased substantially.

Historical Recycling: 2006-2016



The average amounts recycled in these three categories, as well as total recycling, are shown below. Organics recycling is the only category in which the average tonnage is lower using a shorter time period.

Category	Averages	(in tons)
Category	2006-2016	2010-2016
Total Recycling	8,645	9,633
Organics	2,752	2,464
Tires	624	863
All Other Recycling	5,268	6,306

Based upon the strategic analysis conducted by the District and discussed in Appendix H, and the District program priorities identified in Appendix I, the majority of programs will continue without substantial changes during the subsequent planning period. As a result, the District believes that it is appropriate to estimate tonnages recovered through the various programs and sources using the following assumptions:

- Totals for 2014 through 2016 represent the actual tonnages reported for recycling on the Annual District Report (ADR). Tonnage reported in the 2014 ADR was revised; the tonnage presented in this Plan Update should be considered the most accurate 2014 data available.
- The 2017 Ohio EPA Scrap Tire total was projected using an average of the totals reported for 2011-2016, excluding 2014 from the calculations because it was inexplicably higher than other years during that timeframe. Tire totals were projected to change at the same rate as population from 2018 to 2032.
- Curbside recycling, Ohio EPA Commercial Retail Data, Organics, Ashland Recycling Center, and All Other for 2017 through 2032 are projected to increase based on percent changes in population.
- Additional surveying efforts for 2016 lead to increased data collected by commercial generators. To conservatively project tonnage moving forward, the 2017 Commercial Survey tonnage from 2015 and 2016 was averaged, then held constant until the end of the planning period.

Table: E-7. Residential/Commercial Recovery Projections by Program/Source

	Year	Commercial Survey	Ashland Recycling Center	Ohio EPA Commercial Retail Data	Ohio EPA Scrap Tire Data	Curbside	Organics	All Other	Totals
	2014	1,798	2,025	1,763	1,269	428	881	117	8,280
	2015	2,611	2,430	1,616	718	541	4,071	171	12,157
	2016	6,287	2,554	1,550	924	653	2,525	207	14,699
	2017	4,449	2,557	1,552	829	654	2,528	207	12,776
×	2018	4,449	2,560	1,554	830	655	2,531	208	12,787
	2019	4,449	2,564	1,556	831	656	2,535	208	12,799
	2020	4,449	2,567	1,558	832	657	2,538	208	12,810
1	2021	4,449	2,576	1,563	835	659	2,546	209	12,837
Period	2022	4,449	2,584	1,568	838	661	2,555	209	12,865
Pe	2023	4,449	2,593	1,573	841	663	2,563	210	12,892
ng	2024	4,449	2,601	1,579	843	666	2,571	211	12,920
of Planning	2025	4,449	2,610	1,584	846	668	2,580	212	12,947
급	2026	4,449	2,616	1,587	848	669	2,586	212	12,967
	2027	4,449	2,624	1,593	851	671	2,594	213	12,995
ear	2028	4,449	2,633	1,598	854	674	2,603	213	13,023
`±	2029	4,449	2,642	1,603	856	676	2,612	214	13,052
First Year	2030	4,449	2,653	1,610	860	679	2,623	215	13,090
	2031	4,449	2,662	1,616	863	681	2,632	216	13,118
	2032	4,449	2,674	1,623	867	684	2,643	217	13,156

Note: All Other refers to tonnage from various sources, including but not limited to materials collected through the Paper Retriever program and miscellaneous materials collected from the City of Ashland such as used oil and electronics.

APPENDIX F

INDUSTRIAL SECTOR REFERENCE YEAR RECYCLING

APPENDIX F. Industrial Reduction and Recycling Data

This Appendix presents the reduction and recycling data for the industrial sector in the 2014 reference year. To avoid double-counting tonnage, adjustments made to tonnage reported by different types of entities, such as programs, brokers, and scrap yards, will be demonstrated. A historic analysis of the industrial sector's recycling and recycling projections for the planning period are included in this Appendix.

A. Reference Year Recovery Data

The North American Industry Classification System (NAICS) classifies business establishments for collecting, analyzing, and publishing statistical data related to the U.S. economy. The NAICS industry codes define establishments based on the activities in which they are primarily engaged.

To obtain industrial sector recycling data, the District annually surveys establishments that are classified under the following NAICS codes:

22

Utilities

31

- Food Manufacturing
- Beverage and Tobacco Product Manufacturing
- Textile and Textile Product Mills
- Apparel Manufacturing
- ·Leather and Allied Product Manufacturing

32

- Wood Product Manufacturing
- Paper Manufacturing
- Printing and Related Support Activities
- Petroleum and Coal Products Manufacturing
- Chemical Manufacturing
- Plastics and Rubber Products Manufacturing
- Nonmetallic Mineral Product Manufacturing

33

- Primary Metal Manufactuing
- · Fabricated Metal Product Manufacturing
- Machinery Manufacturing
- Computer and Electronic Product Manufacturing
- Electrical Equipment, Appliance, and Component Manufacturing
- Transportation Equipment Manufacturing
- Furniture and Related Product Manufacturing
- Miscellaneous Manufacturing

The following tables present the industrial sector recycling data that was used to calculate the total tons recycled during the reference year. These tables include:

- Table F-1, Industrial Survey Results, which presents the total tons recycled by material and by NAICS code.
- Table F-2, Data from Other Recycling Facilities, which presents the total tons recycled at buybacks, scrap yards, processors, and material recovery facilities (MRFs). This table was not applicable to the District.
- Table F-3, Other Recycling Programs/Other Sources of Data, which presents data from miscellaneous sources.

NAICS FW NFM OCC AOP PL CoM FS Total Adj. 31 498 0 0 2 7 0 0 0 0 508 -44 464 7,678 9,300 32 156 7 73 874 424 9,300 0 89 0 0 8,395 33 525 346 11 65 45 0 3,000 12,387 -25 12,362 Total 498 8,551 532 8,026 91 939 134 424 3,000 22,194 -69 22,126 -44 0 Adj. -25 0 0 0 0 0 0 -69 454 8.526 532 8,026 91 939 134 424 3.000 22,126

Table F-1. Industrial Survey Results

FW = food waste, FM = ferrous metals, NFM = non-ferrous metals, OCC = old corrugated cardboard, AOP = all other paper, PL = plastics, W = wood, CoM = commingled, FS = non-exempt foundry sand, Adj. = adjusted/adjustments

Source(s) of information: 2012-2014 District Industrial Surveys

Sample Calculation: NAICS 31 Unadjusted Tonnage - Adjustments = NAICS 31 Adjusted Total

508 tons - 44 tons = 464 tons

There was no data to report in Table F-2, "Data from Other Recycling Facilities/Programs." Therefore, this table has been omitted.

The District annually surveys scrap yards, processors, and brokers that are located in Ashland County or known to accept materials generated in Ashland County. The District maintains a list of scrap yards, processors, and brokers that is regularly updated. The District adds new entities to this list throughout the year as they are identified. Each year during the preparation of the Annual District Report, a list of scrap yards and secondary materials processors and brokers is compiled based on SIC codes using Reference USA, a business database. New additions to the surveying list are sent a cover letter and survey via mail and when possible, via e-mail. This is performed to gather the necessary information from the new

company so they can be added to District survey effort the following year. Followup requests are made via telephone and e-mail to entities that do not respond.

Responses are evaluated by comparing data submitted by each entity from previous years. Significant increases or decreases in overall tonnage, or tonnage reported for each sector are investigated using a variety of strategies, which include (1) contacting the respondent, verifying tonnage, and asking for an explanation, (2) identifying fluctuations in the economy/market that could cause tonnage to fluctuate, and (3) researching changes to the survey respondent' establishment such as a company merger, receiving a Notice of Violation, or unexpected events impacting operations such as a facility fire, etc.

Clear instructions are presented on the survey which instruct survey respondents to only include tonnage generated within the District's jurisdiction. Survey respondents are also instructed to refrain from reporting any metals from auto bodies, train boxcars, or construction and demolition debris (C&DD).

Responses are thoughtfully reviewed to ensure materials are not handled by more than one entity surveyed. The data used to compile the industrial sector's annual recycling totals are reported typically by end users, brokers, and processors. Adjustments are not frequently necessary for the industrial sector because program data is not factored in, as it is on the residential/commercial sector totals.

Table F-3. 2014 Other Recycling Programs/Other Sources of Data

Other Recycling Programs or Other Sources of Data	Food Waste	Unadjusted Total	Adjustments	Adjusted Total
Ohio EPA Compost Report	163	163	20	143
Unadjusted Total	163	163	20	143
Adjustments	20	20		
Adjusted Total	143	143		

Source(s) of Information: 2014 Ohio EPA Compost Report, Table B-5

Sample Calculations:

Ohio EPA Compost Report - Adjustments = Adjusted Total

163 tons - 20 tons = 143 tons

Table F-4. Reference Year (2014) Industrial Waste Reduced

Material	Quantity
Food	598
Ferrous Metals	8,526
Non-Ferrous Metals	532

Material	Quantity
Corrugated Cardboard	8,026
All Other Paper	91
Plastics	939
Wood	134
Commingled Recyclables (Mixed)	424
Non-Excluded Foundry Sand	3,000
Recycling Subtotals	22,269
Incineration	0
Grand Total	22,269

Source(s) of Information: 2014 ADR Calculation Spreadsheets, 2014 Ohio EPA MRF Reports, 2014 Ohio EPA Compost Report, 2014 ADR Review Forms

Sample Calculations:

Recycling Subtotal + Waste Reduced by Incineration = Grand Total 22,269 tons + 0 tons = 22,269 tons

Table F-5a. Reference Year (2014) Industrial Material Recovered

Data Source	Tons
Industrial Survey	22,126
Ohio EPA Compost Report	143
Total	22,269

Source(s) of Information: Tables F-1 and F-3

B. Historical Recovery

Total recovery includes recycling, composting, and waste reduction from incineration. The District's historical recovery for the industrial sector over a five-year period spanning from 2010 to 2016 is presented in the following table.

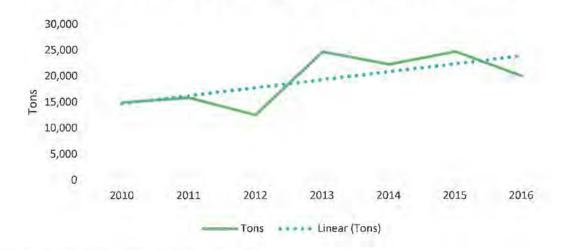
Table F-5b. Recycling Program/Source

Year	Tons	Industrial Sector Annual Percentage Change	Annual Tonnage Change
2010	14,940	market.	
2011	15,863	6.2%	923
2012	12,522	-21.1%	-3,341
2013	24,700	97.3%	12,178
2014	22,269	-9.8%	-2,431

Industrial Sector					
Tons	Annual Percentage Change	Annual Tonnage Change			
24,716	11.0%	2,447			
20,036	-18.9%	-4,680			
2	010-2016 Average				
rage Annual Perce	entage Change	10.8%			
erage Tons Over 7	'-Year Period	19,292			
erage Annual Toni	nage Change	849			
	24,716 20,036 20 rage Annual Perce erage Tons Over 7	Tons Annual Percentage Change 11.0%			

An examination of the recovery patterns over the seven-year period reveals that in 2010, a low of 14,940 tons were recovered and in 2015, a high of 24,716 tons were recovered. Waste recovery fluctuated between approximately 12,500 tons and 15,900 tons from 2010 to 2012, then increased significantly (nearly 100%) from 2013 to 2014. Waste recovery decreased approximately 10% after 2013, but the volume remained significantly greater than amounts recovered from 2010 to 2012. Over the seven-year period, recovery increased by an average of 849 tons, or 10.8%, annually. The District's recovery of 22,269 tons in 2014 was approximately 15.4% greater than the 2010-2016 average of 19,292 tons. The following figure presents the District's historical industrial recovery totals from 2010 to 2016.

Historical Recycling Analysis: Industrial Sector (2010-2016)



C. Industrial Recovery Projections

According to Ohio EPA's Plan Format v4.0, if a solid waste district met the industrial reduction/recycling goal of 66% during the reference year, it is acceptable to project a constant quantity of industrial material to be recovered at the reference year quantity throughout the planning period. During the 2014 reference year, the industrial sector exceeded the reduction/recycling goal of 66%

and achieved an 88% recycling rate. The District continued to exceed the 66% goal in 2015 with a 78% recycling rate and in 2016 with a 72%. Tonnage is projected in 2023 as the average tonnage collected over the five-year period from 2012 to 2016 (20,849 tons). Intermediate years (2017-2022) are projected using a straight-line average. The District feels that modestly increasing recycling totals during the first six years of the planning period are realistic considering the District attempts to expand the number of industrial sector clients it serves each year. The following table presents the industrial sector recovery statistics and projections from 2014 to 2032.

Table F-6. Industrial Recovery Projections

Year	Totals
2014	22,269
2015	24,716
2016	20,036
2017	20,153
2018	20,269
2019	20,385
2020	20,501
2021	20,617
2022	20,733
2023	20,849
2024	20,849
2025	20,849
2026	20,849
2027	20,849
2028	20,849
2029	20,849
2030	20,849
2031	20,849
2032	20,849

APPENDIX G WASTE GENERATION

APPENDIX G. Waste Generation

A. Historical Year Waste Generated

The historical waste generation for the District (years 2006 through 2016) is shown in Table G-1 below. Generation has been calculated based upon the sum of reported disposal and recycling for each year. Per capita generation decreased from 2006 to 2009 and increased from 2009 to 2016. During this time period, the per capita generation rate for total generation has ranged from a low of 6.0 pounds per person per day (PPD) in 2010 to a high of 10.2 PPD in 2015. The significant increases in per capita generation in 2015 and 2016 are mainly the result of increases in excluded waste disposal.

Table G-1. Reference Year and Historical Waste Generated

Year Pop.	Den	Residential/ Commercial		Industrial		Evaluated	T-4-1	Per Capita	Annual %
	Pop.	Disposal	Recycled	Disposal	Recycled	Excluded	Total	Gen. (PPD)	Change In Total Tons
2006	54,727	43,192	6,538	2,082	22,073	6,230	80,115	8.0	-
2007	54,727	38,887	6,893	1,290	16,069	8,887	72,025	7.2	-10.1%
2008	55,125	32,539	6,657	1,091	16,034	8,319	64,640	6.4	-10.3%
2009	55,125	30,759	7,574	795	14,803	6,235	60,166	6.0	-6.9%
2010	53,139	30,655	6,240	611	14,940	7,075	59,521	6.1	-1.1%
2011	53,139	31,315	5,772	1,235	15,863	7,411	61,596	6.4	3.5%
2012	53,153	29,661	8,905	1,612	12,522	7,867	60,565	6.2	-1.7%
2013	53,043	28,546	10,510	2,482	24,700	8,284	74,522	7.7	23.0%
2014	53,095	29,231	8,280	2,823	22,269	8,266	70,870	7.3	-4.9%
2015	53,680	30,835	12,157	6,987	24,716	25,681	100,376	10.2	41.6%
2016	53,752	30,162	14,699	7,642	20,036	25,110	97,649	10.0	-2.7%

Source(s) of Information: Ohio EPA Facility Data Reports and ADR Review Forms, Ashland County Annual District Reports.

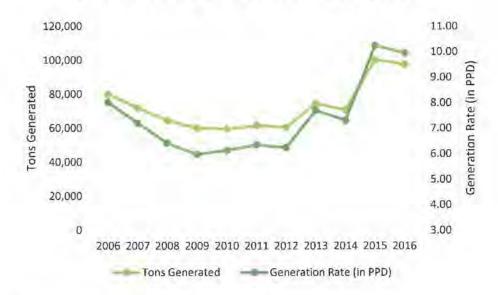
Sample Calculations (2014):

Per capita generation rate = (tons generated x 2000) + (365 x population) $7.3 = (70,870 \text{ tons x } 2,000) \div (365 \times 53,095)$

Annual percentage change = ((New year – old year) ÷ old year) x 100 -4.9% = ((70,870 tons – 74,522 tons) ÷ 74,522 tons) x 100

The following figure shows a graphical representation of the District's waste generation from 2006 through 2016.





Residential/Commercial Waste

The national waste generation rates based upon U.S. EPA documents are generally higher than Ashland SWMD's generation rate or generation rates for the other Ohio rural SWMDs. For example, the national MSW generation rate¹ for 2012 was estimated to be 4.38 PPD while Ashland SWMD's MSW generation rate for 2012 was 3.98 PPD. At least part of the difference between these rates can be explained based upon the national rate incorporating both urban and rural areas. (Rural areas traditionally have lower generation rates than urban areas, and this tendency can be seen in Ohio.) Also, the national generation rate relies on a modeling methodology rather than summing disposal plus recycling to determine generation.

National waste generation has also been estimated by *BioCycle Magazine* by surveying State agencies responsible for regulating solid waste. Estimates compiled by *BioCycle* utilized disposal plus recycling for determining generation, and therefore, the methodology used to determine the generation rates is consistent with the Ashland Plan Update. However, the *BioCycle* generation rates are much higher than Ashland's (see following figure).

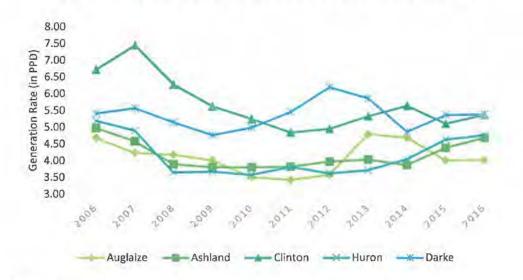
¹ For purposes of this analysis, MSW or municipal solid waste is considered to be synonymous with residential/commercial waste.

MSW Generation Rates: 2000-2014 National vs. Ashland SWMD



The national MSW generation rates have been declining, as demonstrated by the previous figure. MSW generation rates for the District have declined since 2006 as well. Other rural SWMDs in Ohio have experienced falling MSW generation rates since 2006 (with the exception of Auglaize), but all of the SWMDs shown in the following figure have experienced fluctuations in the generation rates over time.

MSW Generation Rates for Selected Ohio Rural SWMDs

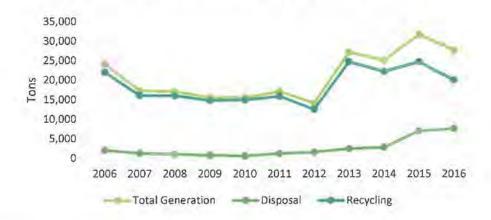


2. Industrial Waste

Total industrial waste generation in the District declined from 2006 through 2012, then increased significantly in 2013 (see following figure).

Recycling tonnage, as the much greater percentage of the total generation, has determined the trend in total industrial generation.

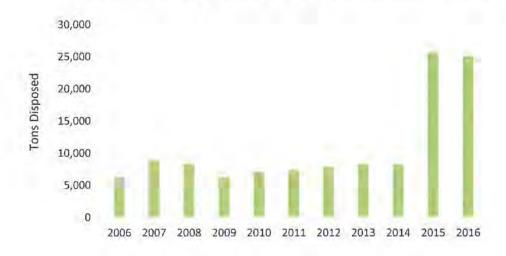
Ashland SWMD Industrial Waste Generation



Excluded Waste

Excluded waste was determined to be more than 10 percent of the total waste disposed in the reference year, and as a result, has been included in this analysis. The following figure indicates that the amount of excluded waste disposed from Ashland County has fluctuated from approximately 6,200 tons to 8,900 tons from 2006 to 2014, then increased significantly in 2015. Tonnage in 2015 and 2016 is notably greater than past years due to the demolition of two large factories.

Excluded Waste Disposed in the District: 2006 - 2016



B. Generation Projections

Generation projections for the District have been developed in Appendices D, E, and F for disposal and recycling for the residential/commercial and the industrial sector. These projections which are presented in detail in Appendices D, E, and F, are summarized below in Table G-2.

Table G-2. Generation Projections

	Year Pop.		Residential/ Commercial		Industrial		Excluded	Total	Per Capita	Annual %
		Рор.	Dispose	Recycle	Dispose	Recycle	Dispose	Tons	Gen. (PPD)	Change in Total Tons
W	2014	53,095	29,231	8,280	2,823	22,269	8,266	70,870	7.31	
	2015	53,680	30,835	12,157	6,987	24,716	25,681	100,376	10.25	41.6%
	2016	53,752	30,162	14,699	7,642	20,036	25,110	97,649	9.95	-2.7%
	2017	53,824	30,143	12,776	9,438	20,153	22,634	95,144	9.69	-2.6%
×	2018	53,896	30,123	12,787	8,205	20,269	20,159	91,543	9.31	-3.8%
	2019	53,968	30,104	12,799	6,971	20,385	17,683	87,942	8.93	-3.9%
	2020	54,040	30,085	12,810	5,738	20,501	15,207	84,340	8.55	-4.1%
1	2021	54,218	30,124	12,837	4,504	20,617	12,732	80,815	8.17	-4.2%
Period	2022	54,396	30,164	12,865	3,271	20,733	10,256	77,288	7.79	-4.4%
Per	2023	54,574	30,203	12,892	2,038	20,849	7,781	73,762	7.41	-4.6%
ng	2024	54,752	30,301	12,920	2,038	20,849	7,781	73,888	7.39	0.2%
Planning	2025	54,930	30,400	12,947	2,038	20,849	7,781	74,014	7.38	0.2%
Pa	2026	55,054	30,468	12,967	2,038	20,849	7,781	74,102	7.38	0.1%
P	2027	55,238	30,570	12,995	2,038	20,849	7,781	74,232	7.36	0.2%
ear	2028	55,422	30,672	13,023	2,038	20,849	7,781	74,363	7.35	0.2%
First Year of	2029	55,606	30,774	13,052	2,038	20,849	7,781	74,493	7.34	0.2%
E	2030	55,850	30,909	13,090	2,038	20,849	7,781	74,666	7.33	0.2%
	2031	56,034	31,011	13,118	2,038	20,849	7,781	74,796	7.31	0.2%
	2032	56,278	31,146	13,156	2,038	20,849	7,781	74,969	7.30	0.2%

APPENDIX H STRATEGIC EVALUATION

APPENDIX H. Strategic Evaluation

This Appendix is divided into thirteen (13) separate analyses or sections to address the recommendations and suggestions in Format v4.0. Some of the more extensive sections are further subdivided, such as Section 1. In general, existing District programs (with Program ID) are discussed first within the appropriate section, followed by any additional analysis not necessarily related to an existing program. All existing programs have been evaluated qualitatively in terms of the suggestions included within Format v4.0 and the identified strengths and weaknesses which are summarized at the end of each existing program analysis. For programs which have data available, quantitative evaluations have also been incorporated.

SECTION 1: RESIDENTIAL RECYCLING INFRASTRUCTURE ANALYSIS

A. Drop-off Recycling

The District services publicly-available drop-offs, drop-offs at schools, and drop-offs at businesses and non-profits/organizations which are not available to the public. Each of these programs are discussed below.

1. Drop-off Recycling for Publicly-Available Sites

This section discusses the drop-off program for publicly-available sites, and program IDs for these sites are shown in the following table.

Existing Program Name	Program ID		
Drop-off Recycling for Publicly-Available Sites	158, 161, 174, 175, 177, 178, 5362-5364, 5852, 7853, 8456, 8468, 8469, 8905, 8906,		

a. Locations of Drop-off Sites

The District maintains a drop-off recycling collection program throughout much of Ashland County, with some of the drop-off sites having been established more than 15 years ago. The District's drop-offs are evenly distributed throughout the county as illustrated in the following figure which presents the location of each drop-off that operated during the reference year.

Example of District Drop-Off Containers



Location of Recycling Drop-offs: 2014



During 2014, at least one drop-off was located in each District city, village, and township except two villages and five townships (see the following table). Most the drop-offs are classified as "rural", and five of the drop-offs function as a "recycling drive" site which is available only one weekend each month, from Friday afternoon through Monday morning.

List of Recycling Drop-offs by Political Subdivision

Political Subdivision	At least one drop-off? 1	Urban or Rural?
Cities		
Ashland City	✓	Urban
Villages		
Bailey Lakes	X	Rural
Hayesville	X	Rural
Jeromesville	X	Rural
Loudonville	✓	Rural
Mifflin	✓	Rural
Perrysville	1	Rural
Polk	1	Rural
Savannah	V	Rural
Townships		
Clear Creek Township	✓	Rural
Green Township	✓	Rural
Hanover Township	X	Rural
Jackson Township	*	Rural
Lake Township	√	Rural
Mifflin Township	1	Rural
Milton Township	X	N/A
Mohican Township	✓	Rural
Montgomery Township	X	Rural
Orange Township	V	Rural
Perry Township	×	Rural
Ruggles Township	×	Rural
Sullivan Township	1	Rural
Troy Township	1	Rural
Vermillion Township	✓ ·	Rural

¹This table includes some double-counting. For instance, if a drop-off is located within a village, a check mark is included for that village as well as the township where the village is located.

² The full-time drop-off in Vermillion Township serves both the villages of Hayesville and Jeromesville.

The District also provides 17-cubic yard recycling tubs to Ashland University. In addition to separate containers for fiber and commingled cans and plastics, the District also provides the University with a 7-cubic yard tub for glass recycling. The University furnishes a trailer for



cardboard which is serviced three to four times per week. The recycling tubs are generally serviced (or pulled) a minimum of once per week.

b. Materials Accepted, Minimum Standards, Size of Containers

The drop-off recycling program accepts a comprehensive mix of materials, which include:

Paper:

- Newspapers
- Mixed Paper
- Magazines
- Cardboard: Corrugated
- Cardboard: Box board
- Cardboard: Shoe Boxes

Cans/Containers:

- Aluminum Beverage Cans
- Steel, Tin, Bimetal Food Cans

Plastics:

- #1 though #7 Plastic Containers
- Plastic Grocery Bags

Other:

Printer cartridges

Ten of the District's drop-offs meet the minimum standards to be classified as full-time, full-service drop-offs. Eight of these drop-offs are located in villages or townships and are classified as rural drop-offs. Each of the nine drop-offs is open 24 hours a day, 7 days a week. As stated above, each drop-off accepts a comprehensive list of materials, which exceeds the minimum four

materials designated as highly amenable for the residential sector to recycle.

The District's drop-off containers (or tubs) have a capacity of 17 cubic yards. (A few sites have smaller containers, typically 8 cubic yards.) Each site has a minimum of two tubs since recyclables are collected in a dual stream: one tub for paper and cardboard (fiber), and the other tub for metal cans, plastics, etc. One site, Buehler's Fresh Food Market, has five tubs, and remains the highest-producing drop-off in the District.

c. Operation of Drop-off Program

The District operates this program, employing three part-time drivers to haul the roll-off containers between the Ashland County Recycling Center and the drop-off sites. Drivers deliver an empty container to a site when a full container is picked up.

d. Education and Awareness

The District provides education and awareness programs to encourage residents to use the drop-offs for recycling, and provides information regarding the types of materials which are acceptable. The District does not target education and awareness initiatives for multi-family housing residents that are serviced by the private sector. See Appendix L for a discussion of the District's education and awareness programs.

e. Tons Recovered

Tonnages at individual sites are not available. In addition, the District does not have the capability to easily track the total amount of recyclables collected through the drop-off program each year since materials from the drop-off program is combined at the Recycling Center from other sources.

f. Cost of Drop-off Recycling

The cost of the District's drop-off program is included in the costs for the Recycling Center.

g. Summary of Publicly-Available Drop-Off Program Findings and Challenges

The drop-off program is important because it provides an opportunity for residents and possibly businesses to recycle. The use of drop-off locations is high when drop-offs are located in areas visited frequently by the public, such as sites near grocery stores, community centers, churches, shopping centers, schools, parks, etc. All of the District's drop-off locations have been strategically chosen to maximize the accessibility of each site to the public. A number of drop-offs are also located at township or village halls, fire stations, parks, or recreation centers.

The following challenges have been identified by the District during the analysis of this program:

- At various times over the years, some drop-offs have experienced significant contamination.
- Residents often place recyclables in wrong container (e.g., cans and plastic is put into the fiber container). Containers have signage instructing residents with regard to the proper usage of the drop-off site, but the signage will need to be redone within 2 to 3 years.

Drop-offs at Schools

As a part of the existing drop-off program, the District operates collection programs for the rural school districts within the County. These individual programs and the programs IDs are shown below.

School Name	Program ID
Black River Elementary	8458
Hillsdale Elementary West	8459
Hillsdale High School	8460
Hillsdale Middle School	8582
Kno-Ho-Co Head Start	8461
Mapleton High School	8463
Montgomery Elementary	8465
Mapleton Elementary School	9419

The District has placed a 17-cubic yard roll-off recycling container at the Black River, Mapleton, and Hillsdale schools. (The Hillsdale Middle School has an 8 cubic yard container.) Mostly fiber (i.e., paper and cardboard) is collected from these drop-offs, however, schools often include metals cans and plastic in the containers. These containers,

which are for school use only, are serviced as needed which many times is no more than once per month.

In 2015, the District added an additional 17 cubic yard tub at the Black River High School. The Montgomery Elementary School was torn down in 2015 and no longer exists.

a. Summary of School Recycling Program Findings and Challenges

These programs provide the opportunity to collect mixed paper and bottles and cans at many schools throughout the District. The District believes that this program is operating smoothly, and has not identified any challenges associated with its continuation into the future.

B. Curbside Recycling

There are currently two curbside recycling programs operating within Ashland County. These programs and the program IDs are shown in the table below.

Curbside Recycling Program Name	Program IDs
Ashland City (non-subscription)	149
Loudonville Village (subscription)	8454

1. City of Ashland Curbside Recycling Program

The Sanitation Department for the City of Ashland operates the curbside recycling program, and collects recyclables once per week. Based upon the District's ADR (Annual District Report), this program served approximately 9,400 households and 21,850 residents in 2014. (The most recent ADR estimated that 7,700 households and 20,500 residents are served by the curbside program.)

The materials which residents can recycle through curbside collection include:

- Newspaper
- Magazines
- Books
- Miscellaneous paper/shredded paper
- Boxboard, cereal boxes, etc.
- Corrugated cardboard
- Aluminum/steel/tin cans, and #1 and #2 plastic containers
- Plastic grocery bags/shrink/stretch film

Although glass is not collected in Ashland's curbside program, glass recycling is available for residents at a drop-off location within the City. The City processes the recyclables from the curbside program and the drop-off at Sanitation Department facilities, and markets the sorted materials.

2. Village of Loudonville Curbside Recycling Program

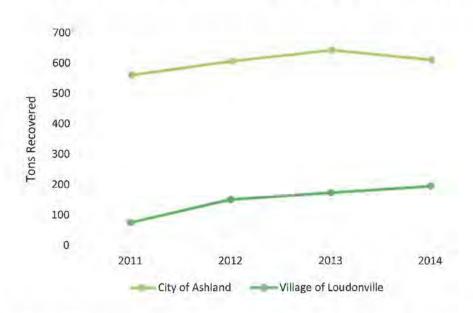
Subscription curbside collection of recyclables is available to the residents of the Village of Loudonville through a contract with Rumpke Waste Services and the Village. Single-stream collection is offered once per week for plastics, glass, metal cans, cardboard, paper, newspaper, magazines, and books. In 2014, this program served 866 customers. In 2015, route sheets indicated that 819 customers were served, with recyclables collected at an average of 600 houses each week.

3. Tons Recovered

The figure below shows the tonnage collected in the Ashland and Loudonville curbside programs from 2011 through 2014. Both of these recycling programs have increased the tons recovered since 2011, especially the Village of Loudonville.¹

¹ The tons collected for the Village of Loudonville's program was reported as 77 tons for 2015. Rumpke believes that the much higher tonnages for the Village in prior years is due to the erroneous inclusion of commercial and industrial recyclables.

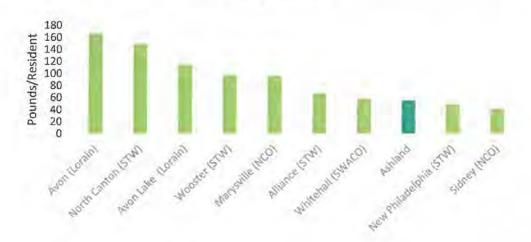
Tons Collected from Curbside Recycling Programs: 2011 - 2014



Benchmarking exercises for subscription-based programs present unique challenges. To compare data, the number of subscribers and the tons need to be known variables. Often times, only the overall population is available and tonnage collected is combined with other routes. For this reason, the District has chosen to only benchmark non-subscription recycling programs.

The following figure presents a comparison of the pounds per person collected from non-subscription curbside recycling programs in Ashland and in political subdivisions with similar populations in Ohio.

2014 Pounds Per Person Non-Subscription Curbside Recycling Comparison



Many of the curbside programs compared had higher pounds collected per resident than the program located in the City of Ashland. This indicates that there may be an opportunity to improve the performance of the City of Ashland's program.

4. Summary of Findings for Curbside Recycling Programs

The curbside program is important because it provides the most convenient way for residents to recycle. The District has curbside recycling in the largest community in the District (Ashland) and the second largest community (Loudonville).

The following challenges have been identified by the District during the analysis of this program:

- There are no curbside recycling programs in the townships or smaller villages in the District.
- Increasing participation.
- The City of Ashland's curbside recycling program may be underperforming.
- Glass is not collected through the City of Ashland's curbside recycling program.

C. Special Events/Collections

1. Recycling Container Loan Program

Since approximately 2006, the District has operated the **Recycling Container Loan Program** which is available to individuals, family groups, non-profit organizations, community groups, and government offices. Groups can borrow District containers to collect aluminum cans and plastic bottles during family gatherings, events, and community functions in Ashland County. Most of the containers are plastic, approximately 55 gallons in size, and are available on a "first come, first served" basis. The District also provides 25 "containers" (metal frames for hanging plastic bags with a cap) to the City of Ashland to be used for events in the City.

The District normally receives five or six requests for use of plastic containers each spring, then occasional requests through the summer and fall. Generally, individual residents are the users of these containers. The District has not experienced any problems with this program.

2. Prescription Drug Drop-off

In 2014, drop boxes were placed at the Ashland County Sheriff's Annex and the Loudonville Police Department for unwanted & unused

medications. This program, which is readily used by residents, has not experienced any problems or challenges that are known to the District.

