# Athens-Hocking Solid Waste Management Plan



2025-2040





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# SECTION 1 SOLID WASTE MANAGEMENT DISTRICT INFORMATION

Table i-1 Solid Waste Management District Information **SWMD Name** Athens-Hocking Solid Waste District Member Counties Athens County, Hocking County Coordinator's Name (main contact) Jane Forrest Redfern Job Title **District Director** Street Address 1121 Chestnut Street City, State, Zip Code Nelsonville, Ohio 45764 Phone 740-753-6885 740-590-2895 Fax E-mail address ahswd@nelsonvilletv.com Webpage www.ahswd.org

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

Member Name	Representing	
Athens County		
Lenny Eliason	County Commissioners	
Steve Patterson	Municipal Corporations	
Ted Linscott	Townships	
Jack Pepper	Health District	
Steve Mack	Generators	
John Kotowski	Citizens	
Mike Cooper	Public	
Hocking County		
Micheal Linton	County Commissioners	
Greg Fraunfelter	Municipal Corporations	
Sam Eggleston	Townships	
Doug Fisher	Health District	
Karen Raymore	Generators	
Jim Raeder	Citizens	
Michelle Stufflebeam	Public	
Additional Public Representative		
Name	County	
Molly Jo Stanley	Athens	

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

Name	Mayor Greg Fraunfelter
Street Address	1151 Old McArthur Road
City, State, Zip Code	Logan Ohio 43138
Phone	740-216-6094
Fax	
E-mail address	mayor@cityoflogan.oh.gov

Table i-4 Board of County Commissioners/Board of Directors			
Commissioner Name	County	Chairperson/President	
Commissioner Michael Linton	Hocking		
Commissioner Jason D'Onofrio	Hocking	X	
Commissioner Sandra Ogle	Hocking		
Commissioner Name	County		
Commissioner Chris Chmiel	Athens		
Commissioner Charlie Adkins	Athens		
Commissioner Lenny Eliason	Athens	X	

# Prepared By Jane Forrest Redfern, District Director

The plan was edited by Jamie A. Zawila, Vice President of GT Environmental!

This plan is dedicated to Nancy Bain, former A-HSWD Policy Committee Member, Chairperson and dedicated community member. A big salute to Athens County Commissioner Lenny Eliason, who has been part of the Policy Committee for five (5) solid waste management plan updates. A big thank you for your guidance and contribution to the District.

Many thanks to the Athens County Commissioners and the Hocking County Commissioners for their support of the Solid Waste District and our programs.

Many thanks to the members of the Policy Committee who attended many meetings to learn about our District and the many wonderful opportunities and challenges before us. A special thanks to our Chair, Mayor Fraunfelter and Vice-Chair, Mayor Patterson for their leadership in the process.

# **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 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 to: reduce the amount of waste Ohioans generate and dispose of, ensure that Ohio has adequate, protective capacity at landfills to dispose of its waste, and reduce Ohio's reliance on landfills.

# B. Requirements of County and Joint Solid Waste Management Districts

#### Structure

Each of the 88 counties in Ohio must be in a solid waste management district (SWMD). A board of county commissioners may form a SWMD through a resolution or has the option of joining with the board(s) of county commissioners from one or more other counties to form a multi-county SWMD. Ohio's 88 counties are organized into 52 SWMDs. Of these, 37 are single county SWMDs and 15 are multi-county.

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. 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 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 (state plan) and present a budget for implementing the solid waste management plan.

Ohio Revised Code (ORC) 3734.53 and Ohio Administrative Code (OAC) Rule 3745-27-90 specify the contents of a solid waste management plan. Ohio EPA prescribes a format (The District Solid Waste Management Plan Format) that details the

information a plan must provide, and the way 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. This gives 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 submits periodic updates to its solid waste management plan to Ohio EPA. For an approved plan that covers a planning period of between 10 and 14 years, the policy committee must submit a revised plan by the third anniversary Ohio approved the SWMD's current plan. 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

The Athens-Hocking Solid Waste District is the most beautiful solid waste district in all of Ohio. The goal of the solid waste district is to reduce, reuse, and recycle solid waste that is generated in the district and to develop plans and programs and evaluate its successes. The district is responsible for planning, implementing, and the oversight of a 15-year comprehensive management plan.

The primary goal is to reuse, recycle and eliminate adverse impacts of waste materials on public health and the environment. We do this by providing information and opportunities, expertise to businesses and residents, and providing programs that support sustainable materials management to reduce the environmental impact of waste.

The district was formed on June 15,1993 and comprises Athens and Hocking counties. The district's main office is in Nelsonville at 1121 Chestnut Street in Nelsonville, Ohio and the Sutton Road Recycling Center located at 33845 Sutton Road in Logan, Ohio. Currently, the district has 22 Recycling Drop-Off locations throughout the district.