3. Summary of Special Events Recycling Findings and Challenges

Special events are an important aspect of the District's participation in recycling programs in Ashland County. These events offer a good opportunity to recycle materials which would otherwise be disposed as well as educate the public with regard to the importance of recycling and other District programs.

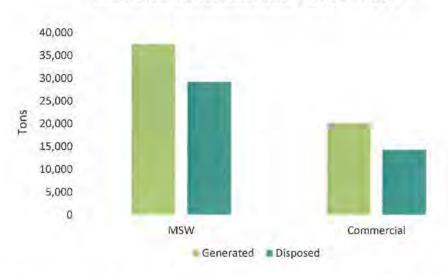
The following challenges have been identified by the District during the analysis of this program:

 The recycling container loan program is mainly used by residents and not community special event organizations.

SECTION 2: COMMERCIAL SECTOR ANALYSIS

The District does not have data to determine the amount of commercial waste which is disposed since landfills are only able to characterize waste disposed in terms of residential plus commercial waste. However, a study conducted for the U.S. Environmental Protection Agency which was published in July 2013 estimated that disposed tonnage from commercial sources ranged from 38 to 59 percent of the total residential/commercial disposal, with an average of 49 percent.² Applying this average percentage (as well as the average percentage for generation) to the total Ashland SWMD residential/commercial disposal and generation tonnage results in an estimated 14,300 tons of commercial waste disposed in 2014 and slightly more than 20,000 tons of generated commercial waste.

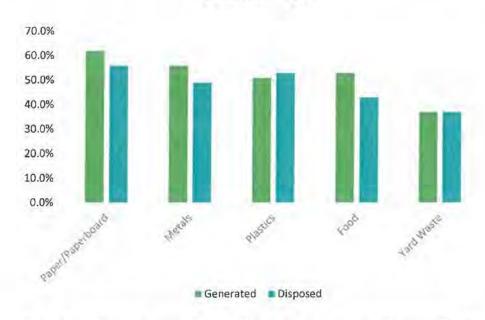
Estimated Generation and Disposal: 2014



The study cited above also estimated the percentage of various materials which originate from the residential vs. commercial sector for the amount generated as well as disposed (see following figure). Based upon this data, the commercial sector generates slightly higher percentages of waste for each of these materials except for yard waste and plastics.

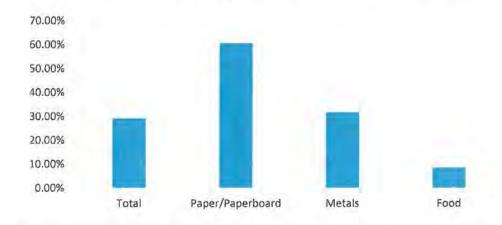
² See "MSW Residential/Commercial Percentage Allocation – Data Availability", U.S. Environmental Protection Agency, Office of Resource Conservation and Recovery, July 2013.

Percent of Commercial Waste in Residential/Commercial Waste Stream by Material Type



Using the data described above, it is estimated that approximately 30 percent of the total waste from commercial sources is recovered for recycling in Ashland County. By material type, paper and paperboard has the highest recovery rate, while food waste could potentially be recovered at much higher rates. According to the analysis, substantial amounts of plastics, wood waste, and textiles are also being disposed from the commercial sector and potentially could be recovered for recycling or reuse.

Estimated Recovery Rates for Commercial Waste



Although the analysis summarized above admittedly has produced rough estimates, the District believes that this analysis shows the magnitude of the materials continuing to be disposed. One of the conclusions of this analysis suggests that at least some of these materials could potentially be recovered for recycling.

Ashland County includes several large commercial businesses and institutions which could be the focus of greater recycling within the District. The following table lists several companies and institutions with the number of employees.

Largest Commercial/Institutional Employers

Company Name	# of Employees	Туре
Ashland University	744	Private University
Samaritan Regional Health Systems	639	Medical
WIL Research Laboratories	619	Biomedical Research
Ashland City Schools	406	Public Schooling
Ashland County	350	County Government
Wal-Mart	320	Big Box Retailer
Brethren Care Village	297	Assisted Living
City of Ashland	240	City Government
Kingston	210	Assisted Living
Loudonville-Perrysville Exempted Schools	160	Public Schooling

Source: Ashland Area Council for Economic Development

The District has an ongoing program which targets Ashland University (program ID 8456). The Recycling Center provides large recycling tubs to the University (one for mixed paper and one for commingled plastics and metals), as well as a seven cubic yard tub for glass. These containers are serviced at least once per week, and more often if needed. The University also furnishes a trailer which is used for corrugated cardboard. The trailer is generally emptied 3 to 4 times per week. In 2014, the University recycled a total of 91.83 tons of materials. The University increased recycling slightly in 2015 to 97 tons. The Recycling Center also provides additional recycling containers in August each year when the students are moving into housing units.

Numerous commercial sites are provided recycling services by the District, collecting materials at loading docks (**program ID 8470**). As part of this same program, the District furnishes recycling tubs for eleven businesses for the collection of cardboard, newspaper, and miscellaneous paper (see following table).

Commercial Businesses with District-Provided Recycling Tubs

Commercial Business	
Armstrong Cable TV	
Ashland Publishing	
Cleveland Avenue Market	

Commercial Business	
Family Dollar Store	
ODOT District 3 Facility	
Round Lake Christian Assembly C	amp
Dor-Lo Pizza	
Eagles Club	
Wil Research	
UPS Store	
Thiel's Replacement Systems	

The District operates the Ashland County Recycling Center which is open to residents and businesses within the District. This facility is discussed later in this Appendix. In summary, the facility accepts the following materials from residents and businesses:

- Newspaper
- Magazines
- Books
- Miscellaneous Paper
- Cardboard/Box Board
- Aluminum Cans
- Steel/Tin Cans
- Plastic Containers #1-#7
- Printer Cartridges



Finally, the District maintains an outreach program for businesses and institutions in the County to assist with the development and/or maintenance of recycling programs. This program is described in the following section, **Industrial Sector Analysis**.

SECTION 3: INDUSTRIAL SECTOR ANALYSIS

In 2014, District industries recycled approximately 22,300 tons of waste, while disposing of only 2,800 tons. This pattern is consistent with each of the last three years resulting in a recycling rate close to, or above 90 percent. The tons of industrial waste disposed and recycled, including the types of materials recycled, are discussed in some detail in Section 7, Diversion Analysis.

Ashland County is home to several medium-sized manufacturers which are listed in the following table. As evidenced in the table, there is a wide variety of types of manufacturing within the District.

Largest Industrial Employers in Ashland County

Company Name	# of Employees	Type of Manufacturing
Mansfield Plumbing	610	bathroom fixture manufacturing
Pentair Pump Group	290	pump manufacturing
Step 2 Corporation	248	lawn, garden, and household supplies
Snyder's-Lance	195	cookies and crackers manufacturing
Hedstrom Plastics/Ball Bounce & Sport	271	toys, exercise and sport balls manufacturing
American Augers	236	boring equipment manufacturing
BookMasters	200	book manufacturer
LiquiBox	162	containers for liquids manufacturing
Packaging Corporation of America	150	corrugated cardboard manufacturing

Source: Ashland Area Council for Economic Development

The District does not have any programs which specifically target the industrial sector. However, the District does contact numerous industries while surveying for the Annual District Report (see Section 12 for discussion of surveying efforts). Also, the District provides the following services on request which are posted on the District website:

- The Recycling Center offers a wide range of recycling options and services for business and industry. Companies can bring their material to the center five days per week, or they can make arrangements for the center to come to their facility and pick up the material. Most businesses/industries that receive pick-up service (approximately 20 establishments) have materials collected weekly or biweekly; some are only picked up on an as-needed basis when a pick-up appointment is made.
- The District provides collection containers for many of its commercial and industrial sector customers. Some were provided with gaylords while others have roll-off tubs ranging from 8 cubic yards to 17 cubic yards.

- The Center accepts most fiber products and several different types of plastic that are generated in commercial operations. Depending on type of material and volumes, the center can pay for some materials.
- A District Coordinator is available to visit your facility, view your operations and
 do a waste audit to determine what materials you could be recycling. Once the
 audit is complete, the center will make recommendations on materials to be
 recycled, how to prep and store them, and pickup/delivery options. During the
 reference year, there was a change in administration. It is not known whether the
 previous District Coordinator conduced any waste audits during the reference
 year.

A. Summary of Program Findings and Challenges

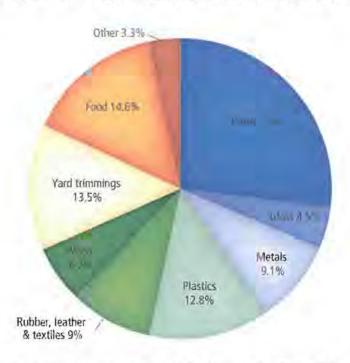
The Industrial sector recycles at a rate of greater than 90% and well above the State Plan goal of 66%. The District does not directly engage the industrial sector with dedicated programs or initiatives but does provide service for recycling to all residents and businesses in Ashland County at the recycling center. The District identified the following challenge for this sector:

 The District has estimated that approximately 20-50 commercial and/or industrial locations could benefit from having a recycling container placed on site, but the District does not have adequate containers. The District would like to purchase 3 new containers annually to expand its ability to serve these sectors. The District's budget is the limiting factor.

Section 4: Residential/Commercial Waste Composition Analysis

According to U.S. EPA, paper (which includes cardboard), food, yard waste, and plastics are the categories comprising the highest percentage of the residential/commercial waste stream before any recycling takes place (see following figure).

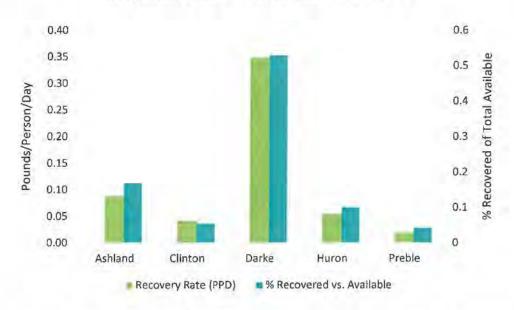




In 2014, the District recovered more than 2,800 tons of fiber (i.e., cardboard and all other paper), 1,269 tons of scrap tires, and 1,644 tons of yard waste. Small amounts of plastics and food were recovered for recycling or composting. Applying the national waste composition percentages to total residential/commercial sector generation provides estimates of the total tonnage potentially available for recovery in the District.³ The following figure shows the percentage of materials recovered based upon the tons recovered divided by tons potentially recoverable. Roughly 29 percent of the available fiber and 34 percent of available yard waste was recovered from the waste stream in 2014, while very small percentages of available plastics and food was recovered. Ashland County's recovery of these materials has generally decreased somewhat since 2010, especially yard waste and food waste recovery.

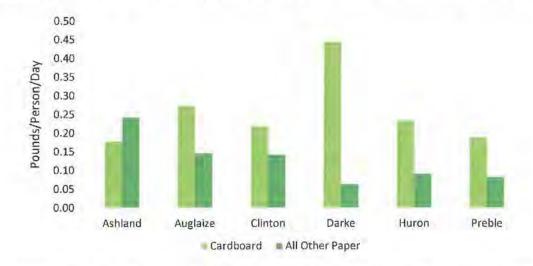
³ These estimates very likely overstate the tonnage which could reasonably be recovered from the R/C waste stream due to contamination and other factors.

Residential/Commercial Sector Tons of Recyclables vs. Percent of Available Recyclables in Waste Stream Recovered



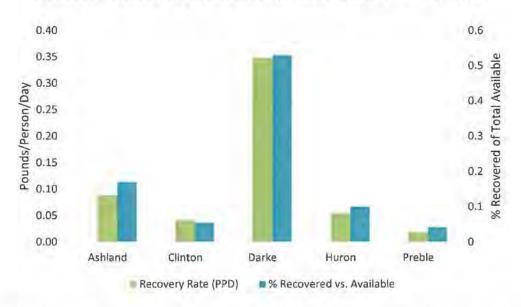
In terms of the recovery rate for cardboard and other paper, Ashland County experienced a somewhat lower per capita rate than comparable rural SWMDs in Ohio during 2014 (see following figure). However, Ashland's recovery rate for all other paper was in the mid-range of recovery rates for these SWMDs.

Recovery Rates of Cardboard and Other Paper for Ohio Rural SWMDs: 2014



The recovery rate for yard waste in the Ashland County SWMD was higher than most of the other rural SWMDs. In addition, Ashland's percentage of yard waste recovered compared to the tons of yard waste potentially available was higher than each of these SWMDs except the Darke County SWMD (see following figure).

Recovery Rates of Yard Waste for Ohio Rural SWMDs: 2014



In 2014, the District reported a total of 861 tons of yard waste processed from residents and businesses located within Ashland County. Two Class IV composting facilities located in Ashland County received the majority of the yard waste generated (**program IDs 5367 and 207**).

A. Summary of Findings and Challenges

The residential/commercial waste composition analysis shows that the District is performing at a level consistent with other rural solid waste districts. Based on this analysis, the District does not identify any meaningful challenges.

SECTION 5: ECONOMIC INCENTIVES ANALYSIS

The District currently does not offer any economic incentive-based programs. However, the City of Ashland does limit residents to no more than six bags of garbage (maximum of 33 gallons each). Residents are charged for any additional bags of garbage at the rate of \$1 per bag. This rate structure does create an economic incentive to reduce the amount of trash and increase recycling within the City. The District currently cannot work with the City of Ashland to modify its trash billing structure because recycling is part of the sanitation bill.

A. Summary of Findings and Challenges

Given the rural nature of the District and the overall budget of the District, the District does not feel it is in a position to create economic incentive programs. The District does acknowledge that it can continue to offer technical assistance to support economic incentive programs especially in the residential/commercial sector.

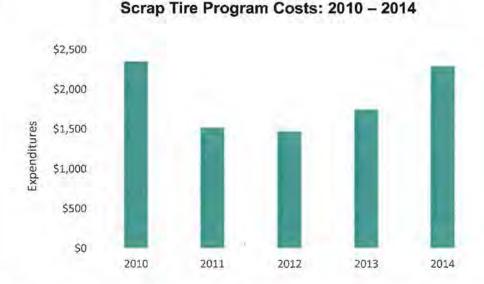
SECTION 6: RESTRICTED AND DIFFICULT TO MANAGE WASTE STREAMS ANALYSIS

Several materials, while not typically found in solid waste in large quantities, are not desired in a landfill. These materials include scrap tires, household hazardous wastes, lead-acid batteries, E-waste (or electronics), appliances, household batteries, and bulk items such couches and mattresses. The District or local communities have programs designed to address each of these materials.

A. Scrap Tires

Existing Program Type	Existing Program IDs
Scrap Tire Collections	198

The District continues to collect tires at the Ashland County Recycling Center, and in 2014 received approximately 20 tons of scrap tires. The costs for the District's scrap tire program during the last five years are shown in the following figure.



The total number of scrap tires recovered from the District as reported to Ohio EPA is shown in the following figure. In addition to the tires received at the Recycling Center from residents and businesses, the District also assists townships, the County highway department, Mifflin Lake Park, and the Mohican River area with cleanup of tires by accepting tires at the Recycling Center at no charge, and by picking up tires placed along roads or along rivers, resulting from cleanup crew activities.

1,400.0
1,200.0
1,000.0
800.0
600.0
400.0
200.0
2010
2011
2012
2013
2014

Scrap Tire Collections: 2010 - 2014

According to the District, the illegal dumping of scrap tires has not been a problem in recent years.

The District also provides education to the public on its website regarding tire recycling at the Ashland County Recycling Center. Further discussion of this program can be found in Appendix L.

1. Summary of Scrap Tire Collection Program Findings and Challenges

The District's scrap tire collection costs and volumes received have increased over the past 5 years. The District is not seeing any issues with illegally dumped scrap tires during this same period. Based on this analysis, the District's only challenge identified with this program is the increased costs associated with operating the program.

B. Household Hazardous Wastes (HHW)

Existing Program Type	Existing Program IDs
HHW Collection Event	201

The District's current plan indicates that an HHW collection event will be held every other year in odd numbered years subject to available funding. The District held a collection event in 2011, resulting in 22 tons of materials collected and spending \$14,300. An event was also held in 2012 to determine if participation levels would remain constant from year-to-year which was not the result. In 2012, the District collected 11 tons of materials (or one-half the amount from the previous year), and spent \$9,000 for the event.

The District intended to hold a collection event in 2014, but adequate funding was not available in 2014. In 2015, the District sponsored an event which resulted in the collection of nearly 31,000 pounds of materials, or 15.5 tons. More than 400 vehicles were serviced, costing the District \$12,220. In the future, the District intends to hold a collection event every other year in odd-numbered years providing the funding levels are adequate.

The District also provides education to the public on its website regarding proper disposal for latex and oil-based paints, batteries, and compact fluorescent light bulbs. Further discussion of HHW education can be found in **Appendix L**.

1. Summary of HHW Program Findings and Challenges

Residents can deliver items such as batteries to the Ashland County Recycling Center. Options for other types of HHW include the following in the District:

- Latex paint and hardened latex paint can be brought the Recycling Center.
- Motor oil can be brought to local automotive service centers.
- The District encourages residents to use all of the lawn and garden chemicals they purchase verses dealing with left overs that no local options exist to manage.

The following challenges have been identified by the District during the analysis of this program:

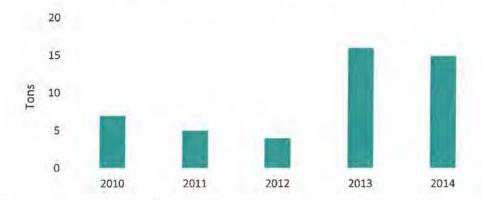
 The District does not have a permanent collection for HHW materials that do not have a local recycling or management option.

C. Lead-Acid Batteries

Existing Program Type	Existing Program IDs
Lead-Acid Battery Recycling	212

The District collects lead-acid batteries at the Ashland County Recycling Center. The following figure shows the tons of batteries which have been received at the Recycling Center from 2010 through 2014.

Lead-Acid Battery Collections: 2010 - 2014



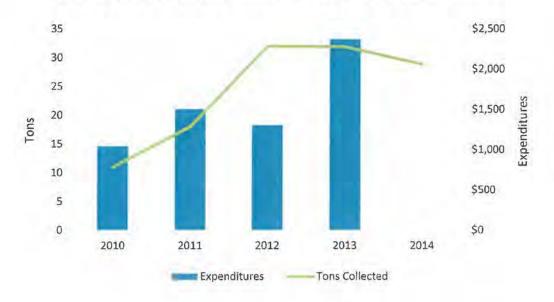
U.S. EPA estimates that 99 percent of lead-acid batteries are recycled, and the District is not aware of any problems with recovery of these batteries in Ashland County.

D. Electronic Waste

Existing Program Type	Existing Program IDs
Electronics Collections	5365

Electronics (or E-waste) can be dropped off at the Ashland County Recycling Center at any time. The following figure shows that the tons collected at the Recycling Center have ranged from 11 tons in 2010 to 32 tons in 2012. The chart also shows the expenditures for this program by the District.

Tons Collected and Expenditures for E-waste: 2010 - 2014



The table below shows the types of e-waste which are accepted at the recycling center. The Recycling Center charges residents \$30 for each television dropped off, and \$20 for each computer monitor. Even though there is a charge associated with disposing of TVs, this item comprises about 50 percent of the total e-waste received.

Types of E-waste Accepted at Ashland County Recycling Center

	ccepted at Ashland County cling Center
Televisions	Computer Mouse
Computer (CPUs)	Cell Phones
Scanners	Telephones
Stereos/Radios	VCRs
Laptops	Calculators
Monitors	PDAs
Keyboards	Small Copiers
Fax Machines	Blackberries
Printers	Home Video Equipment

1. Summary of E-Waste Program Findings and Challenges

The District's recycling center allows for the ongoing collection of electronic waste from residents and businesses. The following challenges have been identified by the District during the analysis of this program:

- Processing of electronics can be challenging, as occasionally large numbers of TVs or other items may be dropped off without any prior notification.
- · The cost of operating the program continues to grow.

E. Appliances

The District provides for the collection of appliances at the Ashland County Recycling Center (**program ID 181**). The tons of appliances collected are included in the ferrous metals recycling totals. The District does not identify any meaningful challenges to this program.

F. Household Batteries

The District collects household rechargeable batteries at the Ashland County Recycling Center. However, the District's website instructs residents to save their lithium button batteries for a HHW collection event. Less than one ton of household batteries were recycled from residential/commercial sources in 2014. The District does not identify any meaningful challenges to this program.

G. Bulk Items

Most communities have some type of bulk pickup for residents as a part of the collection contract with the service provider. Residents are typically required to call and schedule for pickup of a bulk item. The City of Ashland assesses an extra charge to residents for large items not bagged. The District does not identify any meaningful challenges to this program.

SECTION 7: DIVERSION ANALYSIS

The table below shows the amounts which were disposed and diverted from disposal through recycling from 2006 to 2014. Diversion in the residential/commercial sector has fluctuated since 2006, but was substantially higher in 2014 than 2006. Recycling in the industrial sector has also fluctuated, but was slightly higher in 2014 than 2006.

Disposal and Recycling in the Ashland County SWMD: 2006 - 2014

The second second		Comr	lential/ nercial	Indu	strial			Per Capita	Annual %
Year	Population		Recycled	Disposal	Recycled	Excluded	Total	Generation (ppd)	Change in Total Tons
2006	54,727	43,192	6,538	2,082	22,073	6,230	80,115	8.0	-
2007	54,727	38,887	6,893	1,290	16,069	8,887	72,025	7.2	-10.1%
2008	55,125	32,539	6,657	1,091	16,034	8,319	64,640	6.4	-10.3%
2009	55,125	30,759	7,574	795	14,803	6,235	60,166	6.0	-6.9%
2010	53,139	30,655	6,240	611	14,940	7,075	59,521	6.1	-1.1%
2011	53,139	31,315	5,772	1,235	15,863	7,411	61,596	6.4	3.5%
2012	53,153	29,661	8,905	1,612	12,522	7,867	60,565	6.2	-1.7%
2013	53,043	- TISKS NO. 1942	10,510	2,482	24,700	8,284	74,522	7.7	23.0%
2014	53,095	29,231	8,280	2,823	22,269	8,266	70,870	7.3	-4.9%

A. Residential/Commercial Sector

The District's residential/commercial recycling (or diversion) rate during the past five years has increased from 13.8 percent to nearly 21 percent (see the following table). The per capita diversion rate as measured in terms of pounds per person per day (PPD) has increased as well. The general increase in the diversion rate can be primarily attributed to the recovery of materials in the "other paper" category, which increased by more than 1,500 tons from 2010 to 2014.

Residential/Commercial Diversion Rates: 2010 - 2014

Vaca	Dive	ersion Rate
Year	Percent	Per Capita (PPD)
2010	13.83%	0.64
2011	15.07%	0.60
2012	22.45%	0.92
2013	25.53%	1.09
2014	20.91%	0.85

Compared to other rural SWMDs in Ohio, the diversion rate for the Ashland County SWMD is at the low end of the range for both the percentage recycled and per capita recycled. From 2010 through 2014, the statewide R/C percentage

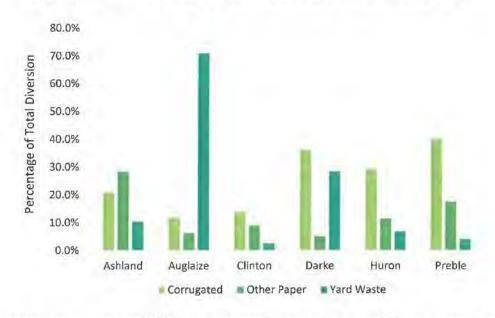
recycling rate increased slightly to 28.6 percent, while the per capita recycling rate increased from 1.66 to 1.81 PPD.

Residential/Commercial Sector Diversion Rates for Ohio Rural SWMDs: 2014

CIMILED Manua	Diversion Rate		
SWMD Name	Percent	Per Capita (PPD)	
Ashland	20.91%	0.85	
Auglaize	49.52%	2.32	
Clinton	28.02%	1.58	
Darke	25.14%	1.22	
Huron	19.71%	0.80	
Preble	13.85%	0.47	

The types of materials which are generally recovered for recycling from the residential/commercial sector in the selected rural SWMDs are illustrated in the following figure. The chart shows that yard waste comprises a very significant percentage of total diversion for Auglaize County, but comprises a much lower percentage of the total for other rural districts. Recovery of corrugated is important for all of these districts, while recovery of other paper is somewhat less important.

Types of Materials Recycled in Selected Rural SWMDs: 2014



The Ashland County SWMD experienced increases in R/C recycling tonnages from 2010 through 2014, while the disposal tonnages decreased. This dataset contained too few data points to determine a statistically significant relationship between recycling and disposal.

The current Plan projected 7,376 tons of residential/commercial recycling (including composting) for 2014. The residential/commercial sector rates projected in the current plan for 2014 were 18.3 percent and 0.71 PPD. Both the actual percentage and per capita diversion rates are somewhat higher than the projected values.

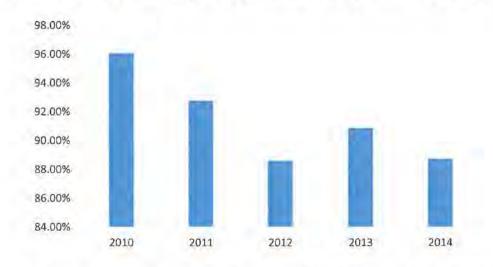
The District has not met Goal #2, which requires a minimum diversion rate of 25 percent for residential/commercial sector generated waste. The District believes that the following factors have contributed to a recycling rate which is below the *State Plan* target of 25 percent for the residential/commercial sector:

- Survey data responses from commercial businesses is at 24%.
- Rural nature of District.

B. Industrial Sector

The industrial recycling rates in the District for 2010 through 2014 is shown in the following figure. The District has consistently achieved an industrial recycling rate well above the percentage goal for industrial recycling established in the State Solid Waste Management Plan.

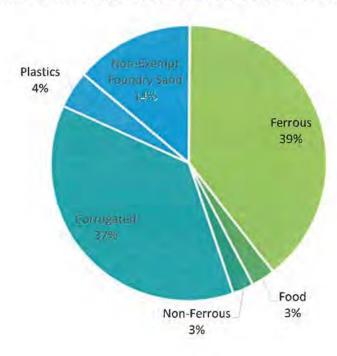




Compared to the current Plan which projected 15,290 tons of industrial recycling for 2014, the actual amount diverted in the reference year was 22,269 tons. The current plan also projected an industrial recycling rate of 93.6% for 2014, which is somewhat higher than the actual recycling rate.

As shown in the following figure, ferrous metals and corrugated represent the two material types recycled in greatest amounts in Ashland County for the industrial sector. Years 2010 through 2013 show similar relationships concerning the types of materials recycled from the industrial sector.

Industrial Material Types Recycled in Ashland SWMD: 2014



SECTION 8: SPECIAL PROGRAM NEEDS ANALYSIS

Format v4.0 defines Section 8 as programs which are specifically funded under the authority granted in Ohio Revised Code Section 3734.57(G)(3) through (9). These program areas of allowable uses for SWMD funds collected under ORC Section 3734.57 are as follows:

- · Section 3734.57(G)(3). Boards of Health, Solid Waste Enforcement
- Section 3734.57(G)(4). Counties, Road/Facility Maintenance
- Section 3734.57(G)(5). Boards of Health, Water Well Sampling
- Section 3734.57(G)(6). Out-of-state Waste Inspection
- Section 3734.57(G)(7). Enforcement of Anti-littering
- Section 3734.57(G)(8). Boards of Health, Training & Certification
- Section 3734.57(G)(9). Cities and Townships, Road maintenance, public services, etc.

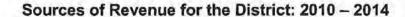
From 2010 through 2014, the District has provided \$5,000 per year to the Ashland County Health Department for solid waste enforcement activities under Section 3734.57(G)(3).

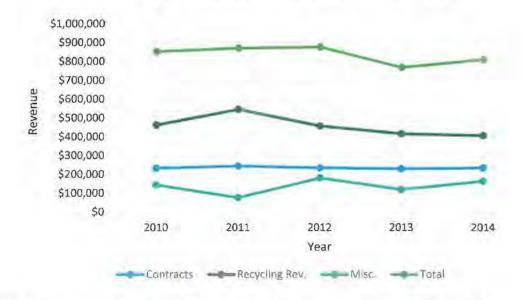
SECTION 9: FINANCIAL ANALYSIS

The financial analysis has been divided into three parts: Revenues, Expenses, and District Fund Balances.

A. Revenues

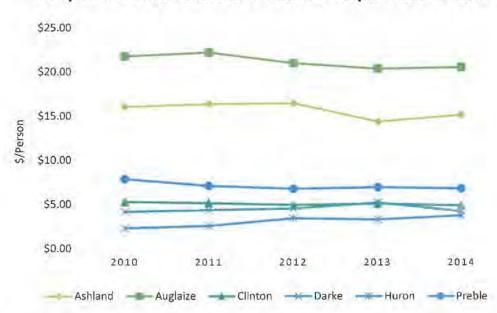
As shown in the figure below, money received from the sale of recyclables has consistently provided the majority of the revenue for the District. Contracts with solid waste facilities for the disposal of waste has also comprised a substantial amount of the total District revenue, ranging from roughly \$230,000 to \$245,000 over the five-year period. Total revenue has ranged from approximately \$769,000 in 2013 to \$878,000 in the prior year (2012). Decreasing revenue from recyclables have been the primary contributor towards lower overall revenues.





On a per person basis, the District collected an average of \$15.68 per capita during 2010 through 2014. Compared to the five other single-county solid waste districts similar in population, the Ashland County SWMD is in the upper range of revenue collected per person (see following figure). However, it is important to note that both the Auglaize and Ashland SWMDs, which collected the highest revenue amounts per person, operate material recovery facilities and recycling centers.⁴

⁴ Differences among SWMDs may also be due to accounting practices. Some SWMDs do not include revenues resulting from facility operations (or expenditures for those facilities) in their fee reports submitted to Ohio EPA if the collection of the revenues is not authorized statutorily in Ohio Revised Code Section 3734.57 or 343.



Comparison of Revenues Collected Per Capita: 2010 - 2014

The District's current Plan projected that approximately \$851,000 would be collected in revenues during 2014. The actual amount collected was \$812,000, or approximately \$40,000 less than projected.

In summary, the District's major revenue streams appear to be relatively stable and should continue to provide sufficient money for operations. In addition, the solid waste facilities providing most of the contract and generation fee revenue are expected to continue operating and receiving District waste for many years. However, due to the reliance on the sale of recyclables, the total revenue collected is subject to the fluctuation of the recycling commodity markets which experience high prices as well as low prices over time.

B. Expenditures

The major categories of expenditures for the District reported to Ohio EPA since 2010 have been the "recycling center" and the material recovery facility (or "MRF"), as shown in the following figure. The "MRF" expenditure category represents the amount of money which is transferred from the District revenue fund account each year to cover the costs of the Recycling Center which are not met by the sale of recyclables, etc. Thus, the total cost of owning and operating the Ashland County Recycling Center is the sum of "recycling center" and "MRF" expenditure categories, or \$734,921 in 2014. The cost of operating the District's drop-off recycling programs is included in the Recycling Center expenditures.

The total expenditures for the District have ranged from \$940,000 in 2012 to \$758,000 in the following year (2013). The total average expenditure during the five-year period was \$846,000 per year.

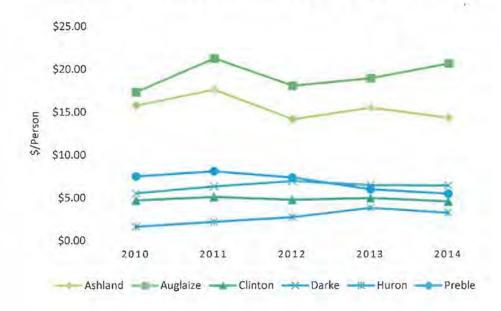
The total expenses for the Recycling Center as projected in the current Plan was \$709,000 for 2014, or only \$26,000 less than the actual expenditures.

\$1,000,000 \$900,000 \$800,000 \$700,000 \$600,000 \$500,000 \$400,000 \$300,000 \$200,000 \$100,000 \$0 2012 2014 2010 2011 2013 ---- Recycling Center MRF --- Totals

District Expenditures: 2010 - 2014

A comparison of the total expenditures per capita is shown in the following figure. The Auglaize and Ashland SWMDs have the highest per capita expenditure rates of the six solid waste management districts depicted. As suggested above, the higher expenditure rates are likely based upon the operation of material recovery facilities by these two SWMDs.

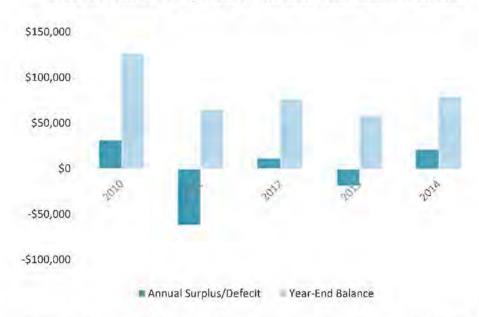




C. Balances

Expenditures have exceeded revenues in three of the last five years, with the annual deficit reaching \$62,000 in 2012 (see following figure). However, the District has maintained a positive year-end balance, although the District balance has decreased from more than \$95,000 in 2010 to \$58,000 in 2014.

District Annual Surplus/Deficit and Year-End Balances



The current Plan projected a carry-over or year-end balance for 2014 of approximately \$245,000 which is much higher than the actual balance. The actual balance is much lower than the amount projected, primarily because the District's expenditures have been higher than projected.

SECTION 10: REGIONAL ANALYSIS

The District is an affiliate member of the Chamber of Commerce through the Ashland County Commissioner's office. The District is also a member of the Organization of Solid Waste District in Ohio (OSWDO), and the District Director attends all of their quarterly meetings held with the Ohio EPA as well as their annual meeting.

The District is a member of the following organizations, but have been unable to attend all of the meetings or conferences the last 4 or 5 years due to time and travel budget constraints:

- Solid Waste Association of North America (SWANA)
- Association of Ohio Recyclers (AOR)
- Ohio Association of Litter Prevention and Recycling Professionals (OALPRP)

SECTION 11: POPULATION ANALYSIS

Population projections for this *Plan Update* were developed using documents published by the Ohio Development Services Agency. The District does not believe there is any reason to expect significant changes in the Ashland County population on an annual basis. In addition, no available population projections for the County predict significant annual changes. The projections for the planning period developed as a part of Appendix C show annual increases less than 100 in the total District population until 2021. At that time, annual increases are expected to be less than 200 until 2030. See Appendix C for further discussion regarding specific documents and assumptions used for the projections.

SECTION 12: DATA COLLECTION ANALYSIS

Existing Program Type	Existing Program IDs
Data Reporting Program	5225

The District collects data each year from entities located both within Ashland County and outside the county. Disposal data is reported to the District by solid waste facilities located in Ohio which are subject to the contract fee.

Each year the District also conducts a survey to obtain recycling data, composting data, and hauling information as a part of preparing the annual district report to be submitted to Ohio EPA. Some of the details of the collecting this information is listed in the following table.

In 2014, the District mailed survey forms to 112 manufacturing industries, and 34 were sent to commercial/institutional entities.

Follow-up phone calls are made as needed to businesses and municipalities. For example, a follow-up would be made in the case of an incomplete survey which was returned, or information included on the survey which was questionable (i.e., a very large quantity or an amount which was very different from a survey returned from the same respondent in a previous survey.

The response rates for the paper survey in 2014 were as follows:

- 27 percent for the industrial sector; and
- 24 percent for the commercial sector.

The District also obtained information from two municipalities, the Paper Retriever program, and used data from the Ashland County Recycling Center, and Ohio EPA's scrap tire, MRF, and compost facility reports.

Data Collection Methods Used by the District

Methods Used to Obtain Data	Residential	Sector Commercial	Industrial
Paper Survey	Yes	Yes	Yes
Type of entities surveyed	Municipalities	Commercial Enterprises	Manufacturing Enterprises
How are entities to be surveyed identified?	District Information	District Information, Ohio EPA Data	District Information
Follow-up	Yes, Phone Calls as Needed	Yes, Phone Calls as Needed	Yes, Phone Calls as Needed

Methods Used to Obtain Data	Residential	Sector Commercial	Industrial
Published Reports	No	Yes; Ohio EPA Documents	No
Websites	Check as Needed to Verify Addresses, or to Ensure that Hauler is Still Operating.	Check as Needed to Verify Addresses, or NAICS/SIC Code, or to Ensure that Entity is Still in Business.	Check as Needed to Verify Addresses, or NAICS/SIC Code, or to Ensure that Entity is Still Operating.

The potential for double-counting materials is addressed by comparing responses from generators with processors and material recovery facilities. Each commercial business and industry is asked to provide the processor receiving their materials. Assume that a business reports recycling 200 tons of cardboard and also reports that this material was sent to ABC Processor. Assume as well that ABC Processor responded to the survey and reported received 1,000 tons of cardboard from the District. In this case, only the amount reported by ABC Processor would be included in the District's recycling totals, and not the 200 tons from the business.

The District uses Ohio EPA's Material Recovery Facility and Commercial Recycling Data Report, Compost Facility Report Data Report, and Scrap Tire Data Report that are published annually. Data in these reports is cross-referenced with data reported through District surveys (when possible). Discrepancies between Ohio EPA's data and data reported from other sources has been identified on occasion. When issues are identified, they are addressed with Ohio EPA and resolved.

A. Summary of Program Findings and Challenges

The District has a relatively successful data collection program, including survey response rates which are very respectable for efforts of this type. Data is collected from entities within Ashland County each year so businesses can expect to receive survey forms in the early part of every calendar year. The following challenges have been identified by the District during the analysis of this program:

 Changes could be made towards improving data collection (better response rates, more accuracy, etc.) such as establishing a program which would contact a certain number of businesses each year through a phone call or a face-to-face meeting.

SECTION 13: RECYCLABLE MATERIAL PROCESSING CAPACITY ANALYSIS

The District operates the Ashland County Recycling Center which processes materials

from communities and businesses throughout the County⁵ (**program ID 8455**). A major portion of the Recycling Center's operation is comprised of the drop-off recycling programs, which involve establishing a drop-off site, placing containers at the site, hauling those containers to the Recycling Center when full, and then processing the recyclables at the Center. As described in earlier sections of the Appendix, drop-off programs have been established for the public, schools, government offices, and for commercial and industrial companies.



The Recycling Center also includes a buyback for aluminum cans and other non-ferrous metals.

The Recycling Center operations include the following employees:

- · 4 full-time employees;
- · 2 part-time floor workers; and
- 3 part-time drivers

After being received at the Recycling Center, the recyclables are separated for baling and/or shipment. Although recyclables are designed to be collected in a dual stream, some sorting is typically required. Cardboard, mixed paper, and printer grade paper are baled, while plastics (and usually some aluminum cans which are mixed in) are transported to Republic's material recovery facility in Lorain County.



The District has identified two issues associated with the future operation of the Recycling Center which will need to be addressed:

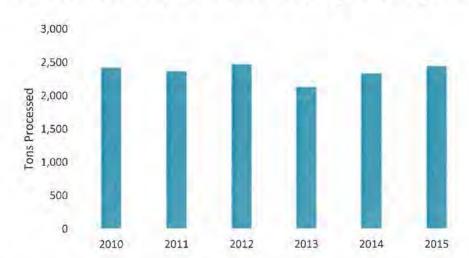
 Labor. Due to ongoing work requirements at the Recycling Center, additional labor is needed. The District believes that converting one part-time worker to a full-time worker will adequately address this issue.

⁵ The City of Ashland's Sanitation Department is the service provider for residents and businesses within the City.

Baler. The existing baler system was installed at the Center in the year 2000.
The baler will need to be replaced within the next 4 to 5 years. The District has
already begun discussions regarding the baler replacement, including the
financing of this project which is expected to cost \$250,000 to \$300,000.

Overall processing capacity has not been identified as a problem at this facility, although adequate space for equipment, recyclables, storage of bales, etc. is usually an issue requiring attention. Maintaining adequate space at the Recycling Center has been described by the District as a management issue.

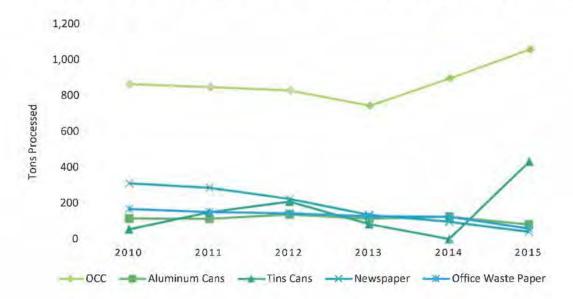
The tons of materials processed at the Recycling Center has remained relatively constant since 2010, as shown in the following figure.



Total Tons Processed at the Ashland County Recycling Center

Corrugated cardboard has consistently comprised the highest tonnage of the materials which are processed at the Recycling Center. The following figure shows the tons of corrugated cardboard as well as some of the other materials which are processed most frequently.

Tons of Recyclables Processed at Ashland Recycling Center by Material



APPENDIX I

CONCLUSIONS, PRIORITIES, AND PROGRAM DESCRIPTIONS

APPENDIX I. Conclusions, Priorities, and Program Descriptions

This Appendix contains two major sections with subsections included within each one. Section A includes a comprehensive list of the possible action items (or programs to be implemented) which the District or some other entity within Ashland County could undertake during the planning period. The list is based upon the conclusions drawn from the program evaluations, and is intended to encompass all possible areas of focus. The list does not necessarily represent the programs or initiatives which the District will commit to implement during the subsequent planning period.

The second subsection of Section A presents a prioritization of the list referenced above in order to show the most important issues which need to be addressed by the District. The steps taken to prioritize the list are discussed in this subsection.

Section B of this Appendix utilizes the results of the analyses described in Section A and presents the programs and/or initiatives which will be implemented by the District (or within the District) during the subsequent planning period. Both existing programs which will be continued as well as new programs are described in Section B.

A. Actions and Priorities

1. List of Possible Actions

The list of possible actions or programs identified through the evaluations presented in Appendix H is shown in the following table. The list is organized according to the program categories included in the Format v4.0 under Appendix I for Section B.

List of Possible District Actions or Programs

Program Category	Action or Program Name	Comments
Residential Recycling Infrastr	ucture	
	Continue existing programs	
Curbside Recycling Services	Facilitate implementation of non-subscription curbside collection in villages and townships	
	Facilitate the formation of collection consortiums	

Program Category	Action or Program Name	Comments
Curbside Recycling Services	Explore the possibility of securing grants with communities to improve the recovery rates of existing curbside programs	Curbside programs that are tote or bag based could benefit from transitioning to carts using Ohio EPA grant funding
Drop-off Recycling: Publicly- Available Sites	Continue existing program	Expand or contract sites as needed based on performance and other factors
Available Sites	Minimize contamination and littering	Signage, participant engagement, enforcement
Drop-off at Schools	Continue existing program	
	Continue existing program	
Special Events	Promote use of recycling container program to community event organizers	
Commercial/Institutional Sector		
Drop-off Recycling	Continue existing program	
Education/Awareness	Continue existing program	a a
Industrial Sector Reduction/Red	cycling	
Recycling Center Access	Continue existing program	
Waste Assessments and Audits	Continue existing program	
Restricted/Difficult to Manage V	Vastes	
Scrap Tires	Explore ways of reducing collection event costs	
	Encourage residents to turn in old tires at dealers	
HHW	Explore collection options for HHW materials not accepted locally	
Lead Acid Batteries	Continue existing program	
E-Waste	Develop sustainable options for collection of TVs	
	Evaluate cost containment options	

Program Category	Action or Program Name	Comments
Appliances	Continue existing program	
Household Batteries	Continue existing program	
Bulk Items	Continue existing program	
Outreach, Education, Awarer	ness, and Technical Assistanc	e
Covered in Appendix L	See table below	
Funding		
	Continue existing funding sources	
Funding	Apply for community development grants for recycling center improvements	Promote grant to communities and target specific needs for project grant covers
Grants	Promote community development grant to communities and institutions	
	Promote market development grant to businesses	
Economic Incentives		
Technical Assistance	Continue existing program	Focus on residential sector
Facilities		
Recyclables Processing	Converting a part time laborer to full time to increase productivity	
	Replace existing baler	
Data Collection		
Data Collection	Contact set number of businesses annually	Could be through phone call or face-to-face meeting. Involve chamber of commerce to determine roadblocks or success options

The following table summarizes the potential actions to be considered based on the analysis conducted in Appendix L.

List of Possible District Actions or Programs for Education and Outreach

Existing Potential Actions			
District Website	Track the number of visits to the website.		
District Website	Minimize the website's "down time" by fixing pages that are under construction as quickly as possible.		
District Website	Include the Recycling Guide online as a downloadable, printable PDF.		
District Website	Improve user-friendliness by reorganizing information and adding a tab for each target audience, such as residents, businesses, governments, etc.		
Presentations	Promote availability of presentations to non-school groups (civic groups) using a variety of means, such as posting on the District website and employing the support of related organizations to promote presentations to members, such as the Chamber of Commerce.		
Presentations	Begin tracking the number of individuals reached by each presentation and the name of each school so the District call identify the number of students and schools reached each year.		
Presentations	Request that educators or group leaders complete a feedback form after a presentation has been completed.		
Presentations	If available, track recycling tonnage from schools with recycling programs to estimate if there is a correlation between presentations given and waste diverted.		
Adopt-a-Road	Identify groups that have a volunteer requirement or organizations that typically perform community service and target these groups to receive information about the District' Adopt-a-Road program.		
Adopt-a-Road	Begin tracking additional program statistics, such as the number of bags collected, weight of bags collected, and/or number of hours volunteered.		
Educational Display at Fairgrounds and Community Events	Ensure promotional items display the District's contact information and that flyers for each target audience are available at the display.		
Educational Display at Fairgrounds and Community Events	Begin tracking or estimating the total publications that are distributed at each event each year, the total number of events attended, and/or increased traffic to the District's website following an event.		
Contests	Inform more school districts about contests to increase participation.		
Contests	Add additional measures of effectiveness, such as tracking whether contests change behavior by tracking whether recycling tonnage increases at participating schools and/or track number of locations where contest winners' posters are displayed.		

Existing Programs	Potential Actions
Business/Industrial Sector Waste Audits	Follow up with entities who participated in an assessment to identify whether the companies were able to implement changes to realize the waste reduction and cost savings identified in their analysis.
Business/Industrial Sector Waste Audits	Request feedback from establishments that participated in an audit to identify how the District can further serve this audience more effectively.

2. Prioritizing the List of Actions

The District reviewed the information presented above, and prioritized the list focusing on the actions which were determined to be most important and those which would require less difficulty in implementing. The step-by-step process which the District used to prioritize the list was as follows:

- The ranking consisted of each member of the District assigning a value of between 1 and 5 to each initiative with 5 being the highest priority and 1 being the least.
- The priority ranking defined whether the District felt an initiative or program would be implemented under the following criteria:
 - Ranking of 1 No implementation
 - Ranking of 2 No implementation
 - Ranking of 3 Possible implementation with direction from Policy Committee
 - Ranking of 4 Implement
 - o Ranking of 5 Implement
- The District then prioritized the results from the above step.
- The list of prioritized possible actions was then presented to the Policy Committee with discussion from District personnel and the District's consultant focusing on the initiatives or programs ranked as a 3 from the criteria above.
- The Policy Committee was then asked to assist the District to decide
 if the initiatives ranked as a 3 should or should not be implemented
 in the new Plan Update.
- The Policy Committee was also asked to confirm that all initiative ranked as a 4 or 5 should be implemented as recommended by the District and that initiatives ranked 1 or 2 should not be implemented as recommended by the District.
- The results of this prioritization process and the programs/initiatives developed or continued are detailed in Chapter V of this Plan Update.

The following table summarizes the District's and Policy Committee's priorities for implementation of the possible list of actions by program:

Policy Committee Prioritization of Possible Actions

Program Category	Action or Program Name	District Priority	Policy Committee Decision
Residential Recycling	Infrastructure		
	Continue existing programs	5	Implement
	Facilitate implementation of non-subscription curbside collection in villages and townships	3	Survey Communities on Interest in 2019
Curbside Recycling Services	Facilitate the formation of collection consortiums	3	Survey Communities on Interest in 2019
	Explore the possibility of securing grants with communities to improve the recovery rates of existing curbside programs	4	Implement
	Continue existing program	5	Implement
Drop-off Recycling: Publicly-Available Sites	Minimize contamination and littering	4	Implement
Drop-off at Schools	Continue existing program	5	Implement
	Continue existing program	5	Implement
Special Events	Promote use of recycling container program to community event organizers	4	Implement
Commercial/Institution	al Sector Reduction/Re	cycling	
Drop-off Recycling	Continue existing program	5	Implement
Education/Awareness	Continue existing program	5	Implement
Industrial Sector Redu	ction/Recycling		
Recycling Center Access	Continue existing program	5	Implement
Waste Assessments and Audits	Continue existing program	5	Implement
Technical Assistance	Continue existing program	4	Implement

Program Category	Action or Program Name	District Priority	Policy Committee Decision
Restricted/Difficult to	Manage Wastes		
Scrap Tires	Explore ways of reducing collection event costs	4	Implement
7	Encourage residents to turn in old tires at dealers	4	Implement
HHW	Explore collection options for HHW materials not accepted locally	4	Implement
Lead Acid Batteries	Continue existing program	5	Implement
E-Waste	Develop sustainable options for collection of TVs	5	Implement
	Evaluate cost containment options	5	Implement
Appliances	Continue existing program	5	Implement
Household Batteries	Continue existing program	5	Implement
Bulk Items	Continue existing program	5	Implement
Outreach, Education, A	Awareness, and Technic	al Assistan	ce
Covered in Appendix L	See table below		
Funding			
	Continue existing funding sources	5	Implement
Funding	Apply for community development grants for recycling center improvements	4	Implement
Grants	Promote community development grant to communities and institutions	3	Implement
	Promote market development grant to businesses	3	Implement
Facilities			
Recyclables Processing	Converting a part time laborer to full time to increase productivity	5	Implement

Program Category	Action or Program Name	District Priority	Policy Committee Decision	
	Replace existing baler	4	Implement	
Data Collection				
Data Collection	Contact set number of businesses annually	5	Implement	

The following table summarizes the District's and Policy Committee's priorities for implementation of the possible list of actions by program for education and outreach:

Policy Committee Prioritization of Possible Actions

Existing Programs	Potential Actions	District Priority	Policy Committee Decision
District Website	Track the number of visits to the website.	4	Implement
District Website	Minimize the website's "down time" by fixing pages that are under construction as quickly as possible.	5	Implement
District Website	Include the Recycling Guide online as a downloadable, printable PDF.	5	Implement
District Website	Improve user-friendliness by reorganizing information and adding a tab for each target audience, such as residents, businesses, governments, etc.	4	Implement
Presentations	Promote availability of presentations to non-school groups (civic groups) using a variety of means, such as posting on the District website and employing the support of related organizations to promote presentations to members, such as the Chamber of Commerce.	4	Implement
Presentations	Begin tracking the number of individuals reached by each presentation and the name of each school so the District can identify the number of students and schools reached each year.	3	Implement
Presentations	Request that educators or group leaders complete a feedback form after a presentation has been completed.	3	Create evaluation form in 2018

Existing Programs	Potential Actions	District Priority	Policy Committee Decision
Presentations	If available, track recycling tonnage from schools with recycling programs to estimate if there is a correlation between presentations given and waste diverted.	2	No Implementat ion
Adopt-a-Road	Identify groups that have a volunteer requirement or organizations that typically perform community service and target these groups to receive information about the District's Adopt-a-Road program.	4	Implement
Adopt-a-Road	Begin tracking additional program statistics, such as the number of bags collected, weight of bags collected, and/or number of hours volunteered.	3	Implement
Educational Display at Fairgrounds and Community Events	Ensure promotional items display the District's contact information and that flyers for each target audience are available at the display.	4	Add District Web Site to Display to Direct Residents to Educational Resources
Educational Display at Fairgrounds and Community Events	Begin tracking or estimating the total publications that are distributed at each event each year, the total number of events attended, and/or increased traffic to the District's website following an event.	2	Do Not Implement
Contests	Inform more school districts about contests to increase participation.	5	Implement
Contests	Add additional measures of effectiveness, such as tracking whether contests change behavior by tracking whether recycling tonnage increases at participating schools and/or track number of locations where contest winners' posters are displayed.	2	Do Not Implement
Business/ Industrial Sector Waste Audits	Follow up with entities who participated in an assessment to identify whether the companies were able to implement changes to realize the waste reduction and cost savings identified in their analysis.	4	Implement
Business/ Industrial	Request feedback from establishments that participated in an	4	Implement

Existing Programs	Potential Actions	District Priority	Policy Committee Decision	
Sector Waste Audits	audit to identify how the District can further serve this audience more effectively.			

B. Programs

This section utilizes the results of Section A above and lists:

- Each existing program that the District will continue.
- Each new program that the District will implement during the planning period.

Descriptions for continuing existing programs are referenced in Appendices H and L, while new programs or changes to existing programs are fully described in the table below.

District Programs: 2018-2032

Pro	ogram	Description	OEPA ID	Start Date	End Date	Goal(s
Residential I	Recycling Infras	structure				
Curbside Recycling Services	Non- Subscription Curbside Recycling	City of Ashland	149	1990	Ongoing	1, 2,7
	Subscription Curbside Recycling	Loudonville Village	8454	Ongoing	Ongoing	1,2,7
	Curbside Facilitation Technical Assistance	Facilitate implementation of non- subscription curbside collection in villages and townships	N/A	2018	2032	1,2,7
	Consortium Technical Assistance	Facilitate the formation of collection consortiums	N/A	2018	2032	3,4
		Buehler's Market Sugarbush Dr. Ashland, OH	FTU1	2009	Ongoing	1,2,7
Drop-off Recycling	Full Time Urban	Ashland Co. Recycling Ctr. 1270 Middle Rowsburg Rd. Ashland, OH	FTU2	1990	Ongoing	1,2,7

P	rogram	Description	OEPA ID	Start Date	End Date	Goal(s
	Part-Time Urban	None	N/A	N/A	N/A	N/A
	0.55	Ashland Co. Service Ctr. (Vermillion Twp.) 1763 SR 60 S Ashland, OH	7853	2009	Ongoing	1,2,7
		Stake's IGA (Hanover Twp.) North Jefferson St. Loudonville, OH	174	2000	Ongoing	1,2,7
	Full-Time Rural	Clear Creek Township 37 S. Main St. Savannah, OH	158	Ongoing	Ongoing	1,2,7
	1	Troy Twp. Garage US 224, Nova, OH	5852	2005	Ongoing	1,2,7
	4	Mifflin Twp. Garage 36 Maine St. Mifflin, OH	178	Ongoing	Ongoing	1,2,7
		Perrysville Fire Dept. SR 39, Perrysville, OH	175	2000	Ongoing	1,2,7
		Cinnamon Lake CR 620, Jackson, OH	8906	2012	Ongoing	1,2,7
		Lake Twp. Garage 2499 CR 3374 Loudonville, OH	177	Ongoing	Ongoing	1,2,7
	Part-Time Rural	Jackson Twp. Polk Ballfield Congress St. Polk, OH	5362	Ongoing	Ongoing	1,2,7
		Sullivan/Clear Creek Twp. Garage 245 Twp. Hwy. 501 Sullivan, OH	161	Ongoing	Ongoing	1,2,7
		Mohican Twp. Garage 2008 SR 89 Jeromesville, OH	5364	Ongoing	Ongoing	1,2,7
	Add, remove needed	or adjust sites as	N/A	2018	2032	1,2,7
		ntamination and littering itional education and	N/A	2018	2032	N/A
	Container los	an program	N/A	Ongoing	Ongoing	2,7
Special Events		of recycling container community event	N/A	2018	2032	3,4

Prog	ram Descri p tion	OEPA ID	Start Date	End Date	Goal(s
Commercial/In	stitutional Sector Reduction and Rec	ycling F	rograms		
	Black River Elementary	8458	2012	Ongoing	2,7
Commercial/Institutional Sector Reduction and Recycling Programs	Hillsdale Elementary	8459	1995	Ongoing	2,7
	Ongoing	2,7			
	Black River Elementary 8458 2012 Ongoing Hillsdale Elementary 8458 2012 Ongoing Hillsdale High School 8460 1995 Ongoing Hillsdale Middle School 8582 1995 Ongoing Hillsdale Middle School 8582 1995 Ongoing Hillsdale Middle School 8460 1995 Ongoing Hillsdale Middle School 8582 1995 Ongoing Mapleton High School 8463 2010 Ongoing Mapleton High School 8463 2010 Ongoing Mapleton Elementary 8465 n/a Ongoing Mapleton Elementary School 9419 2012 Ongoing Mapleton Elementary School 9419 2012 Ongoing Add, remove or adjust sites as needed N/A 2018 2032 Ongoing Ongoi	2,7			
Sahaal Dran	Kno-Ho-Co Head Start	8461	1995	te Date Imms 2 Ongoing 35 Ongoing 35 Ongoing 35 Ongoing 36 Ongoing 37 Ongoing 38 Ongoing 39 Ongoing 40 Ongoing 50 Ongoing 51 Ongoing 52 Ongoing 53 Ongoing 64 Ongoing 65 Ongoing 66 Ongoing 67 Ongoing 68 2032 68 2032 68 2032	2,7
	Mapleton High School	8463	2010	Ongoing	2,7
	Montgomery Elementary	8465	n/a	Ongoing	2,7
	Mapleton Elementary School	9419	2012	Ongoing	2,7
	Black River High School	N/A	2015	Ongoing	2,7
		N/A	2018	2032	2,7
	Armstrong Cable TV				
	Ashland Publishing		Ongoing	Ongoing	
	Cleveland Avenue Market				
	Family Dollar Store				
	ODOT District 3 Facility	8470			
Document of the second					2,7
	Dor-Lo Pizza				
Collection	Eagles Club				
	Wil Research				
	UPS Store				
	Thiel's Replacement Systems				
		N/A	2018	2032	2,7
ndustrial Sect	tor Reduction and Recycling Program	s			
Center	entities will continue to have access to	N/A	Ongoing	Ongoing	3,4
		N/A	2018	2032	3,4
and	participated in an assessment to identify whether the companies were able to implement changes to realize the waste reduction and cost savings	N/A	2018	2032	3,4
	Request feedback from establishments that participated in an audit to identify how the District can further serve this audience more	N/A	Ongoing	Ongoing	3,4

Prog	gram Description	OEPA ID	Start Date	End Date	Goal(s
Restricted/Dif	ficult to Manage Wastes				
Household	Education program for HHW, electronics, and lead-acid batteries	204	1990	Ongoing	3,4
Hazardous Waste	HHW Collection Program	201	1992	Ongoing	2,5,7
Restricted/Dia Household Hazardous Waste Scrap Tires Lead-Acid Batteries Appliances Household Batteries	Evaluate collection options for new materials not collected locally	N/A	2019	2020	2,5,7
	Year-round tire collection at Collection Center	198	Ongoing	Ongoing	2,5,7
Scrap Tires	Explore ways of reducing collection event costs	N/A	2019	2020	5
	Encourage residents to turn in old tires at dealers	N/A	2020	2021	3,4
	Electronics Collection	5365	2000	Ongoing	5,7
Electronics	Develop sustainable options for collection of TVs	N/A	2019	2020	5,7
	Evaluate cost containment options	N/A	2021	2022	5,7
Lead-Acid Batteries	Lead-acid battery collection	212	1990	Ongoing	2,5,7
Appliances	Year-round appliance collection at Collection Center	181	1996	Ongoing	2,5,7
Household Batteries	Household battery collection	N/A	1990	Ongoing	2,5,7
Outreach, Edu	cation, Awareness, and Technical A		e		
	District website	5370	1992	Ongoing	3,4
	Track the number of visits to the website.	N/A	2018	2032	3,4
	Minimize the website's "down time" by fixing pages that are under construction as quickly as possible.	N/A	2018	2032	3,4
Web Page	Include the Recycling Guide online as a downloadable, printable PDF.	N/A	2018	2032	3,4
	Improve user-friendliness by reorganizing information and adding a tab for each target audience, such as residents, businesses, governments, etc.	N/A	2018	2032	3,4
	Environmental education coordinator	190	2001	Ongoing	3,4
Presentations	Promote availability of presentations to non-school groups (civic groups) using a variety of means, such as posting on the District website and	N/A	2018	2032	3,4

Prog	ram	Description	OEPA ID	Start Date	End Date	Goal(s
	organization presentation	ne support of related is to promote is to members, such as er of Commerce.				
	Begin tracki individuals r presentation school so th	ng the number of eached by each and the name of each e District can identify the tudents and schools	N/A	2018	2032	3,4
	Request that leaders com	t educators or group plete a feedback form entation has been	N/A	2018	2018	3,4
Adopt-a-Road program	Continue to program	operate Adopt-a-Road	5372	2003	Ongoing	3,4
	Identify grou requirement typically per and target the	ips that have a volunteer or organizations that form community service nese groups to receive about the District's Adopt- gram.	N/A	2018	2032	3,4
	statistics, su collected, we	ng additional program ich as the number of bags eight of bags collected, per of hours volunteered.	N/A	2018	2032	3,4
Educational Display at		sting education displays Is and community events	187	1995	Ongoing	3,4
Fairgrounds and Community Events	District's cor	notional items display the ntact information and that ch target audience are the display.	N/A	2018	2032	3,4
	Annual post	er contest	186	2000	Ongoing	3,4
Contests		e school districts about increase participation.	N/A	2018	2032	3,4
Tours		will continue to host tours te and recycling facilities.	191	1992	Ongoing	3,4
Funding/Grant	s					
	The second second	sisting funding sources	N/A	Ongoing	Ongoing	Varies
Funding		mmunity development ecycling center nts	N/A	2018	2032	Varies
Grants		mmunity development nmunities and institutions	N/A	2018	2032	Varies

Pro	gram	Description	OEPA ID	Start Date	End Date	Goal(s)
	Promote ma	arket development grant es	N/A	2018	2032	Varies
Economic In	centives					
Technical Assistance	Continue prassistance.	Continue providing technical assistance.		2018	2032	Varies
Facilities						
MRFs/	Continue operating Ashland County Recycling Center		8455	Ongoing	Ongoing	1,2,3,4, 5,7,8
Recycling Centers	Transition p	art time employee to full	N/A	2018	2018	n/a
	Upgrade baler		N/A	2020	2021	n/a
Data Collecti	on					
Data Reporting	Annual Surveying	District sends surveys to commercial and industrial businesses annually.	8471 8472	Ongoing	Ongoing	9
Program	Survey Follow-Up	Contact set number of businesses annually	N/A	2018	2032	9

APPENDIX J

REFERENCE YEAR OPPORTUNITY TO RECYCLE AND DEMONSTRATION OF ACHIEVING GOAL I

APPENDIX J. Reference Year Opportunity to Recycle and Demonstration of Achieving Goal 1

Although the District and communities within the District maintain extensive curbside and drop-off recycling programs, the District has chosen to demonstrate compliance with Goal 2 of the 2009 State Solid Waste Management Plan instead of Goal 1. However, this Appendix presents the District's assessment of the opportunity to recycle within Ashland County in association with the requirements of Goal 1.

A. Residential Sector Opportunity to Recycle

The following table presents the curbside recycling opportunities in the reference year and year 5, 10, and 15 of the planning period, as well as the population credit received for each location.

Table J-1a. Opportunity to Recycle: Curbside Programs

County	ID#	Ashland	2014		2022 (Year 5)		2027 (Year 10)		2032 (Year 15)	
		Community	Pop.	Credit	Pop.	Credit	Pop.	Credit	Pop.	Credit
Ashland	NSC1	City of Ashland	20,218	20,218	20,713	20,713	21,034	21,034	21,430	21,430
Ashland	SC1	Village of Loudonville	2,626	657	2,690	673	2,732	683	2,783	696

Source(s) of Information: Ohio Development Services Agency, 2014 Population Estimates by County, City, Village, and Township, May 2015.

Both curbside programs operating during the reference year are expected to continue. The following figure presents the estimated population with access to curbside recycling programs.

Table J-1a2. Summary Table for Opportunity to Recycle: Curbside Recycling Programs

Year	Population Data	County Ashland
	Total County	53,095
2014	Credit	20,875
	% Access	39%
0000	Total County	54,396
2022 (Year 5)	Credit	21,386
(1.55.5)	% Access	39%

Year	Population Data	County Ashland
2027 (Year 10)	Total County	55,238
	Credit	21,717
(% Access	39%
0000	Total County	56,278
2032 (Year 15)	Credit	22,126
	% Access	39%

The following table presents the drop-off recycling opportunities in the reference year and year 5, 10, and 15 of the planning period, as well as the population credit received for each location.

Table J-1b1. Opportunity to Recycle: Drop-off Programs (2014-2032)

ID#	Ashland	2014		2022 (Year 5)		2027 (Year 10)		2032 (Year 15)	
	Name of Drop-Off Site	Pop.	Credit	Pop.	Credit	Pop.	Credit	Pop.	Credit
FTU1	Buehler's Market Sugarbush Dr. Ashland, OH	20,218	0	20,713	0	21,034	0	21,430	0
FTR1	Orange Twp. Garage 930 CR 801 Ashland, OH	20,218	0	20,713	0*	21,034	0*	21,430	0*
FTR2	Ashland Co. Service Ctr. (Vermillion Twp.) 1763 SR 60 S Ashland, OH	20,218	0	20,713	0	21,034	0	21,430	0
FTU2	Ashland Co. Recycling Center 1270 Middle Rowsburg Rd. Ashland, OH	20,218	0	20,713	0	21,034	0	21,430	0
FTR3	Stake's IGA (Hanover Twp.) North Jefferson St. Loudonville, OH	2,626	2,500	2,690	2,500	2,732	2,500	2,783	2,500
FTR4	Clear Creek Township 37 S. Main St. Savannah, OH	2,294	2,500	2,350	2,500	2,387	2,500	2,432	2,500
FTR5	Troy Twp. Garage US 224, Nova, OH	1,122	2,500	1,149	2,500	1,167	2,500	1,189	2,500
FTR6	Mifflin Twp. Garage 36 Maine St. Mifflin, OH	1,144	2,500	1,172	2,500	1,190	2,500	1,213	2,500

ID#	Ashland	2014			22 ar 5)		27 ir 10)	2032 (Year 15)		
	Name of Drop-Off Site	Pop.	Credit	Pop.	Credit	Pop.	Credit	Pop.	Credit	
FTR7	Perrysville Fire Dept. SR 39 Perrysville, OH	1,981	2,500	2,030	2,500	2,061	2,500	2,100	2,500	
FTR8	Cinnamon Lake CR 620 Jackson, OH	1,100	2,500	1,127	2,500	1,144	2,500	1,166	2,500	
PTR1	Lake Twp. Garage 2499 CR 3374 Loudonville, OH	701	2,500	718	2,500	729	2,500	743	2,500	
PTR2	Jackson Twp. Polk Ballfield Congress St. Polk, OH	3,920	2,500	4,016	2,500	4,078	2,500	4,155	2,500	
PTR3	Sullivan Garage 245 Twp. Hwy. 501 Sullivan, OH	2,294	0	2,350	0	2,387	0	2,432	0	
PTR4	Mohican Twp. Garage 2008 SR 89 Jeromesville, OH	2,023	2,500	2,073	2,500	2,105	2,500	2,144	2,500	

Sources of Information: Ohio Development Services Agency, 2014 Population Estimates by County, City, Village, and Township, May 2015.

Note: *FTR1, Orange Twp. Garage was discontinued after the 2014 reference year due to contamination issues.

Some sites in the table are listed with a population credit of zero. These sites are either located in communities that provide non-subscription curbside recycling access, or they are located in communities with multiple drop-offs. Communities with non-subscription curbside recycling programs have a population credit equal to 100% of the total population; therefore, additional population credit for drop-offs cannot be counted toward achieving Goal 1 because the access credit would exceed the total population of the political subdivision. Likewise, if multiple drop-offs are located in the same community, additional population credit for more than one drop-off cannot be counted toward achieving Goal 1 if the access credit exceeds the total population of the political subdivision. The following figure presents the estimated population with access to curbside recycling programs.