# 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 *2020 Solid Waste Management Plan* (2020 State Plan). The 2020 State Plan established nine goals as follows:

- 1. The SWMD shall ensure that there is adequate infrastructure to give residents and commercial businesses opportunities to recycle solid waste.
- 2. The SWMD shall reduce and recycle at least 25 percent of the solid waste generated by the residential/commercial sector.
- 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.
- 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.
- 5. The SWMD shall incorporate a strategic initiative for the industrial sector into its solid waste management plan.
- 6. The SWMD shall provide strategies for managing scrap tires, yard waste, lead-acid batteries, household hazardous waste and obsolete/end-of-life electronic devices.
- 7. The SWMD shall explore how to incorporate economic incentives into source reduction and recycling programs.
- 8. 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.
- 9. The SWMD has the option of providing programs to develop markets for recyclable materials and the use of recycled-content materials.
- 10. The SWMD shall report annually to Ohio EPA regarding implementation of the SWMD's solid waste management plan.

All 10 goals are crucial to furthering solid waste reduction and recycling in Ohio. However, the challenges posed by Goals 1 and 2 often mean SWMDs 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.

A SWMD is encouraged to devote resources to achieving both goals but is not required to demonstrate that achieving both. Instead, SWMDs have the option of choosing either Goal 1 or Goal 2 for their solid waste management plans. This gives SWMDs two options for achieving Ohio'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 9 (market development) is an optional goal. Goal 10 requires submitting annual reports to Ohio EPA.

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

# **CHAPTER 2 DISTRICT PROFILE**

# **Purpose**

This chapter provides context for the SWMD's solid waste management plan by providing an overview of general characteristics of the SWMD. Characteristics discussed in this chapter include:

- The communities and political jurisdictions within the SWMD;
- The SWMD's population in the reference year and throughout the planning period;
- The available infrastructure for managing waste and recyclable materials within the SWMD:
- The commercial businesses and institutional entities located within the SWMD;
- The industrial businesses located within the SWMD; and
- Any other characteristics that are unique to the SWMD and affect waste management within the SWMD or provide challenges to the SWMD.

Understanding these characteristics helps the policy committee make decisions about the types of programs that will most effectively address the needs of residents, businesses, and other waste generators within the SWMD's jurisdiction.

Population distribution, density, and change affect the types of recycling opportunities that make sense for a particular community and for the SWMD as a whole.

The make-up of the commercial and industrial sectors within the SWMD influences the types of wastes generated and the types of programs the SWMD provides to assist those sectors with their recycling and waste reduction efforts.

Unique circumstances, such as hosting an amusement park, a large university, or a coal burning power plant present challenges, particularly for providing waste reduction and recycling programs.

The policy committee takes these characteristics in mind when developing its overall waste management strategy.

#### A. Profile of Political Jurisdictions

1. Counties in the Solid Waste Management District

The Counties in the District are Athens County and Hocking has 507 and 423 square miles, respectively. The majority of the land use/land cover as forest 73.85% and 80.23% respectively. Only 7.86% and 5.97% land use/land cover is developed at lower or higher intensity. 75.1% of the housing units are owner-occupied in Hocking County, and only 57.8% of the housing units are owner-occupied in Athens County.

# 2. County Overview

The district is home to 41 separate jurisdictions. The largest city in the district is Athens in Athens County, with a population just under 25,000 and home to Ohio University. The population fluctuates during the year depending on which semesters the students are attending, Fall, Winter and/or Summer. Athens County rests in the foothills of the Appalachian Mountains and is ranked as one of the poorest counties in Ohio. The biggest employer in Athens County is Ohio University, with the county transitioning over time from mining and small industry to sustainable farms, forestry and tourism. In 2020, Athens County had a 25% dependence ratio (Percent of income from transfer payments) and an unemployment rate of 7.3%.

Hocking County has only one city, Logan, Ohio. Logan is the heart of industry and tourism for the region. Once known for clay, coal mining, manufacturing and as a forestry community, Logan has transitioned into more of a tourism sector economy. Although having a population of less than 30,000, over 5-million-day visitors annually come to Hocking County to visit the Hocking Hills, ranked by Forbes to be in the top 50 places to visit for nature in the United States. The Airbnb sites and cabins, restaurants and attractions are the main sector of tourism for the last 10 years. Premised upon the high density of forested and sustainable land practices in Athens and Hocking counties, we're firm in the belief that we are the most beautiful solid waste district in Ohio. Hocking County has a 29.6.% dependence ratio (Percent of income from transfer payments) and an unemployment rate of 7.4% in 2020.

# B. Population

# 1. Reference Year Population

Reference year population is an estimate of the District's population distribution and projected residential/commercial waste generation for 2021. The District's population of 90,153 was calculated using the U.S. Census Bureau's Data for July 1, 2021.

The population for Athens County is evenly split of half in the cities of Athens and Nelsonville and half the population of the county live in the villages and townships. In Hocking County, over 70% of the population lives in Townships and a little over one-fourth of the county lives in the City of Logan.