Table J-1b2. Summary Table for Opportunity to Recycle:
Drop-off Programs

Year	Population Data	County Ashland
	Total County	53,095
2014	Credit	20,000
	% Access	38%
2002	Total County	54,396
2022 (Year 5)	Credit	20,000
(10010)	% Access	37%
2732	Total County	55,238
2027 (Year 10)	Credit	20,000
(1001 10)	% Access	36%
2032 (Year 15)	Total County	56,278
	Credit	20,000
	% Access	36%

The following figure presents the estimated population with access to curbside and drop-off recycling programs in the reference year. During 2014, 77% of residents had access to recycling programs.

Table J-1C. Summary Table for Opportunity to Recycle:
Access Percentage

Year	Population Data	County Ashland			
	Total County	53,095			
	Credit for:				
2014	Curbsides	20,875			
2014	Drop-offs	20,000			
	Total	40,875			
	% Access	77%			

Tables J-2 and J-3 are not applicable to the District and have been omitted.

B. Commercial Sector Opportunity to Recycle

Table J-4. Infrastructure Demonstration for the Commercial Sector

Service Provider	Type of Recycling Service Provided	Cc	Мр	Sc	PI	W
Ashland County Recycling Center	Material Recovery Facility	1	1	1	1	1
Ashland County Solid Waste Management District	Hauler Collection*	1	1			
Buckeye Diamond Logistics	Hauler Collection, Pallet Refurbisher	1			1	1
Carolls Truck Parts (Galion, OH)	Scrap Yard			1		
City of Ashland (Ashland, OH)	Hauler Collection	1				
District Drop-Offs	Drop-Off	1	1	1	1	
Gateway Recycling (Cleveland, OH)	Hauler Collection	1	1	1	1	
Innovative Recycling (Galion, OH)	Buy Back	1	1	1	1	
Medina Recycling (Medina, OH)	Hauler Collection, Buy Back	1	1		1	
Metal Conversions (Mansfield, OH)	Scrap Yard			1		
Milliron Recycling (Mansfield, OH)	Scrap Yard, Buy Back	1	1	1	1	
OmniSource (Mansfield, OH)	Scrap Yard, Hauler Collection			1		
Premier Pallet and Recycling	Hauler Collection, Pallet Refurbisher					1
PSC Metals (Wooster, OH)	Scrap Yard			1		
Royal Oaks Paper Retriever (Multiple Locations)	Hauler Collection		1			
Rumpke (Columbus, OH)	Hauler Collection, Material Recovery Facility	1	1	1	1	
Sims Metal Management (Delaware/Columbus, OH)	Scrap Yard			~		

 $Cc = corrugated\ cardboard,\ Mp = mixed\ paper,\ Sc = steel\ cans,\ Pl = plastics,\ W = wooden\ pallets$ and packaging

Table J-4, "Infrastructure Demonstration for the Commercial Sector," presents drop-offs, buy backs, scrap yards, haulers, and pallet refurbishers that provide recycling opportunities to the commercial/institutional sector. The total number of recycling opportunities in the District's jurisdiction for five materials designated for the commercial sector to demonstrate compliance with Goal 1 are as follows:

Cardboard: 10
Mixed paper: 9
Steel cans: 11
Plastics: 8

Wood pallets and packaging: 3

C. Demonstration of Meeting Other Requirements for Achieving Goal 1

1. Residential/Commercial Waste Reduction and Recycling Rate

In the 2014 reference year, the District's residential/commercial sector achieved a 22% waste reduction and recycling rate, which was less than the 25% requirement to achieve Goal 1. The waste reduction and recycling rate increased to 29% in 2015 and is projected to remain at approximately 30% each year throughout the planning period. The waste reduction and recycling rate for the residential/commercial sector is projected to exceed the 25% requirement by 2015 based on anticipated volumes of recycling from MRFs, retailers that report to Ohio EPA, scrap tire recyclers, the drop-off recycling program, curbside recycling programs, and organics diversion facilities.

2. Industrial Waste Reduction and Recycling Rate

In the 2014 reference year, the District's industrial sector achieved an 88% waste reduction and recycling rate, which exceeds the 66% requirement to achieve Goal 1. The waste reduction and recycling rate for the industrial sector is projected to exceed the 66% requirement throughout the planning period based on anticipated volumes of recycling from scrap yards, processors, and MRFs.

3. Encouraging Participation

The District will encourage residents and commercial generators to participate in available recycling infrastructure using a variety of outreach, education, and incentive programs, including the following:

- Educational Displays at Community Events: The District hosts a booth at the County Fair and other major community events. Information on the District's programs and opportunities to recycle is available.
- Website: The District regularly updates its website. The District will
 implement new initiatives to improve the website, such as improving
 the branding and presentation, obtaining a user-friendly URL, and
 developing user metrics to evaluate the use of the site and make
 informed decisions regarding its future improvements.
- Environmental Education Coordinator: The District employs a dedicated Environmental Education Coordinator to perform presentations to students, manage school recycling programs, activities, and contests,
- Recycling and Composting Facility Tours: The District hosts tours
 of the recycling center and compost facilities. Tours actively engage
 participants and encourage recycling and waste reduction.

Appendices I and L include detailed information about each program.

APPENDIX K

WASTE REDUCTION AND RECYCLING RATES AND DEMONSTRATION OF ACHIEVING GOAL 2

APPENDIX K. Waste Reduction and Recycling Rates and Demonstration of Achieving Goal 2

The District has chosen to demonstrate compliance with Goal 2 of the *State Plan*, which states that the District will recycle or reduce at least 25 percent of the solid waste generated by the residential/commercial (R/C) sector, and at least 66 percent of the solid waste generated by the industrial sector. Table K-1 below shows the waste reduction and recycling rates for the residential/commercial sector in the reference year, and projected for the planning period.

The R/C waste reduction rate (WRR) is projected to remain stable at approximately 30% throughout the planning period.

Table K-1. Annual Rate of Waste Reduction: Residential/Commercial Solid Waste

	Year	Population	Recycled	Disposed	Total Generated	WRR Rate	Per Capita WRR Rate (PPD)
	2014	53,095	8,280	29,231	37,512	22.07%	0.9
	2015	53,680	12,157	30,835	42,992	28.28%	1.2
	2016	53,752	14,699	30,162	44,861	32.77%	1.5
	2017	53,824	12,776	30,143	42,919	29.77%	1.3
×	2018	53,896	12,787	30,123	42,911	29.80%	1.3
	2019	53,968	12,799	30,104	42,903	29.83%	1.3
1	2020	54,040	12,810	30,085	42,895	29.86%	1.3
	2021	54,218	12,837	30,124	42,962	29.88%	1.3
Period	2022	54,396	12,865	30,164	43,028	29.90%	1.3
	2023	54,574	12,892	30,203	43,095	29.92%	1.3
Planning	2024	54,752	12,920	30,301	43,221	29.89%	1.3
E	2025	54,930	12,947	30,400	43,347	29.87%	1.3
	2026	55,054	12,967	30,468	43,435	29.85%	1.3
ō	2027	55,238	12,995	30,570	43,565	29.83%	1.3
ear	2028	55,422	13,023	30,672	43,695	29.81%	1.3
<u>.</u>	2029	55,606	13,052	30,774	43,826	29.78%	1.3
First Year	2030	55,850	13,090	30,909	43,999	29.75%	1.3
-	2031	56,034	13,118	31,011	44,129	29.73%	1.3
	2032	56,278	13,156	31,146	44,302	29.70%	1.3

WRR = waste reduction and recycling

In 2014, twenty-one SWMDs in Ohio had a residential/commercial recycling rate less than 25 percent, and fifteen of these districts are primarily rural in nature. The statewide

average for per capita recycling rate from the residential/commercial sector in 2014 was 1.73 pounds/person/day for all SWMDs, while the median value was 1.56 PPD.

As shown in Table K-2, the WRR for the industrial sector is projected to increase from 2017 through 2023 based upon decreases in disposal and very modest increases in recycling estimates.

Table K-2. Annual Rate of Waste Reduction: Industrial Solid Waste

	Year	Tons Reduced and Recycled	Tons Disposed	Tons Generated	WRR Rate
	2014	22,269	2,823	25,092	88.75%
	2015	24,716	6,987	31,703	77.96%
	2016	20,036	7,642	27,678	72.39%
	2017	20,153	9,438	29,590	68.10%
×	2018	20,269	8,205	28,473	71.18%
	2019	20,385	6,971	27,356	74.52%
	2020	20,501	5,738	26,238	78.13%
1	2021	20,617	4,504	25,121	82.07%
Period	2022	20,733	3,271	24,004	86.37%
Pe	2023	20,849	2,038	22,887	91.10%
Bu	2024	20,849	2,038	22,887	91.10%
Planning	2025	20,849	2,038	22,887	91.10%
급	2026	20,849	2,038	22,887	91.10%
of	2027	20,849	2,038	22,887	91.10%
ear	2028	20,849	2,038	22,887	91.10%
>	2029	20,849	2,038	22,887	91.10%
First	2030	20,849	2,038	22,887	91.10%
	2031	20,849	2,038	22,887	91.10%
	2032	20,849	2,038	22,887	91.10%

Table K-3 shows the total WRRs projected throughout the planning period. The overall WRR is projected to peak at 51% in 2023, then decrease slightly to 50.6% by the end of the planning period.

Table K-3. Annual Rate of Waste Reduction: Total Solid Waste

	Year	Tons Reduced and Recycled	Tons Disposed	Tons Generated	WRR Rate
	2014	30,550	32,054	62,604	48.80%
	2015	36,873	37,822	74,695	49.36%
	2016	34,735	37,804	72,539	47.88%
	2017	32,929	39,581	72,509	45.41%
×	2018	33,056	38,328	71,384	46.31%
	2019	33,183	37,075	70,258	47.23%
	2020	33,310	35,823	69,133	48.18%
1	2021	33,454	34,629	68,083	49.14%
Period	2022	33,597	33,435	67,032	50.12%
Pel	2023	33,741	32,240	65,981	51.14%
	2024	33,769	32,339	66,108	51.08%
Planning	2025	33,796	32,437	66,234	51.03%
Pla	2026	33,815	32,506	66,321	50.99%
o o	2027	33,844	32,608	66,452	50.93%
First Year	2028	33,872	32,710	66,582	50.87%
<u>`</u>	2029	33,901	32,812	66,712	50.82%
Firs	2030	33,938	32,947	66,885	50.74%
= 1	2031	33,967	33,048	67,015	50.69%
	2032	34,005	33,184	67,188	50.61%

APPENDIX L

MINIMUM REQUIRED EDUCATION PROGRAMS: OUTREACH AND MARKETING PLAN AND GENERAL EDUCATION REQUIREMENTS

APPENDIX L. Minimum Required Education Programs: Outreach and Marketing Plan and General Education Requirements

This Appendix discusses State Plan Goals 3 and 4 and the District's strategies to satisfy the requirements of meeting each goal. The following figure includes a summary of each goal, as presented in Ohio EPA's Plan Format v4.0:

Goal 3: Waste Reduction and Recycling Rates

- •The SWMD shall provide the following required programs:
- A website
- · A comprehensive resource List
- ·An inventory of available infrastructure
- A speaker or presenter

Goal 4: Outreach and Education - Outreach Plan and General Requirements

 The SWMD shall provide education, outreach, marketing, and technical assistance regarding reduction, recycling, composting, reuse, and other alternative waste management methods to target audiences using best practices.

A. Minimum Required Education Programs

In accordance with Goal 3 of the 2009 State Plan, the District is required to provide four minimum education programs including (1) a website, (2) a comprehensive resource List, (3) an inventory of available infrastructure, and (4) a speaker or presenter.

Website

a. Description

The District's comprehensive website is updated regularly. The website is available at: www.ashlandcounty.org/recycling/

The main page provides the District's contact information, recent Annual District Reports (ADRs), newsletters, and information about the Container Loan Program. It also provides links to a recycling guide, a page on household hazardous waste, the District's calendar of events, information on an annual golf outing fundraiser for the District's scholarship fund, information about adopt-a-road, and an education page.

b. Website Advertisement Strategy

The District advertises the availability of its website using a variety of mechanisms:

- The web address is included in the District staff's e-mail signatures.
- The District's partners and supporters include links to the District's website on their websites and social media posts.
- The District's website is displayed on many promotional items that are distributed at local special events and community activities.

c. Website Updating Strategy

Updates are typically completed on an as-needed basis. Examples of routine updates include adding upcoming events to the calendar and adding new ADRs when completed.

d. Person(s) Responsible for Maintaining Website

The District's coordinator is responsible for maintaining the website.

2. Comprehensive Resource List

a. Description

Each year and as changes occur, the District updates the Recycling Guide, which is a comprehensive List identifying recycling opportunities for residents and businesses. The Guide includes:

- Locations that accept glass recycling, yard waste recycling, and unwanted/unused medications.
- Price list for non-ferrous metals at the Ashland County Recycling Center.
- Contact information for questions regarding recycling.
- Acceptable materials list and how to prepare recyclables in Ashland County.
- List of permanent drop-offs by community and schedule of regularly held recycling drives.
- Ashland County Recycling Center location and hours of operation.
- Where to recycle special materials or items such as batteries, scrap metal, household appliances, tires, electronics, and televisions.

Information about business and industry recycling opportunities and programs.

b. Access to Recycling Guide

The Recycling Guide can be accessed electronically on the District's website.

Moving forward, the District will make printed copies available for distribution at community events and District presentations.

c. Recycling Guide Updating Strategy

District staff review the Recycling Guide annually to confirm whether existing information/listings need updated and add new recycling resources for residents and businesses when they are identified.

All identified recyclers on the list are contacted annually to confirm continued participation and to update information.

To solicit the public's assistance with keeping the Guide as current as possible, future Guides will include a message such as "If you know about a recycling opportunity that is not listed in this guide, or encounter any errors in the listings, please contact the Ashland County Solid Waste Management District."

3. Infrastructure Inventory

a. Description

The District's Solid Waste Management Plan includes an infrastructure inventory. Moving forward, the District will create a stand-alone document containing Ashland County's solid waste and recycling infrastructure inventory that can be posted on the website. The infrastructure inventory will consist of at least the following:

- Solid waste management and disposal infrastructure, including:
 - Landfill facilities
 - Transfer facilities
 - Scrap tire facilities
 - Incinerators/waste-to-energy facilities
- Waste reduction and recycling infrastructure, including:
 - Curbside recycling services
 - PAYT trash collection services

- Drop-off recycling locations (both privately and publicly owned/operated)
- Composting facilities
- Yard waste collection programs
- Recycling centers
- Material recovery facilities and other facilities for processing recyclable materials

A portion of the information to be included in the inventory is currently included in the Recycler's List, such as details about curbside programs, drop-off recycling sites, yard waste composting, and recycling centers. Appendix B of this *Plan Update* also includes much of the information that will be included in the infrastructure inventory.

Access to Inventory

The inventory will be made available on the District's website by the first year of the planning period (2018). Printed copies of the inventory will not be distributed at public events or other establishments since the majority of information which is relevant to residents and businesses is already included in the Recycler's List.

c. Inventory Updating Strategy

The infrastructure inventory will be updated annually. Most information to be included in the inventory has historically (and is currently) collected during the Annual District Report preparation process. Information in the inventory such as the operational status of facilities and their addresses and contact information will be revised as necessary.

4. Speaker/Presenter

a. Description

During the reference year, the District employed an Education Coordinator to perform education and outreach activities.

Environmental Education Specialist's Duties

The District's Education Coordinator conducts in-school and civic group presentations, organizes and runs recycling contests for students, plans and manages recycling facility tours, and participates in special community events, such as hosting a booth at the County fair.

B. Outreach and Education – Outreach Plan and General Education Requirements

1. Evaluation of Existing Programs and Outstanding Needs

The following table presents the District's existing education and outreach programs and each program's target audience.

	Target Audience						
Existing Programs	Residents	Schools	Industries	Institutions & Commercial Businesses	Communities & Elected Officials		
District Website	1	1	1	√:			
Presentations	1	1	1	1	1		
Adopt-a-Road	1	1		1			
Educational Display at Fairgrounds and Community Events	1	1	1	1			
Contests	1	1					
Business/Industrial Sector Waste Audits		~	✓	1			
Total Program per Group	5	6	4	6	(1)		

During the reference year, the District had programs that addressed the five target audiences. The District's infrastructure is mature, so the existing programs are appropriate given the available recycling opportunities.

a. Existing Program Evaluation

i. District website

The District website provides education and awareness about recycling, programs, and infrastructure available locally for recycling and reducing waste for many target audiences, including residents, schools, industries, and institutions/commercial businesses. The website contains information about participating in programs, so the focus of the website is not just on increasing awareness; materials are geared to changing behavior.

 Strengths: Providing resources such as the Recycling Guide through the website is a cost-effective method of providing awareness education to a large quantity of individuals. It also allows the District to update and add new information on an as-needed basis.

- Challenges: Individuals who are not aware of the District's website or do not have internet access do not benefit from it. Individuals who do not have internet access may also be part of socioeconomic groups that are traditionally underserved by programming such as those provided by the District. At the time this Plan Update was prepared, the Education page was under construction, so no information was available on the website that targeted schools. The Recycling Guide was not available as a PDF download during the reference year, so an easily printable format was not available for residents. Businesses and industries did not have their own tab on the website, so it was not immediately apparent that the website included information for these audiences, as it was grouped in with information posted on the Recycling Guide page.
- Measuring Effectiveness: Historically, the District has not measured the results or effectiveness of the website. Potential methods of measurable success may include obtaining the total number of visits to the website annually, monitoring the total number of individuals who have subscribed to the District's notifications, and/or adding a survey on the website asking visitors how they found the site (i.e., found the link while browsing the County's website, saw the address on a District flyer/publication, clicked a link posted by a partner organization, etc.) to identify the most effective way to promote the District's website. Other methods for measuring and improving the effectiveness of the website might include logging the nature of calls received by the District to identify if there are frequently asked questions about information that is not posted on the website.

ii. Presentations

The District's Education Coordinator is responsible for promoting, coordinating, and performing presentations to students, civic groups, businesses, and communities upon request. In 2014, the District's Education Coordinator completed the following presentations:

334 in-school presentations reaching 7,343 students

- "Learn about a Landfill" presentation to the Loudonville Library Summer Reading Club group reaching 80 participants
- Recycling presentation and holiday craft activity for a Girl Scout group reaching 20 people
- Hosted three tours of the Ashland County Recycling Center, reaching 150 participants
- Coordinated a tour of the Willo'Dell Nursery and Compost Center, reaching 24 participants
- Strengths: Presentations and educational workshops are available for no cost, making these opportunities available to any school, scout group, civic organization, business, or community government in the county.
- Challenges: Many school demonstrations teach students that waste materials have value through hands-on learning. While these presentations may be effective when measuring how they impact a student's awareness of recycling, the effectiveness of changing students' behavior to begin recycling or recycle more has not been measured. Additionally, the low number of requests for presentations from non-student groups indicates that this program could be strengthened by more promotion of the availability of presentations to non-school groups.
- Measuring Effectiveness: Historically, the District has
 not measured the effectiveness of presentations.
 Potential methods of measurable success may include
 increasing the number of individuals reached and
 requesting that educators or group leaders complete a
 feedback form after a presentation has been
 completed. Additionally, recycling tonnage from
 schools with recycling programs can be estimated to
 identify if there is a correlation between presentations
 given and waste diverted.

iii. Adopt-a-Road

In 2014, nine groups participated in the District's Adopt-a-Road program. The program provides residents, schools, non-profit groups, and other organizations with the opportunity to play an active role in their community. The

District provides collection bags, safety vests, and safety signs. The District also posts recognition signs in each group's designated area identifying which group is responsible for keeping the roadway clean. This program is promoted on the District's website and by the Education Coordinator.

- Strengths: The program engages community groups, reduces litter, and raises public awareness about littering.
- Challenges: Program participation continues to be a challenge. Many groups that have stopped participating in the program cited limited time availability and increased safety and liability concerns for younger volunteers.
- Measuring Effectiveness: Historically, the District has only measured effectiveness of the program by the number of groups that participate. In addition to tracking the number of groups, the District could track the number of bags collected, and number of hours volunteered.

iv. Educational Display at Fairgrounds and Community Events

The District hosts displays at community events and the Ashland County Fair. Display highlight district activities, display winning posters from the annual poster contest, and present information on recycling, reducing/reusing and composting on a rotating basis. A District employee is available to answer questions and talk to residents. Providing information directly to residents achieves the District's goal of raising awareness amongst residents about which materials can be recycled and nearby locations that accept recyclables. The District is targeting the correct audience given this goal.

 Strengths: Increases awareness of recycling opportunities by providing recycling information to the public. Reaching out to residents at events provides opportunities to reach segments of the population that might not otherwise be reached, either due to being unaware of the District's presence and website or because they lack access to the internet. Providing information directly to residents creates an opportunity for the public to meet District staff, ask questions, and give feedback about the District's services.

- Challenges: None.
- Measuring Effectiveness: Historically, the District has not measured the effectiveness of participating in community events. Possible measures include tracking the total publications that are distributed each year, the total number of events attended, and/or increased traffic to the District's website.

v. Contests

The District organizes and implements annual writing and poster contests and an Earth Day poster contest for students. In 2014, the District held a recycling writing contest which received entries from 25 first grade students, an Earth Day poster contest, which received entries from 50 kindergarten students, and the District's annual poster contest, which received 85 entries. Twelve entries from the annual poster contest were selected to be featured at the District's display booth at the County Fair.

- Strengths: The program engages students and schools. Poster contests bring awareness to waste and environmental issues.
- Challenges: Increasing participation to involve more schools and students.
- Measuring Effectiveness: Historically, the District has only measured effectiveness of the program by the number of entries received. The District has not measured the degree to which contests change behavior. Noting the total locations where residents may see the results from the contests may also be a method of determining effectiveness.

vi. Business/Industrial Sector Waste Audits

The District provides waste audits to the commercial and industrial center. A representative from the District performs a site visit, review site operations, and performs a waste audit

to determine what materials can be recycling or reduced. After the audit is completed, the District provides the entity with recommendations on materials to be recycled, how to prepare and store materials, and pickup/delivery options. Audits can be scheduled by contacting the District. The program is promoted on the District's website in the Recycling Guide.

- Strengths: The program provides entities with individualized assessments identifying opportunities to further reduce waste, increase environmental sustainability, and improve cost savings. The program provides an economic incentive to businesses, organizations, and industries while also achieving the waste reduction goals of the District.
- Challenges: Increasing program promotion and the quantity of requests for audits.
- Measuring Effectiveness: The District historically measured the success of this program in terms of the number of assessments, tons identified for diversion, and cost savings identified. Improving the measures District tracks this by which the program's effectiveness could involve following up with companies who participated in an assessment to identify whether the companies were able to implement changes to realize the waste reduction and cost savings identified in their analysis. Further technical assistance may be needed for companies to reap the full benefits of participating in the program.

2. Conclusions

The following conclusions were identified as a result of the Phase I analysis of existing programs and outstanding needs:

 The District needs to establish quantifiable measures of effectiveness for existing programs.

3. Outreach Priority

Contamination is a serious issue that costs the District money and time and creates safety hazards for workers. While the District does not have statistics on recycling contamination rates within Ashland County, contamination is major Statewide issue that needs to be continuously managed in order to be maintained or reduced. The District has identified reducing contamination in District drop-offs and curbside recycling programs as an outreach priority.

The District will explore using strategies and materials developed by the Recycling Partnership to tackle contamination in curbside recycling programs and drop-offs. Using a consistent and frequently repeated message is a best practice for educating residents.

The goal of the District's outreach priority is to change resident behavior to improve recycling efforts in Ashland County. The District plans to promote proper recycling through signage at drop-off sites, its website, and by creating/curating content for District communities that can be added to each political subdivisions website.

The District plans to begin tracking contamination rates at its recycling center to establish a baseline against which it can benchmark its progress and measure the impact of providing additional education to residents about proper recycling.

4. List of Actions

The following table presents each existing program and the actions the District could implement during the planning period to address the aforementioned conclusions.

Table L-1. Potential Actions

Existing Programs	Potential Actions
District Website	Track the number of visits to the website.
District Website	Minimize the website's "down time" by fixing pages that are under construction as quickly as possible.
District Website	Include the Recycling Guide online as a downloadable, printable PDF.
District Website	Improve user-friendliness by reorganizing information and adding a tab for each target audience, such as residents, businesses, governments, etc.
Presentations	Promote availability of presentations to non-school groups (civic groups) using a variety of means, such as posting on the District website and employing the support of related organizations to

Existing Programs	Potential Actions
- Stanting	promote presentations to members, such as the Chamber of Commerce.
Presentations	Begin tracking the number of individuals reached by each presentation and the name of each school so the District can identify the number of students and schools reached each year.
Presentations	Request that educators or group leaders complete a feedback form after a presentation has been completed.
Presentations	If available, track recycling tonnage from schools with recycling programs to estimate if there is a correlation between presentations given and waste diverted.
Adopt-a-Road	Identify groups that have a volunteer requirement or organizations that typically perform community service and target these groups to receive information about the District's Adopt-a-Road program.
Adopt-a-Road	Begin tracking additional program statistics, such as the number of bags collected, weight of bags collected, and/or number of hours volunteered.
Educational Display at Fairgrounds and Community Events	Ensure promotional items display the District's contact information and that flyers for each target audience are available at the display.
Educational Display at Fairgrounds and Community Events	Begin tracking or estimating the total publications that are distributed at each event each year, the total number of events attended, and/or increased traffic to the District's website following an event.
Contests	Inform more school districts about contests to increase participation.
Contests	Add additional measures of effectiveness, such as tracking whether contests change behavior by tracking whether recycling tonnage increases at participating schools and/or track number of locations where contest winners' posters are displayed.
Business/Industrial Sector Waste Audits	Increase number of businesses that participate in waste audits by identifying top generators in the District from annual ADR survey results and reach out to businesses directly to inquire about interest in receiving an audit.
Business/Industrial Sector Waste Audits	Follow up with entities who participated in an assessment to identify whether the companies were able to implement changes to realize the waste reduction and cost savings identified in their analysis.
Business/Industrial Sector Waste Audits	Request feedback from establishments that participated in an audit to identify how the District can further serve this audience more effectively.

4. Priorities

The District reviewed the information presented above in Table L-1, and prioritized the list focusing on the actions which were determined to be most important and those which would require less difficulty in implementing. The step-by-step process which the District used to prioritize the list was as follows:

- The ranking consisted of each member of the District assigning a value of between 1 and 5 to each initiative with 5 being the highest priority and 1 being the least.
- The priority ranking defined whether the District felt an initiative or program would be implemented under the following criteria:
 - Ranking of 1 No implementation
 - Ranking of 2 No implementation
 - Ranking of 3 Possible implementation with direction from Policy Committee
 - Ranking of 4 Implement
 - Ranking of 5 Implement
- The District then prioritized the results from the above step.
- The list of prioritized possible actions was then presented to the Policy Committee with discussion from District personnel and the District's consultant focusing on the initiatives or programs ranked as a 3 from the criteria above.
- The Policy Committee was then asked to assist the District to decide if the initiatives ranked as a 3 should or should not be implemented in the new Plan Update.
- The Policy Committee was also asked to confirm that all initiative ranked as a 4 or 5 should be implemented as recommended by the District and that initiatives ranked 1 or 2 should not be implemented as recommended by the District.
- The results of this prioritization process and the programs/initiatives developed or continued are detailed in Chapter 5 of this Plan Update.

The following table summarizes the District's and Policy Committee's priorities for implementation of the possible list of actions by program:

Table L-2. District's Ranking of Potential Actions

Existing Programs	Potential Actions	District Priority	Policy Committee Decision	
District Website	Track the number of visits to the website.	4	Implement	
District Website	Minimize the website's "down time" by fixing pages that are under construction as quickly as possible.	5	Implement	
District Website	Include the Recycling Guide online as a downloadable, printable PDF.	5	Implement	
Improve user-friendliness by reorganizing information and adding a tab for each target audience, such as residents, businesses, governments, etc.		4	Implement	

Existing Programs	Potential Actions	District Priority	Policy Committee Decision
Presentations	Promote availability of presentations to non-school groups (civic groups) using a variety of means, such as posting on the District website and employing the support of related organizations to promote presentations to members, such as the Chamber of Commerce.	4	Implement
Presentations	Begin tracking the number of individuals reached by each presentation and the name of each school so the District can identify the number of students and schools reached each year.	3	Implement
Presentations	Request that educators or group leaders complete a feedback form after a presentation has been completed.	3	Create evaluation form in 2018
Presentations	If available, track recycling tonnage from schools with recycling programs to estimate if there is a correlation between presentations given and waste diverted.	2	No Implementation
Adopt-a-Road	Identify groups that have a volunteer requirement or organizations that typically perform community service and target these groups to receive information about the District's Adopt-a-Road program.	4	Implement
Adopt-a-Road	Begin tracking additional program statistics, such as the number of bags collected, weight of bags collected, and/or number of hours volunteered.	3	Implement
Educational Display at Fairgrounds and Community Events	Ensure promotional items display the District's contact information and that flyers for each target audience are available at the display.	4	Add District Web Site to Display to Direct Residents to Educational Resources
Educational Display at Fairgrounds and Community Events	Begin tracking or estimating the total publications that are distributed at each event each year, the total number of events attended, and/or increased traffic to the District's website following an event.	2	Do Not Implement
Contests	Inform more school districts about contests to increase participation.	5	Implement

Existing Programs	Potential Actions	District Priority	Policy Committee Decision
Contests	Add additional measures of effectiveness, such as tracking whether contests change behavior by tracking whether recycling tonnage increases at participating schools and/or track number of locations where contest winners' posters are displayed.	2	Do Not Implement
Business/Industrial Sector Waste Audits	Increase number of businesses that participate in waste audits by identifying top generators in the District from annual ADR survey results and reach out to businesses directly to inquire about interest in receiving an audit.	4	Implement
Business/Industrial Sector Waste Audits	Follow up with entities who participated in an assessment to identify whether the companies were able to implement changes to realize the waste reduction and cost savings identified in their analysis.	4	Implement
Business/Industrial Sector Waste Audits	Request feedback from establishments that participated in an audit to identify how the District can further serve this audience more effectively.	4	Implement

5. Outreach and Marketing Plan

The outreach and marketing plan is encapsulated in earlier sections in this Appendix. Previous discussions in this section describe the District's outreach and education efforts that address the five target audiences, including priority strategies and methods of measuring effectiveness. The programs presented in this section are described in greater detail in Appendices H and I.

APPENDIX M

WASTE MANAGEMENT CAPACITY ANALYSIS

APPENDIX M. Waste Management Capacity Analysis

A. Access to Publicly-Available Landfill Facilities

In the reference year of 2014, nearly 94 percent of the District's waste, which was disposed, was either sent directly to the Noble Road Landfill or transferred to this landfill from the Richland County Transfer Station. Approximately 5 percent of the District waste disposed in 2014 was handled by the Crawford County Landfill. These two landfills, Noble Road Landfill and the Crawford County Landfill, had an estimated 9.1 and 10 years of remaining capacity, respectively, as of the end of 2014 (see Table M-1).

Table M-1. Remaining Operating Life of Publicly-Available Landfills

Facility	County	Years of Remaining Capacity ^a
In-District		
None.		
Out-of-District		
Kimble Sanitary Landfill	Tuscarawas	35.87
Countywide Recycling & Disposal Facility	Stark	63.6
American Landfill	Stark	74.9
Noble Rd. Landfill	Richland	9.1
Mahoning Landfill	Mahoning	3.76
Pine Grove Regional Facility	Fairfield	72.6
Crawford Co. Sanitary Landfill	Crawford	10
Out-of-State		
None.		

^a Based on remaining life as reported by landfill owner/operators.

Source(s) of Information: Ohio EPA Facility Data, 2014.

The Format v4.0 states that Districts should have access to disposal capacity for a minimum of the first eight (8) years of the planning period. Without facility expansions, Noble Road and Crawford County landfills would be able to provide adequate disposal capacity to the Ashland SWMD only through year six of the planning period, or 2023. However, Ohio EPA is not aware of any problems associated with expansion and continued operations at these two landfills. Based upon this information and because:

- Transfer stations currently operate in adjacent counties (i.e., Huron, Medina, and Richland);
- Adequate landfill capacity currently exists at other landfills used by the District (e.g., Kimble Sanitary Landfill, American Landfill, Countywide Recycling and Disposal Facility); and

 The Lorain County Landfill, which is located in Lorain County immediately to the north of Ashland County, had 14.5 years of capacity remaining at the end of 2014.

The District has concluded that adequate landfill capacity exists through year 2023. Therefore, further analysis to demonstrate available capacity is not necessary.

B. Access to Captive Landfill Facilities

No captive landfills exist within the District.

C. Access to Processing Capacity for Recovered Materials

Much of the recyclable tonnage from sources in Ashland County is sent to the Ashland County Recycling Center. Facilities in neighboring counties such as Medina and Richland also receive recyclables from the District.

All facilities in Table M-4 did not report tonnage to the District directly; some of the processors listed in Table M-4 were reported by generators of solid waste. For example, Buehler's sends recyclables to Gateway Recycling. The District reviewed its records and has confirmed that tonnage was not double-counted.