Only 40% of residents in our district live in cities and only 2 of the 3 cities have franchise systems for trash collection and recycling.

Table 2-1 Population of District in the Reference Year

Count	y	Largest Policial Jurisdiction		
Name	Population	Community	Population	Percent of Total
Name		Name		County Population
Hocking County	28,097	Logan	7,349	26%
Athens County	62,056	Athens	24,311	39%
Total	90,153			

According to the U.S. Census Bureau 7/1/2021

# 2. Population Distribution

**Table 2-2 Population of District in the Reference Year** 

County Percent of Population in Cities		Percent of Population in Villages	Percent of Population in Unincorporated Township
Hocking	26%	3%	71%
Athens	47%	8%	45%

	Population*		Population*
Athens County	62,056	Hocking County	28,097
City of Athens	24,311	City of Logan	7,349
City of Nelsonville	4,571	Villages (3)	885
Villages (8)	5,270	Townships (11)	19,863
Balance Townships	27,904		
(14)			

# 3. Population Change

After the presentations to the Policy Committee from both county planners, there is no large increase anticipated in population in either county, but what is expected over the 15 years is a gradual decrease in population. An unexpected decrease in Hocking County has occurred due to significant turnover of homes to Airbnb's cabin rentals and the like, which reduces the previously found year-round residential base.

Seventy percent (70%) of Hocking County's population is over the age of 25, with almost half of that over 45 years of age. Athens County's population is 56% over the age of 25, with 30% of the population between 18 to 24 years old.

# 4. Implications for Solid Waste Management

47% of residents in Athens County live in cities of Athens and Nelsonville, which have curbside pickup. The district is a free enterprise system for trash hauling and recycling.

With only one hauler providing curbside recycling to the City of Athens and Nelsonville and subscription service for residents which live near the cities and the City of Logan, it would benefit the District greatly if there were more.

There is no current curbside service in Hocking County except for the subscription services provided by Athens-Hocking Recycling Center in and around the City of Logan. Otherwise the residents use the drop-off sites provided by the District.

In Athens County, the trend of purchasing homes for rentals is not new to the district. The City of Athens has a student population which changes every year. While the City of Athens has curbside recycling, the constant turnover of renters makes it challenging to inform induce new renters to recycle. There are established neighborhoods in Athens to hold the population and recycling steady. We are thankful that Ohio University's commitment to recycling, which has a current goal of a 60% diversion rate, includes the constant flux of students within its dormitories.

# C. Profile of Commercial Sector

According to the 2021 Ohio County Profiles for Athens County, there are 100 businesses in the commercial private sector with 962 establishments employing 13,271 people on average. The sectors of trade, transportation and utilities, education and health services, and leisure and hospitality employ 71% of the workers in the commercial sector. Since 2013, Athens County has had only three (3) sectors which have seen an increase of over 10% and they are manufacturing (12%); Education and Health Services (39.8%) and Leisure and Hospitality (14.2%).

According to the 2021 Ohio County Profiles for Hocking County, there are 480 establishments in the private sector employing 4,953 people. The Service sector employs 3,609 of the public sector jobs. The trade, transportation and utilities and education and health services and leisure and hospitality employ 58% of the workers. Since 2013, the only sectors which have increased by over 15% are education and health services (17.3%) and leisure and hospitality (20.0%). We also saw a 36.8% reduction of State Government employment in Hocking County since 2013.

Since 2013, we have seen increases in number of employees in the commercial sectors in both counties, but this is also the sector with some of the lowest average weekly wages. While the Education and Health Services in both counties increased which have some of the highest average weekly wage.

#### D Profile of Industrial Sector

With the industrial sector generating 5% of the waste within the District, we haven't seen any significant materials or waste stream changes for many years, other than additional cardboard and less paper due to everything going online.

The list below highlights the industries and the materials they have reported recycling:

Industry	Materials Recycled
Medical Mfr	Cardboard, Paper
Food Mfr	Food Waste
Fabricated Metal Products	Metal Recycling
Solar Company	
Paper Manufacturing	paper, cardboard,
	ferrous metals, plastic, pallets, textiles, wood &
	fiber cores
Clay Products	foundry sand
Flour Mill	Cardboard, Metal
Brewery	Cardboard, metal, other
Tech Specialist)	Cardboard, metal, other
Construction	Tires, Batteries, other

These are the same materials we generate in the residential and commercial sector: food waste, cardboard, paper, metal batteries and tires, which gives even more reason to invest in our infrastructure.

#### E. Other Characteristics

#### **HOCKING HILLS**

The Athens-Hocking Solid Waste District is home to the Hocking Hills, one of Ohio's most popular tourist attractions with over 5 million day and overnight visitors each year. The state parks, forests and other attractions in Hocking County are very rural in nature, making it difficult as well as inordinately expensive to distribute enough containers to serve each cabin and/or rental in these areas. With many absentee owners, responsibilities would rest with their staff to transport recycling to nearby drop-offs in the county. We have worked to identify areas where tourists tend to gather, such as lodges and parks.