Table M-4. Processing Facilities Used by District in the Reference Year

Name of Facility	Location		Type of	Recyclables Accepted from District	
	County	State	Facility	Types	Tons
In-District					
Abibow Recycling-C	Ashland	ОН	Processor	Paper	*
Aldi Inc. Hinckley Division	Ashland	ОН	Retail	Cardboard, plastics	95
Ashland County Recycling Center	Ashland	ОН	MRF	Multi-stream	2,025
Buehler's	Ashland	ОН	Retail	Cardboard, mixed paper	128
Dollar General	Ashland	ОН	Retail	Cardboard, mixed paper	94
Home Depot	Ashland	ОН	Retail	Multi-stream	152
Walmart Recycling in Ohio	Ashland	ОН	Retail	Multi-stream	825
Out-of-District					
Gateway Recycling	Cuyahoga	ОН	MRF	Multi-stream	*
Medina Recycling	Medina	ОН	MRF	Multi-stream	*
Milliron	Richland	ОН	MRF	Multi-stream	*

Name of Facility	Location		Type of	Recyclables Accepted from District	
	County	State	Facility	Types	Tons
Pinnacle Recycling	Summit	ОН	Processor, MRF	Paper, plastic	
River Valley	Summit	ОН	Processor, manufacturer	Paper, plastic	*
Recycle It	Cuyahoga	ОН	Processor	Electronics	*
Sims Metal Management	Delaware	ОН	MRF, Single Material Processor	Scrap metal	*
Waste Management - Akron MRF			MRF	Multi-stream	469
Out-of-State					
None.					
				Total	26,015

Based upon the existing facilities available to process recyclables and the projected recovery of recyclables, the District does not believe that additional processing capacity is needed.

D. Incinerators and Energy Recovery Facilities

A nominal quantity of waste (111 tons) generated in the District was sent to one energy recovery facility in Indiana during the reference year (2014). It is expected that this facility (or similar facilities) will continue to provide necessary capacity to process small quantities of waste. At this time, incinerator and other energy recovery facilities are not incorporated into this Plan.

Table M-2. Incinerators and Energy Recovery Facilities Used by the District in the Reference Year

Facility Name	Location	Type of Facility	Tons Processed from SWMD
In-District			
None.			
Out-of-District			
None.			
Out-of-State			
Indianapolis Resource Recovery Facility	IN	Waste-to-Energy	110.59
		Total	110.59

APPENDIX N EVALUATING GREENHOUSE GAS EMISSIONS

APPENDIX N. Evaluating Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions associated with solid waste management activities were estimated for the District using the U.S. Environmental Protection Agency's Waste Reduction Model (WARM). The WARM was applied to reference year data and data projected for the sixth year of the planning period, or year 2023. Table N-1 shows the waste categories as well as the amounts recycled, landfilled¹, and composted which were entered into the model. Both residential/commercial and industrial waste have been included in this analysis, and sources of waste or recyclables have been combined as necessary in order to create waste category totals corresponding to input entries available, in the WARM. For instance, the "Mixed recyclables" waste category in Table N-1 represents the sum of the estimated tonnages for the following categories:

- Curbside
- Ohio EPA Commercial Retail Data
- Commercial Survey
- Ashland Recycling Center
- All Other
- Industrial Survey

Table N-1. Inputs for WARM: 2014 and 2023

Waste Catalana	201	4 (Reference	Year)		2023	
Waste Category	Recycled	Landfilled	Composted	Recycled	Landfilled	Composted
Yard Trimmings	-	-	881		-	2,563
Mixed Recyclables	28,400	- 4	- 0	30,773	-	3
Scrap Tires	1,269			841	-	- 3
Mixed Waste	-	32,054	1.2	-	32,240	

The top half of Table N-2 shown below provides the results from the WARM assuming that all waste generated in the reference year is disposed in landfills. The model estimates a net production of 24,759 metric tons of carbon dioxide equivalents (MTCO₂E) using this assumption which is characterized as the baseline scenario. The second half of Table N-2 represents the actual amounts recycled, composted, and landfilled in 2014, and is termed the alternative scenario. The alternative scenario results in a net generation of -66,173 MTCO₂E.

¹ The amount of excluded waste landfilled has not been included in this analysis.

Table N-2. Greenhouse Gas Emissions Summary for Reference Year Data

GHG Emissions from Baseline Waste Management (MTCO₂E);

24.759

Material	Tons Recycled	Tons Landfilled	Tons Combusted	Tons Composted	Tons Anaerobically Digested	Total MTCO ₂ E
Yard Trimmings	NA	881.0			3.	(147)
Mixed Recyclables		28,400.0	1	NA	NA	10,217
Mixed MSW	NA NA	32,054.0		NA	NA	14,662
Tires		1,269.0	ja ₁	NA	NA	26

GHG Emissions from Alternative Waste Management Scenario (MTCO2E):

(66,173)

Material	Tons Source Reduced	Tons Recycled	Tons Landfilled	Tons Combusted	Tons Composted	Tons Anaerobically Digested	Total MTCO ₂ E
Yard Trimmings	NA NA	NA			881.0	4.5	(129)
Mixed Recyclables	NA NA	28,400.0			NA	NA	(80,229)
Mixed MSW	NA	NA	32,054.0		NA	NA	14,662
Tires		1,269.0	100		NA	NA	(477)

Combining the results from the two scenarios shows the GHG reductions within each waste category which are achieved by recycling and composting compared to landfilling all of the waste stream. (See Table N-3.) The total GHG reductions are 90,931 MTCO₂E.

Table N-3. Net GHG Reductions for 2014: Alternative vs. Baseline Scenarios

Waste Category	Difference Between Scenarios in MTCO₂E (Alternative - Baseline)
Yard Trimmings composted	18
Mixed recyclables	-90,446
Scrap tires recycled	-503
Mixed waste landfilled	0
Net Totals	-90,931

MTCO₂E = metric tons of carbon dioxide equivalent

The majority of the waste sent for disposal from the District during the reference year was received by the Noble Road Landfill which operates a gas recovery system. This facility flared the collected gas instead of processing it for energy recovery. The results shown in Table N-3 reflect these inputs which were included in the WARM.

The analysis described above has also been conducted for year six of the planning period, or year 2023. The following table shows that the net GHG reductions in 2023 by recycling are more than 98,298 MTCO₂E.

Table N-4. Net GHG Reductions for 2023: Alternative vs. Baseline Scenarios

Waste Category	Difference Between Scenarios in MTCO₂E (Alternative - Baseline)
Yard Trimmings composted	50
Mixed recyclables	-98,004
Scrap tires recycled	-344
Mixed waste landfilled	0
Net Totals	-98,298

MTCO₂E = metric tons of carbon dioxide equivalent

The WARM results shown in this analysis reflect landfill disposal in facilities which include a landfill gas recovery system. It is worth noting that the alternative scenario results for 2023 show that GHG emissions reductions would decrease nearly 26,000 MTCO₂E, were the District waste sent to landfills without a gas recovery system since the greenhouse gases generated from landfill disposal would be released directly into the atmosphere.

APPENDIX O FINANCIAL DATA

APPENDIX O. Financial Data

This Appendix summarizes the District's funding mechanisms, projected revenues and expenses for the planning period of 2018-2032. The District has prepared the budget section of this Plan Update to meet the requirements in the Ohio Revised Code, Section 3734.53 (A)(13)(d):

The methods of financing implementation of the plan and a demonstration of the availability of financial resources for that purpose.

The budget tables prepared for this *Plan Update* demonstrate that the District has the financial funding throughout the planning period to implement the planned programs and initiatives.

Nothing contained in these budget projections should be construed as a binding commitment by the District to spend a specific amount of money on a particular strategy, facility, program and/or activity. The Board, with the advice and assistance of the District Manager, will review and revise the budget as needed to implement the planned strategies, facilities, programs and/or activities as effectively as possible with the funds available. Revenues, not otherwise committed to an existing strategy, facility, program or activity may be used to increase funding to improve the effectiveness of an existing strategy, facility, program or activity and to provide funding for a new strategy, facility, program or activity the Board concludes is justified based on the District Coordinator's recommendations and the content of this Plan Update.

The District reserves the right to revise the budget and reallocate funds as programs change or when otherwise determined to be in the best interest of the District. If the budget in this *Plan Update* is affected to the point that it must be revised, the District will first determine if a material change in circumstance has occurred. If a material change in circumstance has not occurred but budget revisions are needed that go beyond normal adjustments, the District may revise the budget per ORC Section 3734.56(E) and follow the appropriate ratification requirements to finalize the budget revisions.

The District is committed to implementing planned strategies, facilities, programs and/or activities in a cost-effective manner. The District is committed to improving the effectiveness and reduce the cost of all District strategies, facilities, programs and activities. The District Board is authorized to expend District funds among other uses included in the *Plan Update* when costs are reduced. Additionally, the Board is authorized to use reduced costs to provide grant funds or direct funding to evaluate, test and/or implement new strategies, facilities, programs and activities that are in compliance with this *Plan Update* are not a "material change in circumstance" regarding the implementation of this *Plan Update*.

A. Funding Mechanisms and Revenue Generated

Disposal Fees

The District does not receive revenue from disposal fees; therefore, Table O-1 has been omitted.

2. Generation Fees

The District does not receive revenue from generation fees; therefore, Table O-2 has been omitted.

3. Designation Fees

The District has designated solid waste facilities pursuant to ORC 343.014 and has entered into contracts with designated facilities pursuant to which the District currently receives a Contract Fee for solid waste generated in the District and received at the designated facility. The per ton contract fee from 2010 to May 31, 2015 was \$7.50. Pursuant to ORC 343.08(C), the District adopted a fifty cent (\$0.50) per ton Contract Fee increase on June 1, 2015, and intends to adopt a fifty cent (\$0.50) per ton Contract Fee increase on January 1, 2021. The Contract Fee, which is deposited into the Solid Waste District Fund, is used to fund the District's activities and programs. Appendix P contains a sample of a uniform designation agreement used for all designated facilities.

A portion of the funds are used, if necessary, to cover operating expenses for the Ashland County Recycling Center that the District operates. The cost of the Recycling Center operation is detailed in this section. The District shall renegotiate all Designation Agreements as necessary to ensure continued transfer and disposal capacity and funding to implement the Plan.

The total amount of waste generated in the District and disposed at contracted facilities in 2010 was 31,174 tons. This generated approximately \$233,802 of contract fee revenue. The total amount of waste generated in the District and disposed at contracted facilities in the 2014 reference year was 31,406 tons, generating approximately \$235,541 in contract fee revenue. Table O-3 presents the contract fee schedule and the actual and projected contract fee revenue from 2010 to 2032.

Table O-3. Contractual Fee Schedule and Revenue

Year	Contract Fee Schedule (\$ per ton)	Waste Disposed at Contracted Facilities	Total Contract Fee Revenue
2010	\$7.50	31,174	\$233,802
2011	\$7.50	32,703	\$245,273
2012	\$7.50	31,394	\$235,454
2013	\$7.50	30,700	\$230,254
2014	\$7.50	31,406	\$235,541
2015	\$8.00	37,241	\$289,267
2016	\$8.00	37,347	\$298,773
2017	\$8.00	39,581	\$316,645
2018	\$8.00	38,328	\$306,624
2019	\$8.00	37,075	\$296,603
2020	\$8.00	35,823	\$286,582
2021	\$8.50	34,629	\$294,346
2022	\$8.50	33,435	\$284,196
2023	\$8.50	32,240	\$274,044
2024	\$8.50	32,339	\$274,881
2025	\$8.50	32,437	\$275,719
2026	\$8.50	32,506	\$276,302
2027	\$8.50	32,608	\$277,167
2028	\$8.50	32,710	\$278,033
2029	\$8.50	32,812	\$278,899
2030	\$8.50	32,947	\$280,046
2031	\$8.50	33,048	\$280,912
2032	\$8.50	33,184	\$282,060

Assumptions: Actual contract fee revenue is presented for 2010 to 2016. Tons for 2010 to 2014 and 2016 were calculated by dividing the total contract fee revenue by the contract fee per ton rate. Actual tonnage reported on Quarterly Fee Reports was used for 2015. Tonnage for 2017-2032 was taken from Table D-5.

Source(s) of Information: Quarterly Fee Reports, District records

Sample Calculation (2018):

Total contract fee revenue = 2018 Tons disposed x 2018 contract fee

 $$306,624 = 38,328 \times 8.00

Landfill Post Closure Care Contract Fee Summary

The District's designation contracts include a requirement that an additional contract fee be paid to the County for the purpose of covering the cost of the post closure care of the Ashland County landfill. The landfill post closure

care contract fee collected in 2015 was \$2.00 per ton. In 2016, the fee increased to \$2.50 per ton and in 2017, the rate was capped at \$3.00 per ton. The fee is direct deposited into the Ashland County Landfill Post Closure Account. The District does not manage this account nor does the District procure for any post closure expenditures. This is evident in why the revenue and expenses for the landfill post closure care was not included in any of the District's quarterly fee reports. The following table is provided to summarize the history of the landfill post closure care revenue and expenses along with the fund balance summary.

Landfill Post-Closure Care Summary

Year	Contract Fee	Revenue	Expenditures	Fund Balance	Tons Disposed at Designated Facilities
	Startin	g Fund Balanc	e	\$609,244.76	
\$0.00	\$0.00	\$95,281.80	\$513,962.96	n/a	\$0.00
\$0.00	\$0.00	\$67,355.92	\$446,607.04	n/a	\$0.00
\$0.50	\$15,696.90	\$95,803.43	\$366,500.51	31,393.81	\$0.50
\$1.00	\$29,554.75	\$81,266.87	\$314,788.39	29,554.75	\$1.00
\$1.50	\$49,905.74	\$73,681.30	\$291,012.83	33,270.49	\$1.50
\$2.00	\$73,334.68	\$89,337.38	\$275,010.13	36,667.34	\$2.00
\$2.50	\$99,279.50	\$104,650.06	\$269,639.57	39,711.80	\$2.50
\$3.00	\$100,852.38	\$89,000.00	\$281,491.95	33,617.46	\$3.00
\$3.00	\$101,109.48	\$89,000.00	\$293,601.43	33,703.16	\$3.00
\$3.00	\$101,367.24	\$89,000.00	\$305,968.67	33,789.08	\$3.00
\$3.00	\$101,625.66	\$89,000.00	\$318,594.33	33,875.22	\$3.00
\$3.00	\$101,884.74	\$89,000.00	\$331,479.07	33,961.58	\$3.00
\$3.00	\$102,144.48	\$89,000.00	\$344,623.55	34,048.16	\$3.00
\$3.00	\$102,404.85	\$89,000.00	\$358,028.40	34,134.95	\$3.00
\$3.00	\$102,665.91	\$89,000.00	\$371,694.31	34,221.97	\$3.00
\$3.00	\$102,927.66	\$89,000.00	\$385,621.97	34,309.22	\$3.00
\$3.00	\$103,190.04	\$89,000.00	\$399,812.01	34,396.68	\$3.00
\$3.00	\$103,453.11	\$89,000.00	\$414,265.12	34,484.37	\$3.00
\$3.00	\$103,716.84	\$89,000.00	\$428,981.96	34,572.28	\$3.00
\$3.00	\$103,981.23	\$89,000.00	\$443,963.19	34,660.41	\$3.00
\$3.00	\$104,246.31	\$89,000.00	\$459,209.50	34,748.77	\$3.00
\$3.00	\$104,512.08	\$89,000.00	\$474,721.58	34,837.36	\$3.00
\$3.00	\$104,778.51	\$89,000.00	\$490,500.09	34,926.17	\$3.00

4. Loans

The District does not have current loans and does not anticipate securing loans during the planning period.

Table O-4. Loans

Year Loan	Outstanding	Lending	Loan Term	Annual Debt
Obtained	Balance	Institution	(years)	Service
None.				

5. Other Sources of Revenue

a. Grants

In 2010, the District was granted an Ohio EPA Community Development Grant. Grants obtained by the District are competitive and therefore not a guaranteed source of revenue. Potential revenue from future grants has been excluded from the projections in Table O-5.

b. Recycling Revenue

The commodity market for recycled materials is volatile and unpredictable. During 2010 to 2016, annual recycling revenue ranged from a low of \$324,655 in 2015 to a high of \$546,422 in 2011. This recycling revenue came from the sale of commodities from the Ashland County Recycling Center.

Based on the first three Quarterly Fee Reports for 2017, recycling revenue is estimated to be approximately \$470,219 for 2017. In terms of revenue projections, the District feels most comfortable making conservative estimates for future years. Annual recycling revenue from 2023 to 2032 is projected to be flat. The flat annual amount is based on the average recycling revenue collected from 2013 to 2016. The District estimates that 2018 could be as low as levels seen in 2015 due to possible impacts from the China National Sword. Intermediate years (2019-2022) are projected using a straight-line average.

c. User Fees

User fees are collected at the Ashland County Recycling Center for special materials or items such as monitors (\$20/unit), televisions (\$30/unit), broken/dismantled televisions (\$40/unit), auto and light truck tires (\$3/tire), semi tires (\$10/tire), tractor tires (\$30/tire), and Freon-containing appliances (\$15/each). During 2010 to 2016, annual user fee revenue ranged from a low of \$2,418 in 2012 to a high of \$9,086 in 2016. User fee revenue does not correlate with volumetric trends in general District recycling. User fees increased significantly from 2014 to 2016 because of a change in the District's contract with an electronic waste management vendor. The District

needed to increase user fees to offset the costs of the program. In the interest of reducing program costs, a new vendor has been selected for 2017. The reduction in user fees from 2016 to 2017 reflects lower user fees as a result of entering into a service agreement with a new electronics vendor. User fees from 2017 to 2032 are equal to the cost of Tire Collection events and Electronics Collection events listed in Table O-7.

d. Miscellaneous Revenue

Miscellaneous revenue represents total of funds transferred from the Solid Waste District fund over to the Recycling Fund plus any amounts we collected from the sale of recycling bags and paint hardener. From 2010 to 2016, miscellaneous revenue ranged from a low of \$77,046 in 2011 to a high of \$210,631 in 2016. To conservatively estimate miscellaneous revenue, a flat annual amount based on the average collected from 2012-2016 has been projected for 2017-2032.

Revenue from other sources amounted to \$576,090 during the 2014 reference year. During the first year of the planning period (2018), revenue from other sources is expected to be \$501,165. At the end of the planning period in 2032, other revenue is projected to be \$556,438.

Table O-5. Other Revenue and Other Revenue Sources

	Year	Grants	Recycling Revenue	User Fees	Miscellaneous	"Other Revenue" Total
3	2010	\$6,400	\$463,736	\$4,582	\$144,745	\$619,463
	2011	\$0	\$546,422	\$3,483	\$77,046	\$626,951
	2012	\$0	\$458,166	\$2,418	\$181,849	\$642,434
	2013	\$0	\$416,175	\$3,034	\$119,787	\$538,997
	2014	\$0	\$407,123	\$3,627	\$165,339	\$576,090
	2015	\$0	\$324,655	\$6,206	\$171,035	\$501,896
	2016	\$0	\$367,731	\$9,086	\$210,631	\$587,448
1 3	2017	\$0	\$470,219	\$6,719	\$169,728	\$646,666
×	2018	\$0	\$324,655	\$6,782	\$169,728	\$501,165
70	2019	\$0	\$335,508	\$6,846	\$169,728	\$512,083
r of Period	2020	\$0	\$346,361	\$6,912	\$169,728	\$523,001
Per Per	2021	\$0	\$357,215	\$6,978	\$169,728	\$533,921
Year ing P	2022	\$0	\$368,068	\$7,046	\$169,728	\$544,842
	2023	\$0	\$378,921	\$7,115	\$169,728	\$555,764
First Plann	2024	\$0	\$378,921	\$7,185	\$169,728	\$555,834

Year	Grants	Recycling Revenue	User Fees	Miscellaneous	"Other Revenue" Total
2025	\$0	\$378,921	\$7,256	\$169,728	\$555,905
2026	\$0	\$378,921	\$7,328	\$169,728	\$555,978
2027	\$0	\$378,921	\$7,402	\$169,728	\$556,051
2028	\$0	\$378,921	\$7,477	\$169,728	\$556,126
2029	\$0	\$378,921	\$7,553	\$169,728	\$556,202
2030	\$0	\$378,921	\$7,630	\$169,728	\$556,280
2031	\$0	\$378,921	\$7,709	\$169,728	\$556,358
2032	\$0	\$378,921	\$7,789	\$169,728	\$556,438

Source(s) of Information: Quarterly Fee Reports, District Records

Sample Calculations:

2014 Other revenue = Grants + recycling revenue + user fees + miscellaneous

\$576,090 = \$0 + \$407,123 + \$3,627 + \$165,339

6. Summary of District Revenues

The total revenue, comprised of contract fees and other revenue, was \$811,631 during the reference year. Revenue in the first year of the planning period (2018) is projected to be \$828,109. Revenue is projected to increase annually from 2017 to 2032, ending with a total revenue of \$847,225. The following table presents a summary of the District's actual and projected total revenue from 2010 to 2032.

Table O-6. Total Revenue

	Year	Contract Fees	Other Revenue	Total Revenue
	2010	\$233,802	\$619,463	\$853,265
	2011	\$245,273	\$626,951	\$872,224
	2012	\$235,454	\$642,434	\$877,887
	2013	\$230,254	\$538,997	\$769,250
	2014	\$235,541	\$576,090	\$811,631
	2015	\$289,267	\$501,896	\$791,163
	2016	\$299,018	\$587,448	\$886,467
	2017	\$316,645	\$646,666	\$963,310
×	2018	\$306,624	\$501,165	\$807,789
ing	2019	\$296,603	\$512,083	\$808,686
First Year of Planning Period +	2020	\$286,582	\$523,001	\$809,583
of P	2021	\$294,346	\$533,921	\$828,267

Ye	ear	Contract Fees	Other Revenue	Total Revenue
20)22	\$284,196	\$544,842	\$829,038
20	23	\$274,044	\$555,764	\$829,808
20	24	\$274,881	\$555,834	\$830,715
20	25	\$275,719	\$555,905	\$831,624
20	26	\$276,302	\$555,978	\$832,280
20	27	\$277,167	\$556,051	\$833,219
20	28	\$278,033	\$556,126	\$834,159
20	29	\$278,899	\$556,202	\$835,101
20	30	\$280,046	\$556,280	\$836,326
20	31	\$280,912	\$556,358	\$837,270
20	32	\$282,060	\$556,438	\$838,498

Source(s) of Information: Quarterly Fee Reports

Sample Calculations (2014): Total Revenue = Contract Fees + Other Revenues

\$811,631 = \$235,541+ \$576,090

B. Cost of Implementing Plan

1. Expenses

The projected budget, shown in table O-7, was developed based on programmatic needs identified in Appendices H, I, and L.

Table O-7. Expenses

Line #	Category/Program	2010	2011	2012	2013	2014	2015
1	1. Plan Monitoring/Prep.	\$26,322					
1.a	a. Plan Preparation	\$26,322	1 - 1 1				
1.b	The state of the s	\$0					The second secon
1.c	c. Other	\$0					
2	2. Plan Implementation	\$829,712	\$824,493	\$928,826	The second second second	A CONTRACTOR OF THE PARTY OF TH	\$757,666
2.a	a. District Administration	\$67,807		\$67,398	\$67,747		
2.a.1	Personnel	\$63,718	\$64,665	\$66,681	\$66,889	\$52,674	\$54,531
2.a.2	Office Overhead	\$703	\$1,238	\$717			\$1,503
2.a.3	Other	\$3,386					20.7
2.b	b. Facility Operation	\$736,672	\$719,939	\$818,765	\$658,709	\$734,921	\$665,900
2.b.1	MRF/Recycling Center	\$736,672	\$719,939	\$818,765	\$658,709	\$734,921	\$665,900
2.b.2	Compost	\$0	\$0	\$0	\$0	\$0	\$0
2.b.3	Transfer	\$0	\$0	\$0	\$0	\$0	
2.b.4	Special Waste	\$0	\$0	\$0	\$0	\$0	\$0
2.c	c. Landfill Closure/Post-Closure	\$0	\$0	\$0	\$0	\$0	\$0
2.d	d. Recycling Collection	\$0	\$0	\$13,325	\$0	\$0	\$200
2.d.1	Curbside	\$0	\$0	\$0	\$0	\$0	\$0
2.d.2	Drop-off	\$0	\$0	\$12,525	\$0	\$0	\$0
2.d.3	Combined Curbside/Drop-off	\$0	\$0	and the second second		\$0	\$0
2.d.4	Multi-family	\$0	\$0	\$0	\$0	\$0	\$0
2.d.5	Business/Institutional	\$0					\$200
2.d.6	Other	\$0					\$0
2.e	e. Special Collections	\$3,398		20000			
2.e.1	Tire Collection	\$2,353					
2.e.2	HHW Collection	\$0		\$9,038			\$12,220
2.e.3	Electronics Collection	\$1,045			\$2,371	\$0	\$0
2.e.4	Appliance Collection	\$0		\$0			\$0
2.e.5	Other Collection Drives	\$0	-	\$0			\$0
2.6.5 2.f		\$0	\$0				
2.g	g. Education/Awareness	\$18,788					
	Education Staff	\$1,182	\$1,189	\$821	\$1,325	\$1,479	\$1,530
2.g.1	Advertisement/Promotion	\$1,102	\$1,109	\$021			\$1,550
2.g.2	Other	\$17,606					\$16,171
2.g.3	T. 72.77		\$10,040	\$10,490			
2.h	h. Recycling Market Development	\$0	1000	\$0	and the second	\$0	\$0 \$0
2.h.1	General Market Development Activities	\$0	\$0		\$0	-	
2.h.2	ODNR pass-through grant	\$0	\$0	\$0	\$0	\$0	\$0
2.1	i. Service Contracts	\$0	\$0	\$0		\$0	\$0
2.j	j. Feasibility Studies	\$0	\$0	\$0	\$0		\$0
2.k	k. Waste Assessments/Audits	\$0	\$0	\$0	\$0	\$0	\$0
2.1	I. Dump Cleanup	\$0	\$0	\$0	\$0	\$0	\$0
2.m	m. Litter Collection/Education	\$40	\$0	-	\$0	\$80	\$0
2.n	n. Emergency Debris Management	\$0	\$0	\$0		\$0	\$0
2.0	o. Loan Payment	\$0	-		-		\$0
2.p	p. Other	\$3,008	-	\$202	\$201	\$9,739	\$1,968
3	3. Health Dept. Enforcement	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
	Health Department Name:	Ashland C	County-City	Health D	epartment		
3.a	a. Personnel	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
4		\$0	\$0	SO	\$0		\$0
5	DECEMBER SECTION OF THE PROPERTY OF THE PROPER	\$0	\$0	\$0	\$0		\$0
6		\$0	\$0	\$0			\$0
	7. Open Dump, Litter Law Enforcement	\$0	\$0				\$0
	8. Heath Department Training	\$0	\$0	\$0	\$0	\$0	\$0
	9. Municipal/Township Assistance	\$0	\$0			\$0	\$0
_				-			
	10. Compensation to Affected Community (ORC Section 3734.35)	\$0	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$001,U35	\$041,001	\$39,58U	\$101,103	ФО29,944	\$109,98J

Table O-7. Expenses (continued)

Line #	Category/Program	2016	2017	2018	2019	2020	2021
1	1. Plan Monitoring/Prep.	\$16,922	\$5,200	\$3,800	\$0	\$0	\$17,510
1.a	a. Plan Preparation	\$16,922	\$5,200	\$3,800	\$0	\$0	\$17,510
1.b	b. Plan Monitoring	\$0	\$0	\$0	\$0	\$0	\$0
1.c	c. Other	\$0	\$0	\$0	\$0	\$0	\$0
2	2. Plan Implementation	\$855,029	\$807,203	\$812,696	\$810,053	\$829,488	\$827,141
2.a	a. District Administration	\$58,091	\$59,361	\$60,229	\$61,110	\$62,004	\$62,912
2.a.1	Personnel	\$57,006		\$58,729			
2.a.2	Office Overhead	\$1,085			\$1,500		
2.a.3		\$0			\$0		
2.b	b. Facility Operation	\$770,624	\$707,538	\$724,205		\$738,356	
2.b.1	MRF/Recycling Center					\$738,356	
2.b.2	Compost	\$0	\$0	\$0	\$0	\$0	\$0
2.b.3		\$0	\$0	\$0	\$0	\$0	\$0
2.b.4		\$0	\$0	\$0	\$0	\$0	\$0
2.c	c. Landfill Closure/Post-Closure	\$0	\$0	\$0	\$0	\$0	\$0
2.d	d. Recycling Collection	\$0		\$0	\$0	\$0	
2.d.1	Curbside	\$0	\$0	\$0	\$0	\$0	\$0
2.d.2	Drop-off Drop-off	\$0	\$0	\$0	\$0	\$0	\$0
2.d.2	Combined Curbside/Drop-off	\$0	\$0	\$0	\$0	\$0	\$0
2.d.4		\$0	\$0	\$0	\$0	\$0	
							\$0
2.d.5		\$0	\$0	\$0	\$0	\$0	
2.d.6		\$0	\$0	\$0	\$0	\$0	\$0
2.e	and the second s	\$5,127	\$19,183	\$6,782	\$19,560		
2.e.1	Tire Collection	\$1,470	\$3,000	\$3,000	\$3,000		
2.e.2	HHW Collection	\$0		\$0	\$12,713	\$0	
2.e.3	Electronics Collection	\$3,657	\$3,719	\$3,782	\$3,846	\$3,912	\$3,978
2.e.4		\$0	\$0	\$0	\$0	\$0	\$0
2.e.5	Other Collection Drives	\$0	\$0	\$0	\$0	\$0	\$0
2.f	f. Yard Waste/Other Organics	\$0	\$0	\$0	\$0	\$0	\$0
2.g	g. Education/Awareness	\$20,768		\$21,480		\$22,216	
2.g.1	Education Staff	\$1,187	\$1,207	\$1,228	\$1,249	\$1,270	\$1,291
2.g.2	Advertisement/Promotion	\$0	\$0	\$0	\$0	\$0	\$0
2.g.3	Other	\$19,581	\$19,914	\$20,252	\$20,596	\$20,947	\$21,303
2.h	h. Recycling Market Development	\$0	\$0	\$0	\$0	\$0	\$0
2.h.1	General Market Development Activities	\$0	\$0	\$0	\$0	\$0	\$0
2.h.2	ODNR pass-through grant	\$0	\$0	\$0	\$0	\$0	\$0
2.i	i. Service Contracts	\$0	\$0	\$0	\$0	\$0	\$0
2.j	j. Feasibility Studies	\$0	\$0	\$0	\$0	\$0	\$0
2.k	k. Waste Assessments/Audits	\$0	\$0	\$0	\$0	\$0	\$0
2.1	I. Dump Cleanup	\$0	\$0	\$0	\$0	\$0	\$0
2.m		\$0	\$0	\$0	\$0	\$0	\$0
2.п		\$0	\$0	\$0	\$0	\$0	\$0
2.0		\$0	\$0	\$0	\$0	\$0	\$0
2.p		\$420		\$0	\$0	\$0	
	3. Health Dept. Enforcement	\$5,000	The second secon	\$5,000	\$5,000	\$5,000	\$5,000
						ψ5,000	ψο, σσο
	Health Department Name:			Health D		21.705	AV SE SE
3.a		\$5,000		Annual Control of the		\$5,000	\$5,000
	4. County Assistance	\$0		\$0	\$0	\$0	
	5. Well Testing	\$0	\$0	\$0	\$0	\$0	\$0
_	6. Out-of-State Waste Inspection	\$0	\$0	\$0	\$0	\$0	\$0
7	7. Open Dump, Litter Law Enforcement	\$0	\$0	\$0	\$0	\$0	\$0
8	8. Heath Department Training	\$0	\$0	\$0	\$0	\$0	\$0
9	9. Municipal/Township Assistance	\$0	\$0	\$0	\$0	\$0	\$0
	10. Compensation to Affected	\$0	100	\$0	\$0	\$0	\$0
10	Community (ORC Section 3734.35)	7.5		-	-	40	40
	Total Expenses	\$876,951	\$817,403	\$821,496	\$815,053	\$834,488	\$849,651

Table O-7. Expenses (continued)