# **NEW RESIDENT, NEW RULES**

In Athens County, we have new students moving in, moving around or moving out each fall and spring. This is a challenge for the City of Athens, Ohio University and the district. Ohio University is doing incredible work to reduce and divert waste away from the landfill for students living on campus, however not all off campus housing is controlled by Ohio University. So, those students who use to have built in recycling in the dorms, now may or may not have curbside recycling containers available, know which day it is picked up and if they live in a multi-unit housing unit they have no access to recycling at their home, but have to find the nearest drop-off site which may be behind them. This is a challenge because we still struggle to establish a comprehensive recycling message when students come to Athens or are going to leave Athens.

# ILLEGAL DUMPING, ABANDONED OR UNTIDY HOMES AND PROPERTIES

Illegal dumping, abandoned homes and hoarding of household items and animals is a real problem in the district. In some areas of the county, there is no dumping at all. Turn the corner and trash, tires and litter are found everywhere - not just an environmental problem and hazard, but a visual blight to visitors as well as residents. This is a problem for the environment but also is a bad mark to tourists visiting our area. In Athens, the Sheriff', the County Prosecutor, the Health Department and the district are working together to give people assistance to clean up unhealthy homes and properties and to not have to put someone in jail for an unkempt home and property.

In Hocking County, we have had a number of hoarding of materials, trash, and animals. The Health Department follows up on reports of unsafe conditions, and works with residents to find solutions to the problems. We have also had homeless camps, because there is only one homeless shelter in Hocking County. These camps pop up and when the law enforcement comes to visit them, the homeless move on to the next camp location. These camps leave acres of trash, human feces and materials which litter the ground and pollute the waterways in the community.

#### **LANDBANK**

Athens County has a Landbank, which involves retaining control of unsightly properties that have been abandoned or have inordinate tax delinquency. They are cleaned up, with structures repaired, refurbished or demolished to permit site reuse. The Landbank goes beyond the norm to divert as much material as possible during clean up or tear down of old homes and structures. In 2022, they diverted tons of material from the landfill, to be reused or recycled as illustrated below.

2022 Athens Co	2022 Athens County Land Bank Waste Diversion Annual Report					
August - Decembe	August - December 2022					
REGULAR RECYCLING	39.5 Pickup Truck					
HARD PLASTIC RECYCLING	20.5 Pickup Truck					
DUMPSTER	20 Regular & 1-30 Cubic Yards					
E-WASTE/SCRAP RECYCLING	23.5 Pickup Truck Loads & 2-18' Box Truck					
TIRES	264					
UPCYCLE	2-16' utility trailer of trim & 3.5 pickup truck loads of boards, 1-trash bag of clothes & 1-angle grinder(cord), roll of chicken wire, 4-metal shelves & 1-Wood Shelf, 1-large plastic flower pot,1-bird house, 1-plastic toddler size car & 1-walker, 1-courier cabinet, 3-desk, 2-dressers, 2-bookshelves, 1-large plastic cabinet, 1-kegerator, 2-seed spreaders, 1-ladder, 2-metal wash tubs, 12-tubes of wrapping paper, 2-Care Bear pillows, 3-ash trays, 1-					

# **Chapter 2** District Profile

weight bench, 1-medium sized clay flower pot, 1-metal cabinet, 2-winter coats

# **CHAPTER 3. WASTE GENERATION**

This chapter summarizes the SWMD's historical and projected solid waste generation. The policy committee needs to understand the waste the SWMD will generate before it can make decisions regarding how to manage the waste.

The policy committee 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. To calculate how much waste was generated, the policy committee added the quantities of waste disposed of in landfills and reduced/recycled.

The policy committee surveys communities, recycling service providers, collection and processing centers, commercial and industrial businesses, owners and operators of composting facilities, and other entities that recycle to obtain data. Responding to a survey is voluntary. When entities do not respond to surveys, the policy committee gets only a partial picture of recycling activity. How much data the policy committee obtains has a direct effect on the SWMD's waste reduction and recycling and generation rates.

The policy committee 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 policy committee 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

Residential/commercial waste is essentially municipal solid waste waste, the waste generated by a typical community. To calculate how much waste was generated, the policy committee added the quantities of waste disposed of in landfills and reduced/recycled.

Table 3-1 Solid Waste Generated in the Reference Year

Type of Waste	Quantity Generated (tons)
Residential/ Commercial	80,335
Industrial	4,272
Excluded	0
Total	84,607



Source(s) of Information: A-HSWD 2021 Annual
District Plan and the Ohio EPA Waste Flow Report
Excluded waste is less than 10% and was not included.

#### 1. Residential/Commercial Waste Generated in Reference Year

Years 2020 and 2021 were the heart of the pandemic and impacted the wasted generated in the district. Students were present only during part of these years, resulting less generated waste. We also saw a significant increase of cardboard in the residential and commercial waste streams since 2020, creating need to add drop-off containers, a consequence of items being increasingly ordered online.

There was a significant increase in the number of visitors staying in Hocking County in 2021, due to the pandemic and many people staying nearby or in vacation lodging which gave families a reduced exposure to COVID. Ohio saw a drop of 25 million visitors between 2019-2020, but in 2021, the total visits went back up to 219 million visits to Ohio.

The total residential/commercial waste generation for 2021 is 80,335 tons or 95% of the waste generated in the District.

#### 2. Industrial Waste Generated in Reference Year

The industrial waste generated in 2021 was a total of 4,272 tons, only 5% of the total waste. Per Ohio EPA and the State Solid Waste Management Plan, Industrial waste will not be accounted for in this plan update.

#### 3. Excluded Waste Generated in Reference Year

Excluded Waste generated in the District in 2021 was 1.6%. Therefore, excluded waste will not be accounted for in this plan update, as it comprises less than 10% of waste disposed.

# B. Historical Waste Generated

		Residential/ Commercial Solid Waste		Industrial Solid Waste	Excluded Waste	Total Waste
		Weight		Weight	Weight	Weight
Year	Population	Rate (ppd)	(tons)	(tons)²	(tons)3	(tons)⁴
2017	95,071	3.26	56,560	7,605	2,499	66,664
2018	94,259	3.46	59,524	5,488	1,123	66,135
2019	94,259	3.42	58,838	4,703	1,412	64,953
2020	93,306	3.20	54,573	5,247	1,207	61,027
2021	91,180	3.50	58,322	4,271	1,012	63,605

#### 1. Historical Residential/Commercial Waste Generated

The residential/commercial waste generation held flat from 2017 to 2021.



In 2018, the District went from separated materials in recycling to single stream, which is a result of increased diversion in 2018, which increased the amount of total waste generated. In 2020 when the university and commercial entities closed and adjusted to the COVID pandemic generation took a slight dip. Many people worked at home and many of the commercial entities in Athens had very limited business since Ohio University was doing on-line classes. As 2021 rolled around, businesses got back to normal and approached the 2019 levels for disposal and diversion. Over the last five years, total generation only ranged a difference of 18,000 tons. The University and tourism drives the economy therefore driving the amount of waste generated and disposed of in the District.

# 2. Historical Industrial Waste Generated

Per Ohio EPA Format 4.1 and the State Management Plan, Industrial waste will not be accounted for in this plan.

# 3. Historical Excluded Waste Generated

Per Ohio EPA Format 4.1, excluded waste will not be accounted for in this plan update, as it comprises less than 10% of waste disposed.

# C. Waste Generation Projections

**Table 3-2 Waste Generation Projections** 

Year	Residential Commercial Waste
	Waste
	(tons)
2025	83,140
2026	86,020
2027	86,002
2028	85,988
2029	85,980
2030	85,978

This chart projects waste generated for the first five years of the planning period.





The per capita residential/commercial waste generation rate is projected to decrease in even intervals each year until 2030, due to population reduction over time. This does account for the five (5) million tourists visiting every year, so it is hard to determine if those projections will hold if tourism increases overtime. This is why it is a priority for the district to develop ways to assist the tourism sector in proper waste disposal and recycling as part of their operations. Though the per capita generation rate will remain flat from 2025 to 2032, decreases in population result in a decrease in the total tons generated after 2026. By 2032, the total volume generated by the residential/commercial sector is projected to decrease to 85,940 tons in the residential/commercial sector.

# CHAPTER 4 WASTE MANAGEMENT

# **Purpose of Chapter 4**

Chapter 4 summarizes policy committee's strategy for how the SWMD will manage its 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.

To ensure that the SWMD has access to facilities, the solid waste management plan identifies the facilities the policy committee expects will take the SWMD's trash, compost, and recyclables. Those facilities must be adequate to manage all 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 plan needs to show that the SWMD will have access to all types of needed facilities, Ohio law emphasizes access to disposal capacity. The policy committee must demonstrate that the SWMD will have access to enough landfill capacity for all 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.

Finally, the SWMD can 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 District's waste is collected by 14 haulers who pick up residential waste. Over the last two years, the two of the oldest and local haulers were purchased by Rumpke. This has left the smaller local haulers with fewer customers and the national hauling companies to compete.

Athens-Hocking Recycling Center is the only hauler who picks up garbage and does curbside recycling for residential and commercial customers. A few haulers provide commercial and industrial customers with garbage and cardboard recycling. The Cardboard then is taken and recycled by Athens-Hocking Recycling Center.