1.a 1.b 1.c 2 2 2.a 2.a.1 2.a.2 2.b.1 2.b.2 2.b.3 2.b.4 2.c 2.d 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6	a. District Administration Personnel Office Overhead Other b. Facility Operation MRF/Recycling Center Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$63,833 \$62,333 \$1,500 \$0 \$771,689 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$3,914 \$0 \$0 \$830,168 \$64,768 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$818,357 \$65,717 \$64,217 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$833,287 \$66,680 \$65,180 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0	\$18,035 \$0 \$0 \$821,256 \$67,658 \$66,158 \$1,500 \$721,689 \$721,689	\$5,51 \$836,50 \$68,65 \$67,15 \$1,500 \$721,68 \$721,68
1.b 1.c 2 2 2.a 2.a.1 2.a.2 2.a.3 2.b 2.b.1 2.b.2 2.b.3 2.b.4 2.c 2.d 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	b. Plan Monitoring c. Other c. Plan Implementation a. District Administration Personnel Office Overhead Other b. Facility Operation MRF/Recycling Center Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$0 \$865,546 \$63,833 \$1,500 \$771,689 \$771,689 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$830,168 \$64,768 \$63,268 \$1,500 \$0 \$721,689 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$818,357 \$65,717 \$64,217 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$833,287 \$66,680 \$65,180 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0	\$0 \$0 \$821,256 \$67,658 \$66,158 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0	\$836,50 \$68,65 \$67,15 \$1,500 \$1,500 \$721,68 \$721,68
1.c 2 2 2.a 2.a.1 2.a.2 2.a.3 2.b.1 2.b.2 2.b.3 2.b.4 2.c 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	c. Other Plan Implementation a. District Administration Personnel Office Overhead Other b. Facility Operation MRF/Recycling Center Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$0 \$865,546 \$63,833 \$62,333 \$1,500 \$771,689 \$771,689 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$830,168 \$64,768 \$63,268 \$1,500 \$0 \$721,689 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$818,357 \$65,717 \$64,217 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0	\$0 \$833,287 \$66,680 \$65,180 \$1,500 \$0 \$721,689 \$0 \$0 \$0 \$0	\$0 \$821,256 \$67,658 \$66,158 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0	\$836,50 \$68,65 \$67,15 \$1,500 \$721,68 \$721,68
2 2 2.a.1 2.a.2 2.a.3 2.b.1 2.b.2 2.b.3 2.b.4 2.c 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	2. Plan Implementation a. District Administration Personnel Office Overhead Other b. Facility Operation MRF/Recycling Center Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$865,546 \$63,833 \$62,333 \$1,500 \$771,689 \$771,689 \$0 \$0 \$0 \$0 \$0 \$0	\$830,168 \$64,768 \$63,268 \$1,500 \$721,689 \$721,689 \$0 \$0 \$0 \$0	\$818,357 \$65,717 \$64,217 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0	\$833,287 \$66,680 \$65,180 \$1,500 \$721,689 \$721,689 \$0 \$0 \$0	\$821,256 \$67,658 \$66,158 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0	\$836,50° \$68,650 \$67,150° \$1,500° \$721,689 \$721,689
2.a 2.a.1 2.a.2 2.a.3 2.b.1 2.b.2 2.b.3 2.b.4 2.c 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	a. District Administration Personnel Office Overhead Other b. Facility Operation MRF/Recycling Center Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$63,833 \$62,333 \$1,500 \$0 \$771,689 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$64,768 \$63,268 \$1,500 \$0 \$721,689 \$0 \$0 \$0 \$0 \$0	\$65,717 \$64,217 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0	\$66,680 \$65,180 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0	\$67,658 \$66,158 \$1,500 \$0 \$721,689 \$0 \$0	\$68,650 \$67,150 \$1,500 \$0 \$721,689 \$721,689
2.a.1 2.a.2 2.a.3 2.b.1 2.b.2 2.b.3 2.b.4 2.c 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e.1 2.e.2	Personnel Office Overhead Other b. Facility Operation MRF/Recycling Center Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$62,333 \$1,500 \$0 \$771,689 \$771,689 \$0 \$0 \$0 \$0 \$0 \$0	\$63,268 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0	\$64,217 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0	\$65,180 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0	\$66,158 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0	\$67,150 \$1,500 \$0 \$721,689 \$721,689 \$0 \$0
2.a.2 2.a.3 2.b 2.b.1 2.b.2 2.b.3 2.b.4 2.c 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e.1 2.e.2	Office Overhead Other b. Facility Operation MRF/Recycling Center Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$1,500 \$0 \$771,689 \$771,689 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0 \$0	\$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0	\$1,500 \$0 \$721,689 \$721,689 \$0 \$0 \$0	\$1,500 \$0 \$721,689 \$721,689 \$0 \$0	\$1,500 \$0 \$721,689 \$721,689 \$0 \$0
2.a.3 2.b 2.b.1 2.b.2 2.b.3 2.b.4 2.c 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e.1 2.e.2	Other b. Facility Operation MRF/Recycling Center Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$0 \$771,689 \$771,689 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0 \$0	\$0 \$721,689 \$721,689 \$0 \$0 \$0 \$0	\$0 \$721,689 \$721,689 \$0 \$0 \$0	\$0 \$721,689 \$721,689 \$0 \$0	\$0 \$721,689 \$721,689 \$0
2.b 2.b.1 2.b.2 2.b.3 2.b.4 2.c 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e.1 2.e.2	b. Facility Operation MRF/Recycling Center Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$771,689 \$771,689 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$721,689 \$721,689 \$0 \$0 \$0 \$0 \$0	\$721,689 \$721,689 \$0 \$0 \$0 \$0 \$0	\$721,689 \$721,689 \$0 \$0 \$0 \$0	\$721,689 \$721,689 \$0 \$0	\$721,689 \$721,689 \$0 \$0
2.b.1 2.b.2 2.b.3 2.b.4 2.c 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e.1 2.e.2	MRF/Recycling Center Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$771,689 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$721,689 \$0 \$0 \$0 \$0 \$0 \$0	\$721,689 \$0 \$0 \$0 \$0 \$0	\$721,689 \$0 \$0 \$0 \$0	\$721,689 \$0 \$0	\$721,689 \$0
2.b.2 2.b.3 2.b.4 2.c 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0	\$0 \$0
2.b.3 2.b.4 2.c 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	Compost Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0	\$0	\$0
2.b.3 2.b.4 2.c 2.d 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	Transfer Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0		\$0
2.b.4 2.c 2.d 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	Special Waste c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0		
2.c 2.d 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	c. Landfill Closure/Post-Closure d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0	\$0	7.7	-
2.d 2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	d. Recycling Collection Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$0 \$0 \$0 \$0	\$0 \$0	\$0		\$0	\$0
2.d.1 2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	Curbside Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$0 \$0 \$0	\$0		\$0		\$0
2.d.2 2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	Drop-off Combined Curbside/Drop-off Multi-family Business/Institutional	\$0 \$0	1000	\$0	\$0		\$0
2.d.3 2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	Combined Curbside/Drop-off Multi-family Business/Institutional	\$0	\$0	\$0	\$0		\$0
2.d.4 2.d.5 2.d.6 2.e 2.e.1 2.e.2	Multi-family Business/Institutional		\$0	\$0	\$0		\$0
2.d.5 2.d.6 2.e 2.e.1 2.e.2	Business/Institutional	\$0	\$0	\$0	\$0		\$0
2.d.6 2.e 2.e.1 2.e.2	The state of the s	\$0	\$0	\$0	\$0		\$0
2.e 2.e.1 2.e.2	Other	\$0	\$0	\$0	\$0		
2.e.1 2.e.2		\$7,046		\$7,185			
2.e.2	e. Special Collections Tire Collection	\$3,000	\$3,000	\$3,000	\$3,000		\$3,000
	HHW Collection						
2.e.3	1 10 10 10 10 10 10 10 10 10 10 10 10 10	\$0	\$13,227	\$0	\$13,492	\$0	
0 - 4	Electronics Collection	\$4,046	\$4,115	\$4,185	\$4,256		\$4,402
2.e.4	Appliance Collection	\$0	\$0	\$0	\$0	\$0	\$0
2.e.5	Other Collection Drives	\$0	\$0	\$0	\$0	\$0	\$0
	f. Yard Waste/Other Organics	\$0	\$0	\$0	\$0	\$0	\$0
	g. Education/Awareness	\$22,978	\$23,369	\$23,766	\$24,170		\$24,999
2.g.1	Education Staff	\$1,313	\$1,336	\$1,358	\$1,381	\$1,405	\$1,429
2.g.2	Advertisement/Promotion	\$0	\$0	\$0	\$0	\$0	\$0
2.g.3	Other	\$21,665	\$22,033	\$22,408	\$22,789	\$23,176	\$23,570
	h. Recycling Market Development	\$0	\$0	\$0	\$0	\$0	\$0
2.h.1	General Market Development Activities	\$0	\$0	\$0	\$0	\$0	\$0
2.h.2	ODNR pass-through grant	\$0	\$0	\$0	\$0	\$0	\$0
	i. Service Contracts	\$0	\$0	\$0	\$0	\$0	\$0
	j. Feasibility Studies	\$0	\$0	\$0	\$0	\$0	\$0
	k. Waste Assessments/Audits	\$0	\$0	\$0	\$0	\$0	\$0
2.1	I. Dump Cleanup	\$0	\$0	\$0	\$0	\$0	\$0
2.m	m. Litter Collection/Education	\$0	\$0	\$0	\$0	\$0	\$0
2.n	n. Emergency Debris Management	\$0	\$0	\$0	\$0	\$0	\$0
2.0	o. Loan Payment	\$0	\$0	\$0	\$0	\$0	\$0
2.p	p. Other	\$0	\$0	\$0	\$0	\$0	\$0
3 3.	Health Dept. Enforcement	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
	Health Department Name:		Ashland C	ounty-City	Health De		
20							\$5,000
		\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
4 4.		\$0	\$0	\$0	\$0	\$0	\$0
5 5.		\$0	\$0	\$0	\$0	\$0	\$0
6 6.		\$0	\$0	\$0	\$0	\$0	\$0
7 7.		\$0	\$0	\$0	\$0	\$0	\$0
8 8.		\$0	\$0	\$0	\$0	\$0	\$0
9 9.		\$0	\$0	\$0	\$0	\$0	\$0
	Compensation to Affected ommunity (ORC Section 3734.35)	\$0 \$875,902	\$0	\$0	\$0	\$0	\$0

Table O-7. Expenses (continued)

ine #	Category/Program	2028	2029	2030	2031	2032
	1. Plan Monitoring/Prep.	\$4,031	\$0	\$0	\$18,576	\$5,682
1.a	a. Plan Preparation	\$4,031		\$0		\$5,682
1.b	b. Plan Monitoring	\$0		\$0	\$0	\$0
1.c	c. Other	\$0		\$0	\$0	\$0
	2. Plan Implementation	A STATE OF THE PARTY OF THE PAR	\$839,814			- Company of the Company
2.a	a. District Administration	\$69,658	Annual Control of the			\$73,840
2.a.1	Personnel	\$68,158				\$72,340
2.a.2	Office Overhead	\$1,500		The second secon		\$1,500
2.a.3	Other	\$0		\$0	T 20	\$0
2.b	b. Facility Operation		\$721,689			
2.b.1	MRF/Recycling Center		\$721,689	the state of the s	-	
2.b.2	Compost	\$0	\$0	\$0	\$0	\$0
2.b.3	Transfer	\$0		\$0	\$0	\$0
2.b.4	Special Waste	\$0		\$0	\$0	\$0
2.c	c. Landfill Closure/Post-Closure	\$0	\$0	\$0	\$0	\$0
2.d	d. Recycling Collection	\$0	\$0	\$0	\$0	\$0
2.d.1	Curbside	\$0	\$0	\$0	\$0	\$0
2.d.2	Drop-off	\$0		\$0	\$0	\$0
2,d.3	Combined Curbside/Drop-off	\$0	\$0	\$0	\$0	\$0
2.d.4	Multi-family	\$0	\$0	\$0	\$0	\$0
2.d.5	Business/Institutional	\$0	\$0	\$0	\$0	\$0
2.d.6	Other	\$0	The second second	\$0	\$0	\$0
2.e	e. Special Collections	\$7,477	\$21,589	\$7,630	\$22,026	\$7,789
2.e.1	Tire Collection	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
2.e.2	HHW Collection	\$0	\$14,037	\$0	\$14,317	\$0
2.e.3	Electronics Collection	\$4,477	\$4,553	\$4,630	\$4,709	\$4,789
2.e.4	Appliance Collection	\$0	\$0	\$0	\$0	\$0
2.e.5	Other Collection Drives	\$0	\$0	\$0	\$0	\$0
2.f	f. Yard Waste/Other Organics	\$0	\$0	\$0	\$0	\$0
2.g	g. Education/Awareness	\$25,424	\$25,856	\$26,296	\$26,743	\$27,197
2.g.1	Education Staff	\$1,453	-	\$1,503	\$1,528	\$1,554
2.g.2	Advertisement/Promotion	\$0	\$0	\$0	\$0	\$0
2.g.3	Other	\$23,971	\$24,378	\$24,793	\$25,214	\$25,643
2.h	h. Recycling Market Development	\$0	\$0	\$0	\$0	\$0
2.h.1	General Market Development Activities	\$0	\$0	\$0	\$0	\$0
2.h.2	ODNR pass-through grant	\$0	\$0	\$0	\$0	\$0
2.i	Service Contracts	\$0	\$0	\$0	\$0	\$0
2.j	j. Feasibility Studies	\$0	\$0	\$0	\$0	\$0
2.k	k. Waste Assessments/Audits	\$0	\$0	\$0	\$0	\$0
2.1	I. Dump Cleanup	\$0	\$0	\$0	\$0	\$0
2.m		\$0			\$0	\$0
2.n		\$0		\$0	\$0	\$0
2.0	o. Loan Payment	\$0		\$0	\$0	\$0
2.p		\$0	_	\$0	\$0	\$0
-	3. Health Dept. Enforcement	\$5,000		\$5,000	\$5,000	\$5,000
9						
-	Health Department Name:		and Count	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
3.a	a. Personnel	\$5,000	the second name of the second	\$5,000	\$5,000	\$5,000
4	4. County Assistance	\$0	\$0	\$0	\$0	\$0
5	5. Well Testing	\$0	\$0	\$0	\$0	\$0
6	6. Out-of-State Waste Inspection	\$0	\$0	\$0	\$0	\$0
7	7. Open Dump, Litter Law Enforcement	\$0	\$0	\$0	\$0	\$0
8	8. Heath Department Training	\$0	\$0	\$0	\$0	\$0
9	9. Municipal/Township Assistance	\$0	\$0	\$0	\$0	\$0
	10. Compensation to Affected Community (ORC Section 3734.35)	\$0	\$0	\$0	\$0	\$0

2. Explanation of Expenses

Table O-7 includes actual expenses from 2010 to 2016, anticipated expenses from the District's approved budgets for 2017, and projected expenditures from 2018 to 2032. Line items explained below are numbered according to the corresponding line item number in the District's Quarterly Fee Reports. Line items that did not have any expenditures projected throughout the planning period were omitted from the discussion below. Projections were developed using the following assumptions or criteria:

1. Plan Preparation and Monitoring

 1.a Plan Preparation – Budget includes estimated expenses related to retaining a consultant for assistance with plan preparation for each 5-year update that will occur during the planning period.

2. Plan Implementation

2.a District Administration

- 2.a.1 Personnel Budget includes expenditures for salaries, OPERS/STRS, workers' compensation, Medicare, and health insurance. Expenditures are projected to increase 1.5% annually based on historic trends and District practices.
- 2.a.2 Office Overhead Budget includes expenditures for a variety of administrative costs, including but not limited to postage, utilities, telecommunications, staff training, and trade organization memberships. The average expenses in this category from 2012-2016 were rounded up to \$1,500 annually to project the flat amount that will be allocated each year.

2.b Facility Operation

2.b.1 MRF/Recycling Center – Expenditures in 2017 were calculated using the average program cost from 2012 to 2016. The base operating budget was held constant and increased by 2% in 2020. In addition to the base operating budget, additional funding was allocated for planned capital improvements and equipment replacements. This additional funding will only be used if the District receives grant funding. If the District obtains grant funding, it will purchase one used box truck per year in 2018 and 2020 and a baler in 2022. The District estimates the box trucks will each cost \$50,000 and the baler will cost \$150,000. The grants that the District needs

to receive in order to purchase the vehicles and baler require a 33% grant match. In 2018 and 2020, an additional \$16,667 has been allocated to represent the District's contribution to each box truck and \$50,000 has been allocated in 2022 to represent the District's contribution to the baler. The portion funded by grants has been excluded from this table because grant funding is competitive and not guaranteed.

2.e Special Collections

- 2.e.1Tire Collection The District's 2016 budget was used to project a flat annual budget. The District rarely uses the maximum budget, so the annual quantity should provide ample funding even if the program grows throughout the planning period. The costs for this program are offset by user fees. If costs for this program increase, user fee revenue will increase, but the result will be a neutral impact on the budget (i.e., there will not be a net gain or loss in funding).
- 2.e.2 HHW Collection Collection events are planned to occur in odd numbered years. Program costs in 2017 are based on the 2015 budget and increased 2%. The budget during each odd numbered year increases 2% from the previous budget.
- 2.e.3 Electronics Collection The annual budget for this
 program is projected to increase 1.7% annually based on the
 2015 Social Security Cost of Living Adjustment (COLA). The
 costs for this program are offset by user fees. If costs for this
 program increase, user fee revenue will increase, resulting in
 a neutral impact on the budget (i.e., there will not be a net gain
 or loss in funding).

2.g Education/Awareness

- 2.g.1 Education Staff The annual budget for this program is projected to increase 1.7% annually based on the 2015 Social Security Cost of Living Adjustment (COLA).
- 2.g.3 Other The annual budget for this program is projected to increase 1.7% annually based on the 2015 Social Security Cost of Living Adjustment (COLA).

3. Health Department Enforcement

 3.a Personnel – A flat annual budget of \$5,000 is allocated to this program.

The District started the 2014 reference year with a carry-over balance of \$76,586. Based on revenue and expenditure projections discussed throughout this appendix, the District is expected to begin the planning period in 2018 with a carry-over balance of \$221,170 and end the planning period with a carry-over balance of \$50,187. Ample funding is projected to be available to finance the implementation of this plan update. Table O-8 presents a summary of the District's budget, including revenue, expenditures, and fund balance.

Table O-8. Budget Summary

	Year	Revenue	Expenses	Annual Surplus/ Deficit	Balance
	2009		E	nding Balance	\$103,389
	2010	\$853,265	\$861,035	-\$7,769	\$95,620
	2011	\$872,224	\$841,061	\$31,162	\$126,782
	2012	\$877,887	\$939,580	-\$61,693	\$65,089
	2013	\$769,250	\$757,753	\$11,497	\$76,586
	2014	\$811,631	\$829,944	-\$18,313	\$58,273
	2015	\$791,163	\$769,981	\$21,182	\$79,454
1	2016	\$886,467	\$876,951	\$9,516	\$88,970
	2017	\$963,310	\$817,403	\$145,907	\$234,877
×	2018	\$807,789	\$821,496	-\$13,707	\$221,170
	2019	\$808,686	\$815,053	-\$6,367	\$214,803
	2020	\$809,583	\$834,488	-\$24,905	\$189,897
g I	2021	\$828,267	\$849,651	-\$21,384	\$168,513
Period	2022	\$829,038	\$875,902	-\$46,864	\$121,649
	2023	\$829,808	\$839,082	-\$9,273	\$112,376
Flanning	2024	\$830,715	\$823,357	\$7,359	\$119,735
	2025	\$831,624	\$838,287	-\$6,663	\$113,072
Ĕ	2026	\$832,280	\$844,291	-\$12,012	\$101,060
5	2027	\$833,219	\$847,018	-\$13,799	\$87,261
rear	2028	\$834,159	\$833,278	\$881	\$88,141
	2029	\$835,101	\$844,814	-\$9,714	\$78,428
i si l	2030	\$836,326	\$832,332	\$3,994	\$82,421
4	2031	\$837,270	\$866,805	-\$29,535	\$52,887
	2032	\$838,498	\$841,197	-\$2,699	\$50,187

APPENDIX P

DESIGNATION

APPENDIX P. Designation

A. Statement Authorizing/Precluding Designation

Ohio law gives each SWMD the ability to control where waste generated from within the SWMD can be taken. Such control is generally referred to as flow control. In Ohio, SWMDs establish flow control by designating facilities. SWMDs can designate any type of solid waste facility, including recycling, transfer, and landfill facilities.¹

Even though a SWMD has the legal right to designate, it cannot do so until the policy committee (or the Board in the case of an Authority) specifically conveys that authority to the board of directors. The policy committee does this through a solid waste management plan. If the SWMD desires to have the ability to designate facilities, then the policy committee includes a clear statement in the solid waste management plan giving the designation authority to the board of directors. The policy committee can also prevent the board of directors from designating facilities by withholding that authority in the solid waste management plan.

Even if the policy committee grants the board of directors the authority to designate in a solid waste management plan, the board of directors decides whether or not to act on that authority. If it chooses to use its authority to designate facilities, then the board of directors must follow the process that is prescribed in ORC Section 343.014. If it chooses not to designate facilities, then the board of directors simply takes no action.

Once the board of directors designates facilities, only designated facilities can receive the SWMD's waste. In more explicit terms, no one can legally take waste from the SWMD to undesignated facilities and undesignated facilities cannot legally accept waste from the SWMD. The only exception is when the board of directors grants a waiver to allow an undesignated facility to take the SWMD's waste. Ohio law prescribes the criteria that the board must consider when deciding whether to grant a waiver and the time period available to the board for making a decision on a waiver request.

1. Authorization Statement to Designate

The District is hereby authorized to establish facility designations in accordance with ORC Section 343.013, 343.014 and 343.015.

2. Description of the SWMD's Designation Process

¹ Source-separated recyclables delivered to a "legitimate recycling facility" as defined in Ohio law are not subject to the requirements of designation. (A legitimate recycling facility is loosely defined as a facility which consistently recycles a majority of the materials processed on-site.)

Decisions regarding designation or the granting of a designation waiver shall be made by the District, following a review of the request by the Policy Committee.

Where the District designates facilities, it may grant a waiver to a non-designated entity to provide solid waste disposal, transfer or resource recovery facilities or activities at any time after the plan update is approved and in accordance with the criteria specified in ORC 343.01(I)(2). The Policy Committee will evaluate each request for designation or waiver based upon, at least, the following general criteria:

- The facility's compatibility with the District's Solid Waste Management Plan.
- The facility's compliance with all rules promulgated by the District and the District's Solid Waste Management Plan.

The full procedure for granting a designation waiver is included in the District's *Designation Procedure and Evaluation Document*, found in Appendix V.

B. Designated Facilities

The currently designated facilities for the solid waste generators are shown in Table P-1.

Table P-1. Facilities Designated

Facility Name	Locatio		Facility Type	Year
In-District	County	State		Designated
None.				T
Out-of-District				-
Crawford County Landfill	Crawford	ОН	Landfill	2011
Mahoning Landfill	Mahoning	ОН	Landfill	2011
Lorain County Landfill	Lorain	ОН	Landfill	2011
Noble Rd. Landfill	Richland	ОН	Landfill	2011
American Landfill	Stark	ОН	Landfill	2011
Countywide Landfill	Stark	ОН	Landfill	2011
Evergreen Recycling & Disposal Facility	Wood	ОН	Landfill	2011
Suburban Recycling & Disposal Facility	Perry	ОН	Landfill	2011
Stony Hollow Landfill	Montgomery	ОН	Landfill	2011

Faction Many	Location		Carllen Ton	Year
Facility Name	County	State	Facility Type	Designated
County Environmental of Wyandot	Wyandot	ОН	Landfill	2011
Kimble Sanitary Landfill	Tuscarawas	ОН	Landfill	2011
Gallia County Landfill	Gallia	ОН	Landfill	2011
Coshocton Landfill	Coshocton	ОН	Landfill	2011
Geneva Landfill	Ashtabula	ОН	Landfill	2011
Marion County Solid Waste Transfer Station	Marion	ОН	Transfer Facility	2011
Kimble Transfer & Recycling	Carroll	ОН	Transfer Facility	2011
Cambridge Transfer & Recycling	Guernsey	ОН	Transfer Facility	2011
Mt. Vernon Transfer Station	Knox	ОН	Transfer Facility	2011
Kimble Transfer & Recycling Facility	Stark	ОН	Transfer Facility	2011
Kimble Transfer & Recycling Facility	Summit	ОН	Transfer Facility	2011
Lorain County Resource Recovery	Lorain	ОН	Material Recovery Facility	2011
Oakwood Transfer Station	Cuyahoga	ОН	Transfer Facility	2011
Richland County Transfer Station	Richland	ОН	Transfer Facility	2011
Out-of-State				
None.				

Appendix P3 contains a sample uniform designation agreement used for each of the designated facilities listed above.

C. Waiver Process for the Use of Undesignated Facilities

In the event that any person wants to use a facility, other than a designated facility, for the disposal of municipal solid waste, the person must submit a written request for a waiver of designation to the Board of the Ashland County Solid Waste Management District. The request must state the type and amount of material, the facility to be used, the intended duration of the waiver, and the reason for requesting the waiver.

The Ashland County Solid Waste Management District staff will review the request and may request additional information if necessary. The Board shall act on the request for a waiver within 90 days after receiving the request. The Board may grant the request for a waiver if the Board determines that:

 The waiver request is not inconsistent with the projections contained in the District's initial or amended solid waste management plan;

- The waiver request will not adversely affect the implementation and financing of the District's initial or amended solid waste management plan;
- The waiver request assures the Maximum Feasible Utilization of existing in-District Solid Waste Facilities;
- d. The waiver request includes solid waste that will be beneficially used or managed through recycling, reuse, energy recovery or other forms of management that are accepted by Ohio EPA as diversion from the landfill;
- e. The length of time requested for the waiver;
- f. The location for the alternate final disposal or recycling processing facility;
 and
- g. The detailed explanation for the waiver request.

The Board and/or the District Coordinator (as authorized by the Board), within ninety days following receipt of a request for a waiver authorizing the delivery of solid waste generated within the District to an undesignated solid waste facility, shall act upon the waiver request. The waiver request will be evaluated pursuant to District Rule 9, section 343.01(I)(2) of the Revised Code and the policy herein. The District Coordinator will notify the Person requesting the waiver of the action/decision of the Board or District Coordinator. If the waiver is approved, the District Coordinator will notify the Person identified on the District's Application for Waiver from Designation Requirements that the Board or District Coordinator approved the wavier.

If a waiver is granted, the terms and conditions that provide the basis for the approval of the waiver request shall be included in a Waiver Agreement. The Waiver Agreement shall be effective on the date of last execution of the Waiver Agreement. The Waiver Agreement will include a waiver fee. The Board may assess the waiver fee on each ton of solid waste or each ton of source separated solid waste recyclable materials waste covered by the waiver, by a waiver application fee, or other mechanism decided by the Board. The waiver fees are decided by the Board and reviewed annually.

All waivers will be reviewed periodically, but at a minimum annually, by the District Coordinator to determine whether the waiver should be terminated or continued. This waiver policy does not apply to any contract by and between the Board and any Person relating to the transportation, delivery, disposal or processing of Solid Waste or Solid Waste Recyclable Materials generated within the District.

UNIFORM DESIGNATION AND SOLID WASTE SERVICE AGREEMENT

offices locat		the Ashland County Solid Waste Management District, with e Street, Ashland, Ohio 44805 (the "District") and (the "Contractor"), an Ohio corporation with an office
located at		
		RECITALS
the District Se Protection Ag and repairs of	olid Waste Managemen ency on September 19,	determined that the funds required to finance implementation of ant Plan, approved by the Director of the Ohio Environmental, 2005 (the "District Plan"), and to pay for certain maintenance Sanitary Landfill, shall be collected by Board-designated solid pard; and
disposal service owners of imp seven dollar a	ces to the owners of in roved parcels or from to and fifty cent (\$7.50) per porized pursuant to sect	gnated solid waste facilities will provide solid waste transfer or improved parcels within Ashland County and collect from the the owners' selected solid waste hauler and remit to the Board a ser ton fee as consideration for such designation (the "Contract tions 343.01(H), 343.014, 343.02, 343.022 and 343.08 of the
cent (\$0.50) p	er ton rate or charge ef ach calendar year throu	tion 343.08(C) of the Revised Code, the Board approved a fifty ffective January 1, 2012, which rate or charge shall increase on 1, 2017 for the maintenance and repairs of the Ashland County
WHEI name of	REAS, the Contractor	owns and operates a solid waste facility operating under the located at (the
"Contractor's	Facility") and has submet Board's Invitation for	nitted a Request for Designation for the Contractor's Facility in
	t the Contractor's Facil	reviewed the Contractor's Request for Designation and has lity meets the requirements of the Invitation for Designation and
WHER	EAS, the Board desir	res to designate the Contractor's Facility and the Contractor

1

Resolution Authorizing Preliminary Designation on November 23, 2010; a Resolution Declaring Intent to Establish Proposed Designations on December 2, 2010; and a Resolution of Designation of Solid Waste Facilities on December 21, 2010 (the "Effective Date"), and has completed all actions

WHEREAS, the Board adopted a Resolution of Intent to Designate on October 28, 2010; a

desires to accept such designation on the terms and conditions of this Agreement; and

required in sections 343.014 and 343.08 of the Revised Code.

NOW, THEREFORE, in consideration of the promises and mutual covenants contained herein, it is hereby agreed between the parties as follows:

ARTICLE I - DISTRICT'S DESIGNATION OF CONTRACTOR'S FACILITY

- 1.1 Pursuant to section 343.014 of the Revised Code, the Board hereby designates the Contractor's Facility as a solid waste facility authorized to accept, transfer or dispose solid waste generated within the District.
- 1.2 The parties acknowledge and agree that section 343.01(I)(2) of the Ohio Revised Code provides that solid waste generated within the District is permitted to be transferred or disposed only at facilities designated by the Board under section 343.014 of the Ohio Revised Code. and that such designations by the Board include or will include facilities other than the Contractor's Facility on the same terms and conditions as this Agreement. It is the further understanding of the parties that the District does not contemplate requiring any person, municipal corporation, township or other political subdivision located within the District to deliver or cause to be delivered any solid waste to any particular Board-designated facility.

ARTICLE II - CONTRACTOR'S OBLIGATIONS

- 2.1 The Contractor shall perform and complete in a workmanlike manner all work required to operate and maintain the Contractor's Facility, or cause the Contractor's Facility to be operated and maintained, in substantial compliance with all applicable federal, state and local laws as well as the terms and conditions of any applicable licenses or permits.
- 2.2 The Contractor agrees to accept all solid waste generated within the District and thereby provide solid waste transfer or disposal service to the District and the owners of improved parcels within the District, provided that any person who delivers any such solid waste complies with the Contractor's rules and regulations regarding solid waste deliveries.
- 2.3 The Contractor agrees to collect and pay to the District a Contract Fee of seven dollars and fifty cents (\$7.50) per ton of solid waste generated within the District that is received at the Contractor's Facility. Collection of the \$7.50 per ton Contract Fee shall commence sixty (60) days after the Effective Date in accordance with this Uniform Designation and Solid Waste Service Agreement until the Agreement is terminated as provided herein. Prior to the end of each calendar month, the Contractor shall submit to the Board a monthly certified Contract Fee statement, on a form prescribed by the Board, in which the Contractor shall separately identify the tonnage (expressed in tenths of a ton) of solid waste generated within the District that was delivered to the Contractor's Facility during the preceding calendar month, and the amount of the Contract Fee due on that tonnage. The Contractor shall forward payment to the Board of the amount of the Contract Fee identified in the monthly report at the same time the Contractor submits the monthly report. The Board may change the amount of the Contract Fee upon ninety (90) days advance notice to the Contractor provided the Board changes the amount of the Contract Fee collected by all designated solid waste facilities such that all designated solid waste facilities collect and remit to the Board the same Contract Fee.

- 2.4 Effective January 1, 2012, the Contractor shall collect a fifty cent (\$0.50) per ton rate and charge for the maintenance and repair of the Ashland County Sanitary Landfill and remit that rate or charge on the same day of the remittance of the Contract Fee. The rate and charge shall be increased each January 1 of each calendar year through 2017.
- 2.5 Failure to make timely payment of the Contract Fee or comply with any of the Contractor's obligations as provided herein shall constitute a default by the Contractor for which the Board, in addition to any other rights or remedies available, may terminate this Agreement upon thirty (30) days notice to the Contractor and thereby terminate the right of the Contractor's Facility to receive and accept solid waste generated within the District. The Contractor may cure any default within the thirty (30) days notice and the termination of the Agreement shall not occur as provided in the notice of default and termination.
- 2.6 The Contractor represents, if the Contractor owns and operates a solid waste landfill, that years of solid waste disposal capacity is available at the Landfill on the date of final execution of this Agreement by the Contractor. Upon request of the Board, and no more frequently than once each calendar year, the Contractor shall provide an estimate of the remaining years of solid waste disposal capacity at the Landfill.

ARTICLE III - TERM AND TERMINATION

- 3.1 This Agreement shall commence as of the date of last execution, with collection and remittance of the Contract Fee for solid waste generated within the District and received at the Contractor's Facility to begin on February 19, 2011, which is sixty (60) days after the Effective Date.
- 3.2 Either the Board or the Contractor may terminate this Agreement for any reason upon one hundred eighty (180) days written notice to the other party.
- 3.3 The Designation Agreement by and between the Board and the Contractor on the effective date of this Uniform Designation and Solid Waste Service Agreement shall terminate.

ARTICLE IV - MISCELLANEOUS

- 4.1 This Agreement may be assigned by the Contractor to any successor in interest of the Contractor's Facility with the consent of the District. Such consent shall not be unreasonably withheld.
- 4.2 This Agreement shall be binding upon and inure to the benefit of the parties hereto, and their successors, respective heirs, personal representatives, and assigns.
- 4.3 This Agreement shall constitute the entire understanding between the parties hereto relating to the matters contained herein. Any prior agreement by and between the parties that designate the Contractor's Facility shall terminate sixty (60) days after the Effective Date.
- 4.4 No amendments or variations of the terms and conditions of this Agreement shall be valid unless the same are in writing and signed by all the parties hereto.

- 4.5 This Agreement shall be construed and enforced pursuant to the laws of the State of Ohio.
- 4.6 Any action regarding this Agreement shall be brought in a court of competent jurisdiction in Ashland County, Ohio.

IN WITNESS WHEREOF, the parties have duly executed this Agreement in duplicate originals on the date provided below.

By:	5-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	
Barb Queer	Date	
By:		
Michael E. Welch	Date	
Ву:		
Kim Edwards	Date	
CONTRACTOR:		
Signature	Date	
Printed Name		

APPENDIX Q

DISTRICT RULES

APPENDIX Q. District Rules

A. Existing Rules

The following definitions have been incorporated into the District's existing rules summarized in this Appendix:

DEFINITIONS

"Applicant" means a Person: (a) proposing to construct or Modify a Solid Waste Facility within the District that requires a determination by the Board that a proposal to construct or Modify a Solid Waste Facility complies with the Plan; (b) requesting a waiver by the Board from application of a Rule adopted by the Board; or (c) requesting permission to deliver Solid Waste generated within the District to a Solid Waste Facility that is not a Designated Solid Waste Facility.

"Board" means the Board of County Commissioners in its capacity as the Board of Directors of the Ashland County Solid Waste Management District with its principal offices located at 110 Cottage Street, Ashland, Ohio 44805.

"Designated Solid Waste Facility" means those Solid Waste Facilities designated in the initial or amended Plan and as designated pursuant to sections 343.013, 343.014 or 343.015 of the Revised Code.

"District" means the Ashland County Solid Waste Management District and includes the territory of Ashland County and such greater or lesser territory of a municipality which, pursuant to Section 3734.52(A) of the Revised Code, is included, or excluded from the district.

"General Plans and Specifications" means that information required to be submitted to the Board for review for the construction or modification of any proposed Solid Waste Facility and includes, but is not limited to, a site plan for the proposed Solid Waste Facility, architectural drawings or artist's renderings of the proposed Solid Waste Facility, the projected size and capacity of the proposed Solid Waste Facility and all other information required by the siting strategy contained in the Plan.

"Hazardous Waste" means Solid Waste which, by reason of its listing, composition or characteristics is a hazardous waste (as defined in the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., as amended, (including but not limited to, amendments thereto made by the Solid Waste Disposal Act Amendments of 1980) and related federal, state and local laws and regulations, or in any additional or substitute federal, state or local laws and regulations pertaining to the identification, treatment, storage or disposal of toxic substances or hazardous wastes; as any of the foregoing is from time-to-time amended or replaced.