As stated earlier, only cities of Athens and Nelsonville have franchises, which allows them to bid for their garbage and recycling services. These services include picking up paper, cardboard, metal cans, plastics 1-7 and glass-single stream. The City of Athens also has an opt-in composting service for residents for a small monthly fee. Weekly pickups occur for 6,494 households. Overall, this assists the district by providing over 50% of the Athens County residents with curbside recycling and meeting our 25% residential/commercial recycling goal. In addition to City of Athens having residential curbside, there is an uptown franchise for commercial residents with recycling and composting services at a negotiated cost, reducing the impact of multiple haulers driving down the brick lined streets of the City of Athens.

On the other hand, the City of Logan has up to 6 different haulers picking up trash only throughout the city which results in garbage trucks in the city almost every day of the week. Although different approaches have been discussed, no resolution has been adopted. According to the 2021 ADR report, 214 households were served by Athens-Hocking Recycling Center to provide a subscription service for curbside trash and recycling center services. The top drop-off sites in Hocking County are inside the City of Logan. If the City would begin curbside recycling, this would provide residents from Logan a great alternative to the drop-offs and the District could shift resources.

In the rural parts of Athens and Hocking Counties it is a free enterprise for trash haulers. While some 2,300 households in the district subscribe to the Athens-Hocking Recycling Center curbside trash and recycling services, the rest of the residents have only garbage pickup as an option for waste management.

The majority of garbage picked up by haulers in the district goes to the Athens-Hocking Reclamation Center in Nelsonville, Ohio, owned by Rumpke. The other haulers and sometimes Rumpke trucks go to nearby transfer stations or landfills within a short distance of the district, depending on which is closest to their customers. On the other hand, all of the recycling gathered in the district goes to Athens-Hocking Recycling Center.

**Table 4-1: Methods for Managing Waste** 

Year	<b>Total Waste</b>	Recycle	Compost	Transfer	Landfill
2025	83,140	22,014	3,200	1,040	57,926
2026	86,020	22,119	6,100	1,031	57,801
2027	86,002	22,225	6,100	1,023	57,676
2028	85,988	22,337	6,100	1,016	57,551
2029	85,980	22,453	6,100	1,009	57,427
2030	85,978	22,576	6,100	1,003	57,302



As shown in Figure 4-1. The district does not expect any great changes to the recyclable processing facilities or flows to processing facilities during the planning period. Additional capacity is not needed.

# B. Profile of Waste Management Infrastructure

1. Solid Waste Management Facilities

#### a. Landfills

There is currently only one landfill in the district, which is the Athens-Hocking Reclamation Center owned by Rumpke. It was purchased in 2021 and currently has 48 years of remaining capacity. 25% of the waste sent to the landfill is in district waste; 25% is out of district in state waste and nearly 50% is from special waste customers from out of state.

68% of the waste generated in the district goes to the Athens-Hocking Reclamation Center; 29% goes to Beech Hollow Landfill; and the remaining 3% goes to other landfills around the district.

#### b. Transfer Facilities

Table D-2 Waste Transferred	able D-2 Waste Transferred in Reference Year					
Location Waste Received from the SWMD				D		
Facility Name	County	State	Residential/ Commercial (tons) Industrial Excluded Tota (tons) (tons) (tons)			
Meigs County Transfer Station	Meigs County	Ohio	281			281
Chillicothe Transfer WM	Ross	Ohio	774	13		786
Canal Winchester Transfer	Franklin	Ohio	0			0
Total			1,055	13	0	1,067

Although the district does not have a transfer station at this time, there are 3 transfers stations which district waste is sent to on a regular basis and totals only over 1000 tons.

# c. Compost Facilities

able B-5 Inventory of Composting Facilities Used in the Reference Year						
Facility Name	Compost Facility Classification	Publicly Accessible (Y/N)	Location	Food Waste (tons)	Yard Waste (tons)	Total
Athens Hocking Organics	2	Υ	5991 Industrial Drive Athens, Ohio 4570	306	18	324
Ohio University Composting Facility	2	n	137 Dairy Lane, Athens, Ohio 45701	225	111	336
Latta Earthworks LLC	3	у	6787 BakerRd, Athens, OH, 45701		211	211
Ohio University Composting Facility	4	n	N. BlackburnRd, Athens, OH, 45701		1,838	1,838
Hauler/Grocer Food Waste Data Athens				190		190
Hauler/Grocer Food Waste Data Hocking	0	n		61		61
PINE GROVE REGIONAL FACILITY					4	4
Total				782	2,183	2,964

The composting facilities in Athens County are well established. Ohio University operates bot a class 2 and class 4 compost facility serving the university community only. The materials are used on campus and not sold publicly. Athens Hocking Recycling Center operates a class 2 composting facility, which serves the City of Athens curbside residents and restaurants within the area along with some food processors. Athens-Hocking Recycling Center does serve the public, but does not have many drop-off customers at this time.