"Legitimate Recycling Facility" means an engineered facility or site where Recycling of material other than Scrap Tires is the primary objective of the Facility, including: (a) Facilities that accept only Source Separated Recyclable Materials, except Scrap Tires, and/or commingled Recyclable Materials which are currently recoverable utilizing existing technology; and (b) Facilities that: (i) accept mixed or Source Separated Solid Waste; (ii) recover for beneficial use not less than sixty percent (60%) of the weight of Solid Waste brought to the Facility each month (as averaged monthly) for not less than forty percent (40%) of the total weight of Solid Waste brought to the Facility each month (as averaged monthly) for not less than eight (8) months in each calendar year.

"Maximum Feasible Utilization" means the use of a Designated Solid Waste Facility located within the District that operates at not less than ninety-five percent (95%) of its designed capacity and/or Ohio EPA-permitted allowable maximum daily waste receipts at the Board-approved rates and charges to be paid by any Person that delivers Solid Waste or Recyclable Materials to the Designated Solid Waste Facility.

"Modify" or "Modification" means a change in the operation of an existing in-District Solid Waste Facility that requires the approval of the Director of the Ohio Environmental Protection Agency; or, that involves a change in the type of material, manner of operation or activities conducted at the Solid Waste Facility that may directly or indirectly affect the Maximum Feasible Utilization of existing in-District Solid Waste Facilities.

"Person" means a natural person, partnership, association, firm, corporation, limited liability company, municipal corporation, township, government unit, or other political subdivision.

"Plan" means the Solid Waste Management Plan of the District approved by the Director of the Ohio Environmental Protection Agency on September 19, 2005 and as amended hereafter.

"Rule" means the action of the Board in promulgating, adopting and publishing such action as a rule of the District as reserved in the Plan and authorized by Sections 343.01 (G) and 3734.53 of the Revised Code, as now existing or hereafter amended.

"Scrap Tire" means an unwanted or discarded tire.

"Solid Waste" means such unwanted residual solid or semisolid material as results from industrial, commercial, agricultural, and community operations, excluding earth or material from construction, mining or demolition operations, or other waste materials of the type that would normally be included in demolition debris, nontoxic fly ash, spent nontoxic foundry sand,

and slag and other substances that are not harmful or inimical to public health, and includes, but is not limited to, garbage, tires, combustible and non-combustible material, street dirt, and debris. "Solid Waste" does not include any material that is an infectious waste or a Hazardous Waste.

"Solid Waste Collection Facility" means any site, location, tract of land, installation, or building used for collection of Solid Wastes including Recyclable Materials.

"Solid Waste Composting Facility" means any site, location, tract of land, installation, or building used for composting Solid Waste where the owner or operator has met all registration, licensing, or permitting requirements of rule 3745-27-41 of the Administrative Code.

"Solid Waste Disposal Facility" means any site, location, tract of land, installation, or building used for incineration, composting, sanitary landfilling, or other approved methods of disposal of Solid Waste.

"Solid Waste Energy Recovery Facility" means any site location, tract of land, installation, or building where mixed Solid Waste or select sources of Solid Waste, including scrap tires, is used as or intends to be used as fuel to produce energy, heat, or steam.

"Solid Waste Facilities" include Solid Waste Disposal Facilities, Energy Recovery Facilities, Resource Recovery Facilities, Composting Facilities, Transfer Facilities, Legitimate Recycling Facilities, Recycling Facilities, and Collection Facilities.

"Solid Waste Recycling Facility" means any site, location, tract of land, installation, or building used for Recycling Solid Waste.

"Solid Waste Resource Recovery Facility" includes Solid Waste Energy Recovery Facilities, Legitimate Recycling Facilities, and Solid Waste Recycling Facilities.

"Solid Waste Transfer Facility" means any site, location, tract of land, installation, or building that is used or intended to be used primarily for the purpose of transferring Solid Waste that is generated off the premises of the Facility from vehicles or containers into other vehicles for transportation to a Solid Waste Disposal Facility.

"Source Separated Recyclable Materials" means the process of separating, or the separation of Solid Waste, including Yard Waste and Recyclable Materials, from other Solid Waste at the location where such materials are generated for the purpose of Recycling.

"Yard Waste" means all garden residues, leaves, grass clippings, shrubbery and tree cuttings less than one-quarter inch in diameter, and similar material.

"Waiver Fee" is a fee payable to District relating to any waiver granted by the Board.

The following rules were adopted during implementation of the previously ratified solid waste management district plan. These rules will remain in place following the approval of this Plan update. The Board reserves the right to modify any of these rules at any time and nothing contained in these proposed rules limits the authority of the Board to promulgate further rules in accordance with Section 343.01(G) of the Ohio Revised Code in order to fully implement this Plan.

The purpose of the rules and regulations is to give the District a basis for future solid waste management planning and to provide direction in achieving the recycling and waste minimization goals.

- The District reserves the right to amend and/or add rules and regulations at any time deemed appropriate by the Board for appropriate implementation of the Plan. Additional rules may include, but are not limited to, mandatory solid waste management methods, additional material prohibitions, and additional enforcement provisions.
- 2. The Board reserves the right to establish a Rules, Regulations and Enforcement Committee (RREC) for future modifications or additions to the rules and regulations and for the establishment of enforcement guidelines. The Committee shall include, at a minimum, the District Coordinator, a representative from the county health department, and a public member.
- 3. To encourage participation in District recycling programs, the District requires all solid waste haulers doing business within the District to report all solid waste and recyclables collected. Recyclables collected and recycled shall be reported by recyclable type (i.e., newsprint, corrugated, brown, HDPE, PET, aluminum, ferrous, etc.) in pounds or tons. These amounts may be requested monthly, but at the very least, will be requested on an annual basis. The amounts recycled must be provided no later than two months after the end of the time period for which the amounts are requested. Additionally, the routes and areas serviced shall be identified by all haulers.

Existing solid waste disposal facilities and solid waste haulers must submit assurance of compliance with the requirement of item 3.a above, as part of the annual licensing procedure by the health department to receive license renewal.

- 4. All solid waste loads received by in-district solid waste disposal facilities and solid waste that is located at the curbside within the District is subject to inspection to assure compliance with all local, state, and federal regulations.
- 5. The District has the right to regulate the collection and flow of solid waste, compostables, and recyclable material, herein called flow control, as needed to meet the requirements of Amended Substitute House Bill 592, Senate Bill 153, the District Plan, and any new local, state, or federal legislation. Flow control authority has received approval of the Board of Directors and Policy Committee. As given in Section VI.E of this Plan, the Board of Directors of the Ashland County Solid Waste Management District is authorized to establish facility designations in accordance with Section 343.014 of the Ohio Revised Code after this Plan has been approved by the Director of the Ohio Environmental Protection Agency.
- 6. No incineration of recyclable materials will be allowed within the District unless the District agrees there is no reasonable market for the recyclable materials to be incinerated. Any incineration must be in compliance with local, state, and federal regulations and can be performed only following written permission from the Board.
- 7. In the event that mandatory requirements for recycling are implemented by the District, the District may establish rules prohibiting designated materials from being landfilled for certain in-district waste generation. Any prohibitions would be in addition to the existing schedule set forth by the Ohio Environmental Protection Agency for materials prohibited from being landfilled.
 - The District may assist in locating recyclable goods markets for entities that are recycling.
- The Board has the ability to assess fees and prepare budgets to finance activities associated with proper implementation and support of the Plan.
- 9. The Board may convene a Technical Advisory Committee when applicable, in activities associated with Plan implementation, Plan updates, Plan revisions, and additional rules to be developed or the modification of existing rules. The extent of the Technical Advisory Committee participation will be determined by the Board.
- The Board will work with the local health department regarding the establishment and enforcement of rules and regulations regarding solid waste disposal, solid waste hauling, recycling, open dumping,

and any future closed or open dump site assessments and remediation and other related items.

11. The Board is hereby proposing the establishment of responsibilities for solid waste haulers within the District, solid waste disposal facilities within the District, and local residences and businesses within the District, and appropriate penalties as given follows:

SOLID WASTE HAULER/SOLID WASTE DISPOSAL FACILITY

RESPONSIBILITY

ENFORCEMENT AGENCY

a. The enforcement of waste bans District/Health Dept.

 Assist in public awareness and communication process

District

Follow all applicable rules and regulations

Health Dept.

Penalties:

a. Appropriate monetary fines and/or revocation of District operating licenses, when applicable, shall be imposed on haulers/facilities to comply with District rules and regulations and standards as provided by law and provided by the appropriate enforcement agency. Such penalties and fines shall be established by a Rules, Regulation, and Enforcement Committee.

RESIDENCE AND SMALL BUSINESSES

RESPONSIBILITY

ENFORCEMENT AGENCY

a. Participation in recycling program (when applicable)

District

 b. Compliance with open dumping laws Health Dept. Sheriff's Dept.

Penalties:

 Solid waste shall not be collected if recyclable materials specified in the appropriate recycling program or banned wastes are contained therein.

- Solid waste haulers have the right to impose penalties or surcharges to residences and businesses that do not comply and cooperate with their requirements regarding solid waste collection.
- 12. The District reserves the right to enact and enforce new rules as needed to retain the rights granted to the District through ORC Section 343 and ORC Section 3734, as well as any new authority granted by the state legislature.

The District recognizes the proper channels of authority, and respects the ratification process for Plan approval, Plan Amendments, and Plan Updates, as described in ORC.

 Requirement for disposal of all solid waste generated within the Ashland County Solid Waste Management District only at facilities designated by the District

No individual, public or private corporation, partnership, political subdivision or agency thereof, or any other entity shall deliver, or cause the delivery of, any solid waste generated within the District to any disposal facility not designated by the District pursuant to Section 343.014 of the Ohio Revised Code to receive such solid waste generated within the District, unless a waiver from this rule has been granted by the Board in accordance with Section 343.01(I)(2) of the Ohio Revised Code, or the waste is subject to a contract entered into prior to such publication of intent to designate facilities by the District and such contract has been reviewed and recognized by the Board as a valid pre-existing contract. Such solid waste is exempt from this rule only for the term of such pre-existing contract.

14. Siting of Facilities

No person, municipal corporation, township or other political subdivision, shall construct, enlarge, or modify any solid waste transfer, disposal, recycling or resource recovery facility until general plans and specifications for the proposed construction, enlargement or modification of any such facility have been approved by the Board as complying with the Plan or amended Plan of the District.

The following rules were adopted in 2008 when the District elected to develop a Contract Fee rather than a Generation Fee; these rules will remain in place following the approval of this *Plan Update*. The Board reserves the right to modify any of these rules at any time and nothing contained in these proposed rules limits the authority of the Board to promulgate further rules in accordance with

Section 343.01(G) of the Ohio Revised Code in order to fully implement this Plan.

15. Rule 2-2008: Delivery of Solid Waste to Designated Facilities

Except as otherwise permitted by Rule, no Person shall deliver, or cause the delivery of, any Solid Waste generated within the District to any Solid Waste Facility other than a Designated Solid Waste Facility.

16. Rule 3-2008: Waiver from Designation

Any Person or Applicant may request a waiver from the Board authorizing the delivery of all or any portion of the Solid Waste generated within the District to a Solid Waste Facility other than a Designated Solid Waste Facility. The Board may grant a waiver from the obligation to deliver Solid Waste generated within the District to a Designated Solid Waste Facility if the Board finds that issuance of a waiver for the Solid Waste, the subject of the waiver request: (a) is not inconsistent with projections contained in the Plan; (b) will not adversely affect the implementation and financing of the Plan pursuant to the implementation schedule contained in the Plan; and (c) assures the Maximum Feasible Utilization of existing in-District Designated Solid Waste Facilities. Any Person or Applicant who submits a waiver request pursuant to Rule 3-2008 shall submit documents and information for consideration by the Board that support the issuance of the requested waiver. Any waiver granted by the Board shall be the subject of a waiver agreement by and between the Board and the Person or Applicant setting forth the terms of such waiver and waiver fee, if any. Rule 3-2008 does not apply to any contract by and between the Board and any Person relating to the transportation, delivery, disposal, or processing of Solid Waste.

 Rule 4-2008: Reporting and Certification of Solid Waste and Recyclable Material Collection

Any Person that collects Solid Waste generated within the District is required to report the amount of Solid Waste and Recyclable Materials collected by such Person. Recyclable Materials collected and recycled shall be reported by Recyclable Material type (i.e., news print, corrugated, brown, green, or clear glass, HDPE, PET, aluminum, ferrous, etc.) in pounds or tons. The weight of all Solid Waste and Recyclable Materials collected by a Person shall be provided to the District on a quarterly basis. The amounts recyclable must be provided no later than sixty (60) days following the end of

each calendar quarter. Upon request, any Person who collects Solid Waste within the District may be required by the District to submit a certified copy of the weight of Solid Waste and Recyclable Materials collected by such Person.

 Rule 5-2008: Construction, Modification and Improvements to Solid Waste Facilities

No Person shall construct, enlarge, improved, Modify or replacement any Solid Waste Facility until General Plans and Specifications of the proposed improvement or Modification have been submitted to and approved by the Board as complying with the Plan. General Plans and Specifications shall be submitted to the Board, Attn: District Coordinator, 1270 Middle Rowsburg Road, Ashland, Ohio 44805. All such General Plans and Specifications shall be clearly marked as complying with the requirements of Rule No. 5-2008 and Section 343.01(G)(2) of the Revised Code. Rule No. 5-2008 does not apply to a Solid Waste Facility owned, operated, or to be owned or operated, by the District.

B. Rule Making Authority – ORC 343.01

The solid waste management plan provides the authority to the Board of County Commissioners to adopt, publish, and enforce all the rule-making powers authorized by Ohio Revised Code 343.01, Divisions (G)(1), (G)(2), (G)(3) and (G)(4) including the following:

ORC 343.01(G)(1)

To the extent authorized by the solid waste management plan of the district approved under section 3734.521 or 3734.55 of the Revised Code or subsequent amended plans of the district approved under section 3734.521 or 3734.56 of the Revised Code, the board of county commissioners of a county district or board of directors of a joint district may adopt, publish, and enforce rules doing any of the following:

(1) Prohibiting or limiting the receipt of solid wastes generated outside the district or outside a service area prescribed in the solid waste management plan or amended plan, at facilities covered by the plan, consistent with the projections contained in the plan or amended plan under divisions (A)(6) and (7) of section 3734.53 of the Revised Code, except that the director of environmental protection may issue an order modifying a rule adopted under division (G)(1) of this section to allow the disposal in the district of solid wastes from another county or joint solid waste management district if all of the following apply:

- (a) The district in which the wastes were generated does not have sufficient capacity to dispose of solid wastes generated within it for six months following the date of the director's order;
- (b) No new solid waste facilities will begin operation during those six months in the district in which the wastes were generated and, despite good faith efforts to do so, it is impossible to site new solid waste facilities within the district because of its high population density;
- (c) The district in which the wastes were generated has made good faith efforts to negotiate with other districts to incorporate its disposal needs within those districts' solid waste management plans, including efforts to develop joint facilities authorized under section 343.02 of the Revised Code, and the efforts have been unsuccessful;
- (d) The district in which the wastes were generated has located a facility willing to accept the district's solid wastes for disposal within the receiving district;
- (e) The district in which the wastes were generated has demonstrated to the director that the conditions specified in divisions (G)(1)(a) to (d) of this section have been met;
- (f) The director finds that the issuance of the order will be consistent with the state solid waste management plan and that receipt of the out-of-district wastes will not limit the capacity of the receiving district to dispose of its in-district wastes to less than eight years. Any order issued under division (G)(1) of this section shall not become final until thirty days after it has been served by certified mail upon the county or joint solid waste management district that will receive the out-of-district wastes.

ORC 343.01(G)(2)

Governing the maintenance, protection, and use of solid waste collection or other solid waste facilities located within its district. The rules adopted under division (G)(2) of this section shall not establish design standards for solid waste facilities and shall be consistent with the solid waste provisions of Chapter 3734. of the Revised Code and the rules adopted under those provisions. The rules adopted under division (G)(2) of this section may prohibit any person, municipal corporation, township, or other political subdivision from constructing, enlarging, or modifying any solid waste facility until general plans and specifications for the proposed improvement have been submitted to and approved by the board of county commissioners or board of directors as complying with the solid waste management plan or amended plan of the district. The construction of such a facility shall be done under the supervision of the county sanitary engineer or, in the case of a joint district, a county sanitary engineer designated by the board of

directors, and any person, municipal corporation, township, or other political subdivision proposing or constructing such improvements shall pay to the county or joint district all expenses incurred by the board in connection therewith. The sanitary engineer may enter upon any public or private property for the purpose of making surveys or examinations necessary for designing solid waste facilities or for supervising the construction, enlargement, modification, or operation of any such facilities. No person, municipal corporation, township, or other political subdivision shall forbid or interfere with the sanitary engineer or his authorized assistants entering upon such property for that purpose. If actual damage is done to property by the making of the surveys and examinations, a board shall pay the reasonable value of that damage to the owner of the property damaged, and the cost shall be included in the financing of the improvement for which the surveys and examinations are made.

"Governing the maintenance, protection, and use of solid waste collection or other solid waste facilities located within its district. The rules adopted under division (G)(2) of this section shall not establish design standards and shall be consistent with the solid waste provisions of Chapter 3734. of the Revised Code and the rules adopted under those provisions. The rules adopted under division (G)(2) of this section may prohibit any person, municipal corporation, township, or other political subdivision from constructing, enlarging, or modifying any solid waste facility under general plans and specifications for the proposed improvement have been submitted to and approved by the Board of County Commissioners . . . as complying with solid waste management plan or amended plan of the District. The construction of such a facility . . ."

ORC 343.01(G)(3)

Governing the development and implementation of a program for the inspection of solid wastes generated outside the boundaries of this state that are disposed of at solid waste facilities included in the district's solid waste management plan or amended plan. A board of county commissioners or board of directors or its authorized representative may enter upon the premises of any solid waste facility included in the district's solid waste management plan or amended plan for the purpose of conducting the inspections required or authorized by the rules adopted under division (G)(3) of this section. No person, municipal corporation, township, or other political subdivision shall forbid or interfere with a board of county commissioners or directors or its authorized representative entering upon the premises of any such solid waste facility for that purpose.

ORC 343.01(G)(4)

Exempting the owner or operator of any existing or proposed solid waste facility provided for in the plan or amended plan from compliance with any amendment to a township zoning resolution adopted under section 519.12 of the Revised Code or to a county rural zoning resolution adopted under section 303.12 of the Revised

Code that rezoned or redistricted the parcel or parcels upon which the facility is to be constructed or modified and that became effective within two years prior to the filing of an application for a permit required under division (A)(2)(a) of section 3734.05 of the Revised Code to open a new or modify an existing solid waste facility.

C. Rule Making Authority - ORC 3734.53

The solid waste management plan provides the authority to the Board of Directors to adopt, publish, and enforce all of the rule-making powers authorized by Ohio Revised Code 3734.53, Division (C) including the following:

- (1) Prohibiting or limiting the receipt at facilities covered by the plan of solid wastes generated outside the district or outside a prescribed service area consistent with the projections under divisions (A)(6) and (7) of this section, except that the director of environmental protection may issue an order modifying a rule authorized to be adopted under division (C)(1) of this section to allow the disposal in the district of wastes from another county or joint solid waste management district if all of the following apply:
 - (a) The district in which the wastes were generated does not have sufficient capacity to dispose of solid wastes generated within it for six months following the date of the director's order;
 - (b) No new solid waste facilities will begin operation during those six months in the district in which the wastes were generated and, despite good faith efforts to do so, it is impossible to site new solid waste facilities within the district because of its high population density;
 - (c) The district in which the wastes were generated has made good faith efforts to negotiate with other districts to incorporate its disposal needs within those districts' solid waste management plans, including efforts to develop joint facilities authorized under section 343.02 of the Revised Code, and the efforts have been unsuccessful;
 - (d) The district in which the wastes were generated has located a facility willing to accept the district's solid wastes for disposal within the receiving district;
 - (e) The district in which the wastes were generated has demonstrated to the director that the conditions specified in divisions (C)(1)(a) to (d) of this section have been met;
 - (f) The director finds that the issuance of the order will be consistent with the state solid waste management plan and that receipt of the

out-of-district wastes will not limit the capacity of the receiving district to dispose of its in-district wastes to less than eight years. Any order issued under division (C)(1) of this section shall not become final until thirty days after it has been served by certified mail upon the county or joint solid waste management district that will receive the out-of-district wastes.

- (2) Governing the maintenance, protection, and use of solid waste collection, storage, disposal, transfer, recycling, processing, and resource recovery facilities within the district and requiring the submission of general plans and specifications for the construction, enlargement, or modification of any such facility to the board of county commissioners or board of directors of the district for review and approval as complying with the plan or amended plan of the district;
- (3) Governing development and implementation of a program for the inspection of solid wastes generated outside the boundaries of the state that are being disposed of at solid waste facilities included in the district's plan;
- (4) Exempting the owner or operator of any existing or proposed solid waste facility provided for in the plan from compliance with any amendment to a township zoning resolution adopted under section 519.12 of the Revised Code or to a county rural zoning resolution adopted under section 303.12 of the Revised Code that rezoned or redistricted the parcel or parcels upon which the facility is to be constructed or modified and that became effective within two years prior to the filing of an application for a permit required under division (A)(2)(a) of section 3734.05 of the Revised Code to open a new or modify an existing solid waste facility.

D. Proposed Rules

The District is not proposing any new rules in this Plan Update.

E. Rule Approval Process

Proposed rules shall be adopted and enforced by the Board of County Commissioners as provided in section 343.01(G).

APPENDIX R

BLANK SURVEY FORMS AND RELATED INFORMATION

Enter SWMD Logo Here







Dear Commercial Business,

Thank you for completing this survey. The information you provide for your company is crucial to monitoring John Doe County Solid Waste Management District's progress towards achieving Ohio's recycling goals. Your information will be combined with information submitted by other businesses and used to calculate the amount of material commercial businesses recycled in the John Doe County Solid Waste Management District and Ohio, in 2014. Your company's survey response <u>will not</u> be reported individually; all data will be summarized by the North American Industry Classification System (NAICS) category.

For assistance completing this form or any questions related to the survey, please contact John Doe, the John Doe County Solid Waste Management District's Coordinator, at blank.jd@something.com or 614.999.0987.

Please complete and submit this survey no later than MONTH/DAY/YEAR.

Options for Returning the Completed Survey

- Email directly to John Doe at johndoe@swmd.com Subject Line: 2014 Commercial Survey
- Fax to 9998887766, Attention: John Doe

Instructions for Table A:

Please provide all information requested in *Table A* below. Even if your business does not currently recycle or is unable to report quantities of materials recycled, please complete *Table A*. Doing so will allow the John Doe County Solid Waste Management District to contact you in the future to discuss your recycling needs.

Table A: Company Informa	ition				
Name:		County:		Store I.D.	
Address:		City:		Zip:	
Contact Person:		Title:			
Email:		Telephone Number (include area code): () —			
Primary NAICS:	Secondary NAICS:		Number of full-time employees:		
Provide the name(s) of you	r recycling hauler, processor and	d/or broker:			
Would you like to be conta	cted by your local solid waste m	anagement distri	ct for recycling assis	stance? Yes No	

Instructions for completing Table B:

Table B provides a list of common materials that are recycled by commercial facilities in Ohio. Please indicate the unit of each quantity of material that is reported (pounds, tons or cubic yards). Provide any comments related to each material as necessary. Please do not report any liquid waste, hazardous waste or construction & demolition debris.

The list in *Table B* is not all-inclusive. If your facility recycles a material that is not listed in *Table B*, please enter the name and quantity of that material on a line labeled "Other." Some materials may not apply to your operation; simply

enter "0" for those materials. Some of the materials are listed in broad categories. For example, "Plastics" include plastics #1-7, plastic films, etc. Please refer to the attached "Materials Cheat Sheet" for examples of materials and definitions.

If you do not currently track this information internally, your solid waste hauler or recycling processor may be able to provide it upon request. The John Doe County Solid Waste Management District may also be able to provide you with assistance.

Recyclable Material Category	Amount Recycled in 2014	Units	Comments
Lead-Acid Batteries		☐ lbs. ☐tons ☐ yd³	
Food		☐ lbs. ☐tons ☐ yd³	
Glass		☐ lbs. ☐tons ☐ yd³	
Ferrous Metals		☐ lbs. ☐tons ☐ yd³	
Non-Ferrous Metals		☐ lbs. ☐ tons ☐ yd³	
Corrugated Cardboard		☐ lbs. ☐ tons ☐ yd³	
All Other Paper		☐ lbs. ☐tons ☐ yd³	
Plastics		☐ lbs. ☐tons ☐ yd³	
Textiles		☐ lbs. ☐tons ☐ yd³	
Wood		☐ lbs. ☐tons ☐ yd³	
Rubber		☐ lbs. ☐tons ☐ yd³	
Commingled Recyclables		☐ lbs. ☐tons ☐ yd³	
Yard Waste		☐ lbs. ☐ tons ☐ yd³	
Other:		☐ lbs. ☐tons ☐ yd³	
Other:		☐ lbs. ☐tons ☐ yd³	
Other:		☐ lbs. ☐tons ☐ yd³	
Other:		☐ lbs. ☐tons ☐ yd³	
Other:		☐ lbs. ☐tons ☐ yd³	
Other:		☐ lbs. ☐ tons ☐ yd³	
Other:		☐ lbs. ☐ tons ☐ yd³	
Other:		☐ lbs. ☐tons ☐ yd³	

Thank you again for taking the time to complete this survey. Please contact John Doe with any questions.

John Doe, District Coordinator John Doe County Solid Waste Management District Phone: (513) 732-7745 JohnDoe@JohnDoe.com

Enter SWMD Logo Here







Dear Industrial Facility,

Thank you for completing this survey. The information you provide for your company is crucial to monitoring the John Doe County Solid Waste Management District's progress towards achieving Ohio's recycling goals. Your information will be combined with information submitted by other businesses and used to calculate the amount of material industrial businesses recycled in the John Doe County Solid Waste Management District and Ohio, in 2014. Your company's survey response will not be reported individually; all data will be summarized by each North American Industry Classification System (NAICS) category.

For assistance completing this form or any questions related to the survey, please contact John Doe, the John Doe County Solid Waste Management District's Coordinator, at blank.jd@something.com or 614.999.0987.

Please complete and submit this survey no later than MONTH/DAY/YEAR.

Options for Returning the Completed Survey

- Email directly to John Doe at johndoe@swmd.com Subject Line: 2014 Industrial Survey
- Fax to 9998887766, Attention: John Doe

Instructions for Table A:

Please provide all information requested in *Table A* below. Even if your business does not currently recycle or is unable to report quantities of materials recycled, please complete *Table A*. Doing so will allow the John Doe County Solid Waste Management District to contact you in the future to discuss your recycling needs.

Table A: Company Informa	tion				
Name:		County:	County:		
Address:		City:	Zip:		
Contact Person:		Title:			
Email:		Telephone Number (include area code): () —			
Primary NAICS:	Secondary NAICS:		Number of full-time employees:		
Provide the name(s) of you	r recycling hauler, processor and	/or broker:			
Would you like to be contain	cted by your local solid waste ma	nagement distri	ct for recycling assistance? Yes No		

Instructions for completing Table B:

Table B provides a list of common materials that are recycled by industrial facilities in Ohio. Please indicate the unit of each quantity of material that is reported (pounds, tons or cubic yards). Provide any comments related to each material as necessary. Please do not report any liquid waste, hazardous waste or construction & demolition debris.

The list in *Table B* is not all-inclusive. If your facility recycles a material that is not listed in *Table B*, please enter the name and quantity of that material on a line labeled "Other." Some materials may not apply to your operation; simply enter "0" for those materials. Some of the materials are listed in broad categories. For example, "Plastics" include plastics #1-7, plastic films, etc. Please refer to the attached "Materials Cheat Sheet" for examples of materials and definitions..

If you do not currently track this information internally, your solid waste hauler or recycling processor may be able to provide it upon request. The John Doe County Solid Waste Management District may also be able to provide you with assistance.

Recyclable Material Category	Amount Recycled in 2014	Units	Comments
Food		☐ lbs. ☐tons ☐ yd³	
Glass		☐ Ibs. ☐ tons ☐ yd³	
Ferrous Metals		☐ lbs. ☐tons ☐ yd³	
Non-Ferrous Metals		☐ lbs. ☐tons ☐ yd³	
Corrugated Cardboard		☐ lbs. ☐ tons ☐ yd³	
All Other Paper		☐ lbs. ☐tons ☐ yd³	
Plastics		☐ lbs. ☐tons ☐ yd³	
Textiles		☐ lbs. ☐ tons ☐ yd³	
Wood		☐ Ibs. ☐tons ☐ yd³	
Rubber		☐ lbs. ☐tons ☐ yd³	
Commingled Recyclables		☐ lbs. ☐ tons ☐ yd³	
Ash (recycled ash only)		☐ Ibs. ☐tons ☐ yd³	
Non-Excluded Foundry		☐ Ibs. ☐tons ☐ yd³	
Flue Gas Desulfurization		☐ Ibs. ☐tons ☐ yd³	
Other:		☐ lbs. ☐tons ☐ yd³	
Other:		☐ Ibs. ☐tons ☐ yd³	
Other:	4	☐ lbs. ☐tons ☐ yd³	
Other:		☐ Ibs. ☐tons ☐ yd³	
Other:		☐ lbs. ☐tons ☐ yd³	
Other:		☐ lbs. ☐tons ☐ yd³	
Other:		☐ lbs. ☐tons ☐ yd³	

Thank you again for taking the time to complete this survey. Please contact John Doe with any questions.

John Doe, District Coordinator John Doe County Solid Waste Management District

Phone: (513) 732-7745

Email: JohnDoe@JohnDoe.com

APPENDIX S SITING STRATEGY

APPENDIX S. Siting Strategy

The District's Siting Strategy includes the following:

Submission and review of general plans and specifications and application of the Siting Strategy to proposals to modify or construct solid waste facilities within the District must demonstrate how such modifications or construction of solid waste facilities within the District maximize the feasible utilization of existing in-District solid waste facilities.

For purposes of implementing the Siting Strategy, proposals to modify or construct a solid waste facility within the District, shall include the process by which the Board of County Commissioners (Board) shall review proposals for the construction and modification of any solid waste facilities within the District, and determine whether such proposals comply with the District Plan.

A. Purpose and Objective

The District Siting Strategy for solid waste facilities insures that proposals to construct a new solid waste facility within the District or modify an existing in-District solid waste facility are in compliance with the Plan. The Board shall not approve the general plans and specifications for any proposed solid waste facility or modification of an existing in-District solid waste facility where the modification, construction and operation of the proposed solid waste facility, as determined by the Board, will:

- Adversely affect the Board's ability to finance and implement the Plan;
- Interfere with the Board's obligation to provide for the maximum feasible utilization of existing in-District solid waste facilities;
- Materially and adversely affect the quality of life of residents within 300 feet of the proposed modification or construction of a solid waste facility; or
- Materially and adversely affect the local community, including commercial businesses within 500 feet of the proposed modification or construction of a solid waste facility and the adequacy of existing infrastructure to serve the proposed solid waste facility as modified or constructed.

Except as otherwise provided herein, all proposed solid waste facilities, whether to be sited by or on behalf of the District or by and on behalf of any person, municipal corporation, township or other political subdivision, shall be subject to the Siting Strategy and shall comply with the requirement to submit general plans and specifications to the Board for its determination that the modification or construction of the solid waste facility complies with the Plan.

B. Siting Procedure and Limited Exemptions

Notwithstanding the foregoing requirement, existing in-District solid waste facilities specifically identified in the Plan are not subject to the Siting Strategy unless the owner/operator of any such in-District solid waste facility proposes a modification to the operation of the in-District solid waste facility that:

- Requires the approval of the Director of the Ohio Environmental Protection Agency; or
- Involves a change in the type of material, manner of operation or activities conducted at the solid waste facility (i.e., a conversion of a legitimate recycling facility to a transfer station, or acceptance of food waste at a yard waste composting facility).

C. Requirements

The District requires the general plans and specifications for all proposals to construct any solid waste facility within the District or modify any existing in-District solid waste facility be submitted to the Board for determination by the Board of whether such general plans and specifications demonstrate that the proposed modification or construction of a solid waste facility complies with the Plan.

The District Policy Committee and Board carefully evaluated the present and future facility needs of the District. The *Plan Update* includes all the solid waste facilities that the District needs to effectively and efficiently manage the transfer, disposal, composting and recycling of solid waste and implement the District Solid Waste Management Plan. In order to assure that the District can meet the obligations to which it is committed in the Plan, the District must determine if any new solid waste facility or modification of an existing in-District solid waste facility complies with the Plan and will not adversely affect the District's ability to finance and implement the Plan.

In order to facilitate the Board's determination of whether a proposed solid waste facility complies with the Plan, the Board must have general plans and specifications submitted to the Board that contain sufficient detail to make the determination of whether the proposal to construct or modify a solid waste facility complies with the Plan. The Board also has an interest in assuring that any solid waste facility that is constructed or modified is appropriately designed and sited to meet its intended purpose without creating excessive burdens upon county facilities and services, or properties within 300 to 500 feet of the location of the solid waste facility that will be constructed or modified. The rules clearly state that the Board will not consider any criteria that would establish design standards that are addressed by the rules of the Ohio Environmental Protection Agency for the issuance of a permit for the construction, modification and operation of a solid waste facility.