The only private composting facility is Latta Earthworks, a class 3 facility which accepts compost, leaves from communities, brush from the public and private companies and does sell its compost to the public as a product. The owner, a retired fire fighter, opened to serve the public to reduce the amount of brush and woody material from getting burned in the district, which occasionally got out of hand, requiring assistance from local fire departments.

# d. Processing Facilities

The district has two scrap metal/auto recycling facilities which are well established businesses. Athens-Hocking Recycling Center collects, processes and sends off household recyclables for further processing. Athens-Hocking Recycling Center also collects books, hard plastic, scrap metal and electronics.

e. Other Waste Management Facilities We have no other Waste Management Facilities.

#### Waste Collection

The district has 2 cities, Athens and Nelsonville, which bid contracts for waste and recycling at the curb. The rest of the district is a free enterprise with14 haulers contracting with residents and businesses for waste and recycling services. This heavy and excessively frequent traffic causes great damage within the City of Logan, as well as village, county and township roads throughout the district. There are fewer haulers with Rumpke purchasing the larger hauler in both Athens and Hocking counties. Apart from Athens-Hocking Recycling Center (AHRC) the balance of haulers are very small businesses covering the breadth and width of the counties. AHRC currently has the contracts for Ohio University, Cities of Nelsonville and Athens many customers around the cities of Nelsonville, Athens and Logan to complete their routes. Currently AHRC is the only full service residential and commercial hauler who picks up waste and recycling. Rumpke does a few residential homes for recycling, but largely focuses on waste collection. They provide cardboard recycling for businesses and larger commercial and industrial clients.

#### C. Solid Waste Facilities Used in the Reference Year

#### 1. Landfill Facilities

Table 4-2: Landfill Facilities Us						
	Loc	Location		Percent of	Remaining	
Facility Name	County	State	from SWMD (tons)	all SWMD Waste Disposed	Capacity (years)	
In-District						
A-H Reclamation Center	Athens	Ohio	58,007	92%	48	
		Ohio		0%		
Out-of-District						
Pine Grove Rupublic Services	Fairfield	Ohio	443	1%	88	
Tunnel Hill Win Waste	Perry	Ohio	806	1%	7	
Suburban WM	Perry	Ohio	1	0%	77	
Gallia County WM	Gallia	Ohio	0	0%	9	
SWACO	Franklin	Ohio	497	1%	46	
Pike Rumpke	Pike	Ohio	0	0%	36	
Beech Hollow	Jackson	Ohio	3,551	6%	76	
	63,306	100%	387			

The landfills which service the district are owned by the haulers of the materials. 68% of the district's waste goes to the only landfill in the district, the Athens-Hocking Reclamation Center, located in Nelsonville, Ohio. The other 8% of the waste goes to

the landfills that are nearest to the routes of the haulers or the landfills which are owned by the hauler. All of them have a remaining capacity of 387 years.

#### 2. Transfer Facilities

Table 4-3: Transfer Facilities Us						
Facility Name	Loca	Location		Percent of all District Waste	Landfill Where Waste was Taken to be Disposed	
	County	State	(tons)	Transferred		
Out-of-District						
Meigs County Transfer Station Rumple	Meigs	Ohio	243	22%		
Chillicothe Transfer (WM)	Ross	Ohio	815	74%		
Canal Wincester Transfer (WM)	Franklin	Ohio	44	4%		
Columbus Transfer Station	Franklin	Ohio	2	0%		
	Total		1.104	100%	0	

The transfer facilities listed in Table 4-3 are those identified for purposes of Ohio Revised Code Section 3734.53(A)(13)

Due to the rural nature of the district, haulers choose to go to the nearest and least expensive site to save funds, with some haulers like to use their own facilities.

# 3. Composting Facilities

Table 4-4: Composting Facilities Used by the District in the Reference Year							
Facility Name	Location (County)	Material Composted	Percent of all Material				
In District							
Athens Hocking Organics	Athens	328	12%				
Ohio Univ. Composting Class II	Athens	336	12%				
Ohio Univ. Composting Facility	Athens	1,838	65%				
Latta Earthworks LLC	Athens	317	11%				
			0%				
Out-of-District							
Pine Grove Regional Facility	Fairfield	4	0%				
			0%				
	2,822						

These numbers are low due to the pandemic, with Ohio University students absent from Athens due to on-line learning. There are currently no licensed composting facilities in Hocking County. The Ohio University sites are not for public use. Only Athens Hocking Organics and Latta Earthworks are available for the public drop-off. Athens-Hocking

Organics does pick up materials to opt-in households in the City of Athens, as part of their contract.

# 4. Processing Facilities

Table 4-5: Processing Facilities								
	Loc	Location		Recyclables				
Name of Facility	County	State	Facility Type	Accepted from District (tons)				
In-District								
Athens-Hocking Recycling Center	Athens	ОН	MRF	5600				
Out-of-District								
		ОН						
Out-of-State	Out-of-State							
			Total	5,600				

The processing facilities listed in Table 4-5 are those identified for purposes of Ohio Revised Code Section 3734.53(A)(13)

Athens-Hocking Recycling Center is the only processing facility in the region. They are a non-profit organization and they haul trash and recyclables.