D. Procedure Implementing Siting Strategy Information

Unless otherwise provided herein, or unless an exemption or waiver to this siting procedure has been granted by the Board, the following procedure and process shall be followed in the event that any person proposes to construct a solid waste facility within the District or modify an existing in-District solid waste facility:

Step 1: Submittal of Plans and Specifications

Any person, municipal corporation, township or other political subdivision proposing to construct a solid waste facility or modify an existing in-District solid waste facility shall:

- Provide general plans and specifications of the proposal to construct or modify the solid waste facility to the Board. Such general plans and specifications shall include, but are not limited to, the following documents and information:
 - (a) A site plan for the proposed solid waste facility;
 - (b) Architectural drawings of the proposed solid waste facility with a view of properties within 300 feet and within 500 feet of the proposed solid waste facility;
 - (c) Availability of necessary utilities;
 - (d) Projected size and capacity of the proposed solid waste facility;
 - (e) Hours of operations;
 - (f) Anticipated source of solid waste or recyclable materials to be received at the proposed solid waste facility. If recycling activities will be conducted at the proposed solid waste facility, a detailed description of the recycling activities shall be submitted, including materials to be recycled, technology to be utilized to accomplish the separation and processing of the recyclable materials, the anticipated percentage of solid waste reduction resulting from the operation of the solid waste facility and the identification of the market or markets for the sale of the recyclable materials recovered at the solid waste facility;
 - (g) Types and anticipated number of vehicles that will deliver and/or transport solid waste to or from in the proposed solid waste facility on an hourly and daily basis;
 - (h) Routes to be used by vehicles utilizing the solid waste facility and of ingress and egress to the solid waste facility; and
 - (i) Any other information necessary for the Board to evaluate whether the proposal to construct or modify a solid waste facility complies with the plan and

demonstrates that the proposed solid waste facility as constructed or modified satisfies the requirements identified in the Siting Strategy.

- Adequately demonstrate to the Board that the construction or modification and subsequent operations of the proposed solid waste facility will:
 - (a) Be consistent with the goals, objectives, protections and strategies contained in the Plan;
 - (b) Not adversely affect financing or the implementation of the Plan;
 - (c) Not adversely affect the Board's obligation to provide for the maximum feasible utilization of existing in-District solid waste facilities;
 - (d) Be harmonious and appropriate in appearance and use with the existing character of the area within 500 feet of the proposed solid waste facility;
 - (e) Be served by essential public utilities and services;
 - Not create excessive additional cost to the District to construct or improve governmentally provided facilities or services;
 - (g) Not be detrimental to the economic welfare of the community;
 - (h) Not involve excessive production of traffic, noise, smoke, fumes, or odors;
 - Have vehicular approaches to the property that are designed not to create interference with traffic;
 - Not result in the destruction, loss or damage of a natural, scenic, or historic feature of major importance; and
 - (k) Not adversely affect property values within 500 feet of solid waste facility.

The Board may request that the person who submits general plans and specifications to the Board provide additional information to complete those general plans and specifications, and demonstrate to the Board that the construction, modification and subsequent operation of the solid waste facility will comply with the Plan.

Step 2: Board Review

The Board shall review the information submitted for a proposal to construct or modify a solid waste facility within the District to determine whether the general plans and specifications and additional information demonstrate that the proposed construction or modification of the solid waste facility and its subsequent operation complies with the Plan. The Board may expend District funds to employ a consultant or consultants familiar

with the solid waste facility that is proposed to be constructed or modified and its subsequent operation, land use planning and solid waste planning to assist the Board in implementing this Siting Strategy and in the Board's determination of whether a proposed solid waste facility or a modification of existing in-District solid waste facility complies with the Plan.

Within sixty (60) days of receiving the general plans and specifications from an applicant, the Board shall make a determination as to whether the general plans and specifications contain sufficient information for the Board to complete its review of the proposal. In the event the Board determines that additional information is necessary to complete the Board's review of the proposal, the Board shall notify the applicant of such request in writing.

Within ninety (90) days of determining that the applicant has submitted a complete set of general plans and specifications, the Board shall determine whether the proposal complies with the Plan and adequately address the criteria identified in this Siting Strategy. The Board shall notify the applicant of its decision in writing. While the Board has broad discretion regarding the approval of general plans and specifications for a proposed solid waste facility or modification of an existing in-District solid waste facility, it is the intention of this Siting Strategy that the Board shall not approve general plans and specifications for a proposed solid waste facility unless the Board determines that the proposed solid waste facility and modification of an existing in-District solid waste facility complies with the Plan and demonstrates to the Board that the requirements of this Siting Strategy have been adequately addressed by the applicant.

Step 3: Development Agreement

In the event the Board determines that the proposed construction or modification and subsequent operation of a solid waste facility complies with the Plan, the person, municipal corporation, corporation, township or other political subdivision proposing to construct or modify the solid waste facility shall enter into a development agreement with the Board which memorializes the obligations that are the basis of the Board's conclusion that the general plans and specifications demonstrate that the proposed solid waste facility or its modification complies with the Plan. The person proposing to construct or modify a solid waste facility shall have an ongoing obligation to comply with the Plan as well as the terms and conditions contained in the development agreement.

Waiver

The Board reserves the right to waive application of the requirement for the submission and Board approval of general plans and specifications or waive any portion of the Siting Strategy or otherwise grant exceptions to the rules of the District, if the Board concludes that such waiver, modification or amendment is in the best interest of the District, its residents and businesses and will assist the Board in the successful implementation of the Plan.

A determination by the Board to construct or modify any District-owned solid waste facility or program shall be deemed to be in compliance with the Plan and District rules.

APPENDIX T MISCELLANEOUS PLAN DOCUMENTS

CERTIFICATION STATEMENT FOR THE DRAFT PLAN

We as representatives of the Solid Waste Management Policy Committee (SWMPC) of the Ashland County Solid Waste Management District (District), do hereby certify that to the best of our knowledge and belief, the statements, demonstrations and all accompanying materials that comprise the draft District Solid Waste Management Plan Update, and the availability of and access to sufficient solid waste management facility capacity to meet the solid waste management needs of the District for the fifteen year period covered by the Plan Update are accurate and are in compliance with the requirements in the District Solid Waste Management Plan Format, revision 4.0.

Milal 8. Yell	2-14-17
Representing the County Commissioners	Date Signed
Representing CEO of Largest City	Date Signed
Representing County Health Department	Date Signed # 1/18 / 17
Representing Townships Mattle P.C.	Date Signed 2/14/2017
Representing Commercial/Industrial Generators	Date Signed
Representing the General Interests of Citizens Leage W. Amite	Date Signed 1-/4-20/7
Representing the Public	Date Signed

Resolution Adopting the Solid Waste Management Plan

Resolution # 2018-01

A RESOLUTION DECLARING THAT THE AMENDED SOLID WASTE MANAGEMENT PLAN FOR THE ASHLAND COUNTY SOLID WASTE MANAGEMENT DISTRICT HAS BEEN ADOPTED.

Whereas, the Ashland County Solid Waste Management District (District") completed the draft amended Solid Waste Management Plan ("Plan") and submitted it to the Ohio Environmental Protection Agency for review and comment on March 6, 2017 and the Ohio Environmental Protection Agency provided comments in a non-binding advisory opinion on April 19, 2017.

Whereas, the District's Policy Committee has reviewed the non-binding advisory opinion received from the Ohio Environmental Protection Agency and taken these comments into consideration and incorporated changes into the amended Plan as appropriate;

Whereas the District has conducted a 30-day comment period from December 27, 2017 to January 25, 2018 and a public hearing was held on February 1, 2018 to provide the public an opportunity to have comment on the Plan;

NOW, THEREFORE, BE IT RESOLVED that the District Policy Committee:

- Adopts the amended Plan as the District Plan in the form: with changes made as needed on February 1, 2018.
- 2. Certifies that, to the best of its knowledge and belief, the statements, demonstrations and all accompanying materials that comprise the District's Plan, and the availability of and access to sufficient solid waste management facility capacity to meet the solid waste management needs of the District for the fifteen-year period covered by the Plan, are accurate and are in compliance with the requirements of the District Solid Waste Management Plan Format Revision 4.0.
- Directs that copies of the adopted Plan be delivered to the Board of County Commissioner's and to the legislative authority of each municipal corporation and township under the jurisdiction of the District for ratification.

This resolution shall be in effect immediately upon its adoption

Representation	Signature for Yes Vote	Signature for No Vote
County Commissioner	Dag 0. 1200	
Largest City	Clauchiller	
Health District	SarahAumphrey	
Townships	Berny CElands	
Industry		
General Interest of Citizens	George W. Smit	
Public	,	
Total Votes		

Date: 2/1/2018

Ashland County Solid Waste Management District Solid Waste Management Plan Public Hearing

February 1, 2018

Sign In Sheet

Name	Representing	Offering Oral Comments Today?
Leongel Sme	General Interest Formshops Public	No
Jim Skag	GT Eversantes	NO
Dennia Episk	Y Roy	NG
Day D. Bin	COMMISSIENER	
Pat Donddson	Health Dept	NO
Ju Just	Commission	L)i
Sarah Humphrey	ashland Co-City HD	No
Michael Walch	Co-Conmission	
Clatt Cliller	Clayor (City)	Cho

Run Date: 12/29/2011 13:13:30

Ashland Publishing Company L.L.C.

Ashland Times-Gazette n On Target n Loudonville Times Mohican Area Shopper n www.times-gazette.com

40 East Second Street . Ashland OH 44805 Phone (419) 281-0581 FAX (419) 281-5591

Advertising Receipt

A Division of GateHouse Media

Ashland County Recycling Cindy Brady 1270 MIDDLE ROWSBURG ASHLAND, OH, 44805

Cust #: 10021657 Order #: 12401860 Phone: (419)289-7382 Date:

12/29/2017

PO Number:

Ad Taker: kathy christian	Salesperson: 60	2 Alexander Sa	msel	Classification:	5 Legals/Public I	Notices
Description:	Start	Stop	Ins.	Cost / Day	Surcharges	Total
60 Ashland Times-Gazette	12/27/2017	12/27/2017	1	0.00		0.00
					Total:	0.00
					Prepaid:	0.00

0.00 Total Due:

PUBLIC NOTICE ASHLAND COUNTY SOLID WASTE MAN-AGEMENT DISTRICT Public Comment Period for Draft Solid Waste Management Plan Update The Ashland County Solid Waste Management District (District) is establishing a 30-day written comment period (December 27. 2017 - January 25, 2018) on the draft Solid Waste Management Plan Update (Plan Update) (Ohio Revised Code Section 3734,54). The District has prepared the draft Plan Update as required by Section 3734.54 of the Ohio Revised Code. The draft Plan Update includes a budget and fees to finance the Plan, a solid waste facility

inventory, projections and

strategies, facilities and programs to be used, and an analysis of the progress made toward achieving state solid waste reduction

The Plan Update includes six chapters that are prepared specifically for the public's review. They include:

1. Introduction 2. District Profile 3. Waste Generation

4. Waste Management 5. Waste Reduction and

Recycling 6. Budget

This draft is an update to a previously approved solid waste plan. This Plan Update details the following: Recycling Infrastructure Inventory, Population Data, Disposal Data,

Residential/Commercial/ Industrial Recycling Data, Waste Generation Data, a Strategic Evaluation of Old and New Proposed District Programs, Methodology to Select Program Priorities, Achievement of State Recycling Goals, Education and Outreach Programs, Greenhouse Gas Emissions Calculations, Financial Data, Designation of Facilitics, and a Siting Strategy. The draft Plan Update includes a demonstration of access to landfill capacity. There are no landfills located in the District, but based on landfills used to manage waste generated in Ashland County during the 2014 reference year for the planning period, landfills had an average life expectancy of more than 38 years.

Under this Plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 343.015 of the Ohio Revised Code. The designated facilities in this Plan Update include 14 landfills and eight transfer stations in Ohio. Additional facilities can be utilized if the Policy Committee approves a waiver for the facility. The draft Plan Update com-

plies with State Plan Goal #2, which states that the District must recycle at least 25% of the solid waste penerated residential/commercial sector and at least 66% of the solid waste generated by the industrial sector.

The District primarily funds Plan programs, cur-

Ashland Publishing Company L.L.C.

Ashland Times-Gazette n On Target n Loudonville Times Mohican Area Shopper n www.times-gazette.com

40 East Second Street . Ashland OH 44805 Phone (419) 281-0581 . FAX (419) 281-5591

Advertising Receipt

A Division of GateHouse Media

Ashland County Recycling Cindy Brady 1270 MIDDLE ROWSBURG ASHLAND, OH, 44805 Cust #: 10021657 Order #: 12401860 Phone: (419)289-7382 Date: 12/29/2017

PO Number:

Ad Taker: kathy.christian Salesperson: 602 Alexander Samsel Classification: 5 Legals/Public Notices

Ins. Cost / Day Surcharges Total Start Stop Description: 0,00 0.00 12/27/2017 60 Ashland Times-Gazette 12/27/2017 -Total: 0.00 0.00 Prepaid:

Total Due: 0.00

rent operations, and it's facility (the Ashland County Recycling Center) through contract fees, recycling revenue, user fees for electronics and scrap tire collections, and miscellaneous sources. As of June 1, 2015, a contract fee of \$8.00 per ton was charged to all solid waste facilities that were designated by the District to receive District solid waste. Contract fees are anticipated to increase to \$8.50 per ton in 2021 then remain flat for the remainder of the planning period (2032).

The District will hold a public hearing to obtain oral comments regarding the draft Plan Update on Thursday, February 1, 2018, at 11:00 AM in the County Commissioners Of-

fice, located at 110 Cottage St., Ashland, OH 44805. The District will accept written comments as required by Ohio Revised Code Section 3734.55 on the draft Plan Update from December 27, 2017 until January 25, 2018. Written comments should be sent to Ms. Cindy Brady, Ashland County Solid Waste Management District, 1270 Middle Rowsburg Rd., Ashland, OH 44805. The draft Plan Update is available for review at the following locations: •District Office: 1270 Middle Rowsburg Rd., Ashland, OH 44805, during normal business hours Commissioners County Office: 110 Cottage St..

Ashland, OH 44805, during

normal business hours

•District website at https://www.ashlandcounty.org/recycling/
Please call (419) 289-7382 with any questions about the Plan Update.
Publish Ashland Timez-Gazette

Proof of Publication Ashland Publishing Company 40 E. Second St. Ashland, OH 44805 Phone: (419) 281-0581 Fax: (419) 281-5591 being first duly sworn depose and say that I am **Ashland Publishing Company**

60 Ashland Times-Gazette a newspaper printed and published in the city of Ashland, and of General circulation in the County of Ashland, State of Ohio, and personal knowledge of the facts herein stated and that the notice hereto annexed was Published in said newspapers for 1 insertions on the same day of the week from and after the 30th day of January, 2018 and that the fees charged are legal.

Signature

Name of Account: Ashland County Recycling

Ad Number: 12412568 No. of Lines: 151

Day(s) Published:

01/30.

Printers Fee: \$154.46

Sworn to and subscribed before this 30th day of January, 2018.

Notary Public, State of Door My Commission Expires (

PUBLIC HEARING NOTICE

The Ashland County Solid Waste Management District will hold a public hearing to obtain oral comments regarding the draft Solid Waste Management Plan Update on Thursday, February 1, 2018 at 11:00 AM in the County Commissioner's Office, located at 110 Cottage St., Ashland, OH 44805. The District has prepared the draft Plan Update as required by Section 3734.54 of the Ohio Revised Code. The draft Plan Update includes a budget and fees to finance the Plan, a solid waste facility inventory. projections and strategies, facilities and programs to be used, and an analysis of the progress made toward achieving state solid waste reduction goals. The Plan Update includes six chapters that are prepared specifically for the

- 1. Introduction
- 2. District Profile
- 3. Waste Generation
- 4. Waste Management

public's review. They in-

- 5. Waste Reduction and
- Recycling
- 6. Budget

clude:

This draft is an update to a previously approved solid waste plan. This Plan Update details the following: Recycling Infrastructure Inventory, Population Data, Disposal Data. Residential/Commercial /Industrial Recycling Data, Waste Generation Data, a Strategic Evaluation of Old and New Proposed District Programs, Methodology to Select Program Priorities, Achievement of State Recycling Goals, Education and Outreach Programs, Greenhouse Gas Emissions Calculations, Financial Data, Designation of Facilities, and a Siting Strategy. The draft Plan Update includes a demonstration of access to landfill capacity. There are no landfills located in the District, but based on landfills used to manage waste generated in Ashland County during 2014 reference year for the planning period, landfills had an average life expectancy of more than 38 vears. Under this Plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 and 343.015 of the Ohio Revised Code. The designated facilities in this Plan Update include 14 landfills and eight transfer stations in Ohio. Additional facilities can be utilized if the Policy Committee approves a waiver for the facility. The draft Plan Update com-

plies with State Plan Goal #2, which states that the District must recycle at least 25% of the solid waste generated by the residential/commercial sector and at least 66% of the solid waste generated by the industrial sector. The District primarily funds Plan programs, current operations, and it's facility (the Ashland County Recycling Center) through contract fees, recycling revenue, user fees for electronics and scrap tire collections, and miscellaneous sources. As of June 1, 2015, a contract fee of \$8.00 per ton was charged to all solid waste facilities that were designated by the District to receive District solid waste. Contract fees are anticipated to increase to \$8.50 per ton 2021 then remain flat for the remainder of the planning period (2032)The District will accept written comments as required by Ohio Revised Code Section 3734.55 on the draft Plan Update from December 27, 2017 until January 25, 2018. Written comment should be sent to Ms. Cindy Brady, Ashland County Solid Waste Management District, 1270 Middle Rowsburg Rd., Ashland, OH 44805: The draft Plan Update is available for review at the following locations:

• District Office: 1270 Middle Rowsburg Rd., Ashland, OH 44805, during normal business hours County Commissioners Office: 110 Cottage St., Ashland, OH 44805, during normal business hours · District website at https://www.ashlandcounty. org/recycling/ Please call (419) 289-7382 with any questions about the Plan Update.

PUBLIC NOTICE ASHLAND COUNTY SOLID WASTE MANAGEMENT DISTRICT

Public Comment Period for Draft Solid Waste Management Plan Update

The Ashland County Solid Waste Management District (District) is establishing a 30-day written comment period (December 27, 2017 – January 25, 2018) on the draft Solid Waste Management Plan Update (Plan Update) (Ohio Revised Code Section 3734.54). The District has prepared the draft Plan Update as required by Section 3734.54 of the Ohio Revised Code. The draft Plan Update includes a budget and fees to finance the Plan, a solid waste facility inventory, projections and strategies, facilities and programs to be used, and an analysis of the progress made toward achieving state solid waste reduction goals.

The Plan Update includes six chapters that are prepared specifically for the public's review. They include:

- 1. Introduction
- 2. District Profile
- Waste Generation
- 4. Waste Management
- Waste Reduction and Recycling
- 6. Budget

This draft is an update to a previously approved solid waste plan. This Plan Update details the following: Recycling Infrastructure Inventory, Population Data, Disposal Data, Residential/Commercial/Industrial Recycling Data, Waste Generation Data, a Strategic Evaluation of Old and New Proposed District Programs, Methodology to Select Program Priorities, Achievement of State Recycling Goals, Education and Outreach Programs, Greenhouse Gas Emissions Calculations, Financial Data, Designation of Facilities, and a Siting Strategy.

The draft Plan Update includes a demonstration of access to landfill capacity. There are no landfills located in the District, but based on landfills used to manage waste generated in Ashland County during the 2014 reference year for the planning period, landfills had an average life expectancy of more than 38 years.

Under this Plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 and 343.015 of the Ohio Revised Code. The designated facilities in this Plan Update include 14 landfills and eight transfer stations in Ohio. Additional facilities can be utilized if the Policy Committee approves a waiver for the facility.

The draft Plan Update complies with State Plan Goal #2, which states that the District must recycle at least 25% of the solid waste generated by the residential/commercial sector and at least 66% of the solid waste generated by the industrial sector.

The District primarily funds Plan programs, current operations, and it's facility (the Ashland County Recycling Center) through contract fees, recycling revenue, user fees for electronics and scrap tire collections, and miscellaneous sources. As of June 1, 2015, a contract fee of \$8.00 per ton was charged to all solid waste facilities that were designated by the District to receive District solid waste. Contract fees are anticipated to increase to \$8.50 per ton in 2021 then remain flat for the remainder of the planning period (2032).

The District will hold a public hearing to obtain oral comments regarding the draft Plan Update on Thursday, February 1, 2018, at 11:00 AM in the County Commissioners Office, located at 110 Cottage St., Ashland, OH 44805.

The District will accept written comments as required by Ohio Revised Code Section 3734.55 on the draft Plan Update from December 27, 2017 until January 25, 2018. Written comments should be sent to Ms. Cindy Brady, Ashland County Solid Waste Management District, 1270 Middle Rowsburg Rd., Ashland, OH 44805.

The draft Plan Update is available for review at the following locations:

- District Office: 1270 Middle Rowsburg Rd., Ashland, OH 44805, during normal business hours
- County Commissioners Office: 110 Cottage St., Ashland, OH 44805, during normal business hours
- District website at https://www.ashlandcounty.org/recycling/

Please call (419) 289-7382 with any questions about the Plan Update.

Public Hearing Notice

The Ashland County Solid Waste Management District will hold a public hearing to obtain oral comments regarding the draft Solid Waste Management Plan Update on Thursday, February 1, 2018 at 11:00 AM in the County Commissioner's Office, located at 110 Cottage St., Ashland, OH 44805.

The District has prepared the draft Plan Update as required by Section 3734.54 of the Ohio Revised Code. The draft Plan Update includes a budget and fees to finance the Plan, a solid waste facility inventory, projections and strategies, facilities and programs to be used, and an analysis of the progress made toward achieving state solid waste reduction goals.

The Plan Update includes six chapters that are prepared specifically for the public's review. They include:

- 1. Introduction
- 2. District Profile
- 3. Waste Generation
- 4. Waste Management
- 5. Waste Reduction and Recycling
- 6. Budget

This draft is an update to a previously approved solid waste plan. This Plan Update details the following: Recycling Infrastructure Inventory, Population Data, Disposal Data, Residential/Commercial/Industrial Recycling Data, Waste Generation Data, a Strategic Evaluation of Old and New Proposed District Programs, Methodology to Select Program Priorities, Achievement of State Recycling Goals, Education and Outreach Programs, Greenhouse Gas Emissions Calculations, Financial Data, Designation of Facilities, and a Siting Strategy.

The draft Plan Update includes a demonstration of access to landfill capacity. There are no landfills located in the District, but based on landfills used to manage waste generated in Ashland County during the 2014 reference year for the planning period, landfills had an average life expectancy of more than 38 years.

Under this Plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 and 343.015 of the Ohio Revised Code. The designated facilities in this Plan Update include 14 landfills and eight transfer stations in Ohio. Additional facilities can be utilized if the Policy Committee approves a waiver for the facility.

The draft Plan Update complies with State Plan Goal #2, which states that the District must recycle at least 25% of the solid waste generated by the residential/commercial sector and at least 66% of the solid waste generated by the industrial sector.

The District primarily funds Plan programs, current operations, and it's facility (the Ashland County Recycling Center) through contract fees, recycling revenue, user fees for electronics and scrap tire collections, and miscellaneous sources. As of June 1, 2015, a contract fee of \$8.00 per ton was charged to all solid waste facilities that were designated by the District to receive District solid waste. Contract fees are anticipated to increase to \$8.50 per ton in 2021 then remain flat for the remainder of the planning period (2032).

The District will accept written comments as required by Ohio Revised Code Section 3734.55 on the draft Plan Update from December 27, 2017 until January 25, 2018. Written comments should be sent to Ms. Cindy Brady, Ashland County Solid Waste Management District, 1270 Middle Rowsburg Rd., Ashland, OH 44805.

The draft Plan Update is available for review at the following locations:

- District Office: 1270 Middle Rowsburg Rd., Ashland, OH 44805, during normal business hours
- County Commissioners Office: 110 Cottage St., Ashland, OH 44805, during normal business hours
- District website at https://www.ashlandcounty.org/recycling/

Please call (419) 289-7382 with any questions about the Plan Update.

Resolution Certifying Ratification of the Solid Waste Management Plan

Resolution No. 2018-02

A resolution declaring that the amended solid waste management plan for the Ashland County Solid Waste Management District (District) has been ratified in accordance with Section 3734.55 of the Ohio Revised Code.

Whereas, the District held a 30-day comment period from December 27, 2017 – January 25, 2018 and a public hearing on February 1, 2018, and the Solid Waste Management District Policy Committee adopted the amended solid waste management plan on February 1, 2018.

Whereas, this Solid Waste Management District Policy Committee has received copies of resolutions and ordinances approving the amended solid waste management plan from the Board of County Commissioners, the legislative body of the largest municipality in the District and from legislative jurisdictions representing at least 60 percent of the population of the District.

NOW THEREFORE BE IT RESOLVED that the Solid Waste Management Policy Committee of the District declares the amended Plan for the District to be ratified in accordance with Section 3734.55 of the Ohio Revised Code, and shall cause the ratified solid waste management plan to be submitted to the Director of the Ohio Environmental Protection Agency for their final review.

This resolution shall be in effect immediately upon its adoption.

This is to certify that the foregoing is a true and correct copy of the resolution passed by the Solid Waste Management District Policy Committee on June 1, 2018 and recorded in the Journal of said Policy Committee.

Date:	
	Policy Committee Chairman
Total Yes Votes:	
Total No Votes:	

Representation	Signature for Yes Vote	Signature for No Vote
County Commissioner		
Largest City		
Health District		
Townships		
Industry		
General Interest of Citizens		
Public		
Total Votes		

Resolution Certifying Ratification of the Solid Waste Management Plan

Resolution No. 2018-02

A resolution declaring that the amended solid waste management plan for the Ashland County Solid Waste Management District (District) has been ratified in accordance with Section 3734.55 of the Ohio Revised Code.

Whereas, the District held a 30-day comment period from December 27, 2017 – January 25, 2018 and a public hearing on February 1, 2018, and the Solid Waste Management District Policy Committee adopted the amended solid waste management plan on February 1, 2018.

Whereas, this Solid Waste Management District Policy Committee has received copies of resolutions and ordinances approving the amended solid waste management plan from the Board of County Commissioners, the legislative body of the largest municipality in the District and from legislative jurisdictions representing at least 60 percent of the population of the District.

NOW THEREFORE BE IT RESOLVED that the Solid Waste Management Policy Committee of the District declares the amended Plan for the District to be ratified in accordance with Section 3734.55 of the Ohio Revised Code, and shall cause the ratified solid waste management plan to be submitted to the Director of the Ohio Environmental Protection Agency for their final review.

This resolution shall be in effect immediately upon its adoption.

This is to certify that the foregoing is a true and correct copy of the resolution passed by the Solid Waste Management District Policy Committee on June 1, 2018 and recorded in the Journal of said Policy Committee.

Date: 6/1/18

Policy Committee Chairman

Total Yes Votes.

5

Total No Votes:

0

Representation	Signature for Yes Vote Signature for No Vote
County Commissioner	Martin F. Welly
Largest City	Clattelfiller
Health District	Sarah Humphrey
Townships	Dening C Board
Industry	mattera_
General Interest of Citizens	Leorge W. Snitt
Public	
Total Votes	-6-0-

APPENDIX U RATIFICATION RESULTS

Table U-1 Ratification Results

Community	Population	Approve	Disapprove	
Ashland city*	20,489	20,489		
Bailey Lakes village	375	375		
Clear Creek township	1,549	1,549		
Green township	1,834	1,834		
Hanover township	851	851		
Hayesville village	470	470		
Jackson township	3,624			
Jeromesville village	550			
Lake township	708	708		
Loudonville village	2,642	2,642		
Mifflin township	1,022	1,022		
Mifflin village	139	139		
Milton township	2,416			
Mohican township	1,459	1,459		
Montgomery township	2,714	2,714		
Orange township	2,566	2,566		
Perry township	1,988	1,988		
Perrysville village	725	725		
Polk village	341	341		
Ruggles township	948	948		
Savannah village	409	409		
Sullivan township	2,554			
Troy township	1,125	1,125		
Vermillion township	2,214	2,214		
Ashland County Commissioners		1		
Total District Population Estimate		53,712		
60% Approval Needed		32,227		
Total Population Approved		44,568		
Percent Approved		83%		

APPENDIX V

MISCELLANEOUS DOCUMENTS REQUIRED BY OHIO REVISED CODE

APPENDIX V. Miscellaneous Required Information

Ohio EPA notified solid waste districts that Format 4.0 did not include several items that are required by Ohio law to be included in solid waste plans. Appendix V has been developed to meet the following miscellaneous requirements:

A. Solid Waste Management and Recycling Inventories Requirement

Ohio Revised Code Section 3734.53 (A)(2) requires "...an inventory of all existing facilities were solid wastes are being disposed of, all resource recovery facilities, and all recycling activities within the district. The inventory shall identify each such facility or activity and, for each disposal shall estimate the remaining disposal capacity available at the facility. The inventory shall be accompanied by a map that shows the location of each such existing facility or activity."

1. Solid Waste Management and Recycling Inventories Response

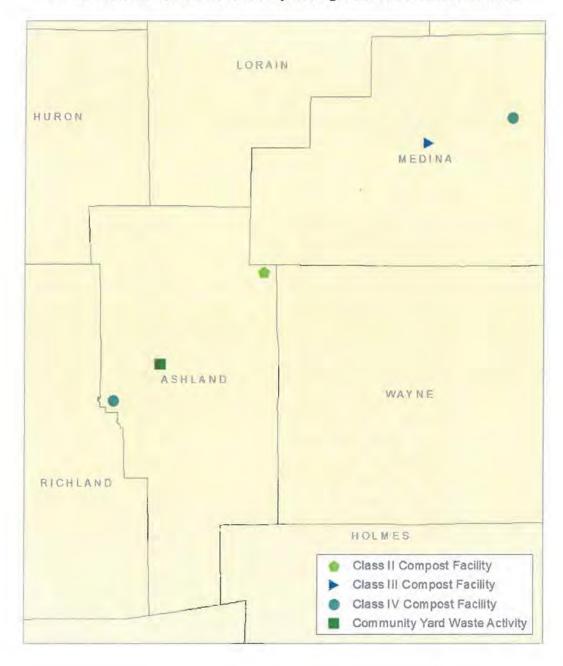
Appendix B of the Plan Update includes a recycling infrastructure inventory providing data and information on curbside recycling, drop-offs, and composting facilities/activities operating in the District. Appendix D includes an inventory of landfills and transfer facilities managing waste generated in the district. Appendix M, "Waste Management Capacity Analysis," provides remaining disposal capacity for landfills.

The following series of maps shows the location of each existing facility or activity in the District during the 2014 reference year.

2014 District Access to Drop-Off and Curbside Recycling



2014 District Yard Waste Composting Facilities and Activities



Ashland County

ASHTABULA -etrawa GEAUGA CUTAHOGA SANDUSKY ERIE TRUMBULL LORAIN PORTAGE HURON MEDINA SUMMIT SENECA MAHONING CRAWFORD ASHLAND WAYNE BTARK COLUMBIANA RICHEAND MARION CARROLL HOLWES MORROW DEFFERSON TUSCARAWAS MCKN DX HARRISON COSHOCTON DELAWARE LICKING GUERNSEY BELMONT FRANKLIN MUSKINGUM NOBLE FAIRFIELD PERRY MONROE PICKAWAY MORGAN HOCKING WASHINGTON ATHENS 20 Miles ROSS 5 10 VINTON Landfill Transfer Station

2014 Landfills and Transfer Stations Used to Manage District Waste

Note: In 2014, approximately 110 tons of waste generated in the District was sent to a waste recovery facility in Indiana. This waste represented less than 1% of the District's waste disposal and was therefore excluded from the map.

MEIGS

PIKE

JACKSON

B. Open Dumping Sites Inventory Requirement

Ohio Revised Code Section 3734.53 (A)(4) requires "...an inventory of open dumping sites for solid wastes, including solid wastes consisting of scrap tires and facilities for the disposal of fly ash and bottom ash, foundry sand, and slag within the district. The inventory shall identify each such site or facility and shall be accompanied by a map that shows the location of each of them."

1. Open Dumping Sites Inventory Response

The District did not have any records of open dumps or waste tire dumps existing in the District during the reference year.

C. Out-of-District Waste to be Disposed in District and Effect of Newly Regulated Waste Streams Requirement

Ohio Revised Code Section 3734.53 (A)(6) requires "...for each year of the forecast period, projections of the amounts and composition of solid wastes that will be generated within the district, the amounts of solid wastes originating outside the district that will be brought into the district for disposal or resource recovery, the nature of industrial activities within the district, and the effect of newly regulated waste streams, solid waste minimization activities and solid waste recycling and reuse activities on solid waste generation rates. For each year of the forecast period, projections of waste quantities shall be compiled as an aggregate quantity of wastes."

1. Out-of-District Waste to be Disposed in District and Effect of Newly Regulated Waste Streams Response

The District does not have any operating landfills or transfer stations located within its boundaries. Therefore, this section is not applicable to the District.

D. Expense Analysis Requirement

Ohio Revised Code Section 3734.53 (A)(10) requires "...an analysis of expenses for which the district is liable under section 3734.35 of the Revised Code."

1. Expense Analysis Response

The District does not provide funding under 3734.35 to any political subdivision.

E. Facility Identification Requirement and Facility Closure, Expansion, Establishment Schedule Requirement

Ohio Revised Code Section 3734.53 (A)(13) requires "...a schedule for implementation of the plan that, when applicable contains all of the following:

- (a) An identification of the solid waste disposal, transfer, and resource recovery facilities and recycling activities contained in the plan where solid wastes generated within or transported into the district will be taken for disposal, transfer, resource recovery or recycling.
- (b) A schedule for closure of existing solid waste facilities, expansion of existing facilities and establishment of new facilities. The schedule for expansion of existing facilities or establishment of new facilities shall include, without limitation, the approximate dates for filing applications for appropriate permits to install or modify those facilities under section 3734.05 of the Revised Code...."

1. Facility Identification Response

Appendix P presents the table regarding designation and flow control for disposal of solid waste and transfer of solid waste.

2. Facility Closure, Expansion, Establishment Schedule Response

There are no operating solid waste facilities in the District. Therefore, this section is not applicable to the District.

F. Source Reduction Program Requirement

Ohio Revised Code Section 3734.53 (A)(14) requires "...a program for providing informational or technical assistance regarding source reduction to solid waste generators or particular categories of solid waste generators, within the District. The plan shall set forth the types of assistance to be provided by the district and the specific categories of generators that are to be served. The district has the sole discretion to determine the types of assistance that are to be provided under the program and the categories of generators to be serviced by it."

1. Source Reduction Program Response

Appendix L includes plans for outreach and marketing and covering the topic of source reduction for solid waste generators for different categories of generators. Plans for the industrial sector also include technical assistance for source and waste reduction.