# 5. Other Waste Management

# D. Use of Solid Waste Facilities During the Planning Period

#### 1. Landfills

The district does not control the hauling or disposal in the district. The haulers of garbage decide to take their waste to their own landfill or for the smaller haulers the use the cheapest landfill and closest to their routes.

#### 2. Transfer Facilities

The district does not control the hauling or disposal in the district. The haulers of garbage decide to take their waste to their own landfill or for the smaller haulers the use the cheapest landfill and closest to their routes.

Table D-2 Waste Transferred	Table D-2 Waste Transferred in Reference Year						
	Location		Location Waste Received from the SWMD				D
Facility Name	County	State	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)	
Meigs County Transfer Station	Meigs County	Ohio	281			281	
Chillicothe Transfer WM	Ross	Ohio	774	13		786	
Canal Winchester Transfer	Franklin	Ohio	0			0	
Total			1,055	13	0	1,067	

# 3. Composting Facilities

The district has plans to assist in the expansion and/or construction of composting facilities to increase the amount of waste which can be composted. We will increase the amount going to the sites through education, assisting local schools, commercial and industrial sites to use composting facilities locally. Through this strategy, we can work to reduce the organics in the waste stream and generate very sought-after compost amendments for our soils in the district. It also could be the least expensive diversion program with the greatest benefits to diverting waste and reducing greenhouse gasses.

Table 4-4. Composting Facilities used by the district in the Reference Tear							
Facility Name	Location (County)	Material Composted	Percent of all Material				
In District							
Athens Hocking Organics	Athens	328	12%				
Ohio Univ. Composting Class II	Athens	336	12%				
Ohio Univ. Composting Facility	Athens	1,838	65%				
Latta Earthworks LLC	Athens	317	11%				
			0%				
Out-of-District							
Pine Grove Regional Facility	Fairfield	4	0%				
			0%				
	2,822	-					

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

# 4. Processing Facilities

The district must support the only processing facility in the district. If it does not continue to do so, the cost of recycling and programs will go beyond our ability to pay for them. This also benefits the region if that facility is able to expand and grow in the number of materials accepted, as well as volume.

Table 4-5: Processing Facilities Used by the District in the Reference Year						
	Loc	ation	Facility Type	Recyclables		
Name of Facility	County	State		Accepted from District (tons)		
In-District						
Athens-Hocking Recycling Center	Athens	OH	MRF	5600		
Out-of-District						
		ОН				
Out-of-State						
Total						

# 5. Other Waste Management

The district must work to engage with the haulers, local governments, commercial and industrial interests, as well as the general public, to develop ways to reduce waste by all possible methods. This does not help us reach our recycling goals, but it will reduce the amount of waste generated and materials we will have to divert. We will work to help publicize people who repair and restore items.

We will also work with our regional partners to identify opportunities for a circular economy, and assist in their development, so our waste becomes a raw material for a new industry or sector. This is the reason we need a facility to handle hard to recycle materials to store or upcycle those materials at the level that they are economically feasible to recycle them.

As discussed below, the District has a number of commercial scrap yards, recycling sites for motor oil and batteries, thrift stores, food pantries, food rescue and donation stations, and programs to reduce materials going into the landfill.

# E Siting Strategy

# **Purpose of the Siting Strategy**

If the SWMD will not have access to enough landfills to dispose of all waste the SWMD will need to dispose of. If existing facilities cannot provide that capacity, then the policy committee must develop a plan for obtaining additional disposal capacity.

Although unlikely, the policy committee can decide that it is in the SWMD's best interest to construct a new solid waste landfill facility to secure disposal capacity. In that situation, Ohio law requires the policy committee to develop a strategy for identifying a suitable location for the facility. That requirement is found in <a href="Ohio Revised Code Section 3734.53(A)(8)">Ohio Revised Code Section 3734.53(A)(8)</a>. This strategy is referred to as a siting strategy. The policy committee must include its siting strategy in the solid waste management plan. If this solid waste

management plan includes a siting strategy, then that strategy is summarized in this chapter and presented in full in Appendix S.

The Athens-Hocking Solid Waste District does not intend to site or build any District owned or financed solid waste transfer or municipal solid waste disposal facilities during the planning period. The District does not plan to site any privately owned solid waste transfer or solid waste disposal facilities to serve District needs.

If a private owner decides to site a waste disposal facility or solid waste transfer facility, which requires a permit for construction, enlargement or modification, the District will review the permit application that is submitted to the Ohio Environmental Protection Agency and will actively participate in the public review and comment process to the extent deemed appropriate by the District Board of Directors. The Athens-Hocking Solid Waste District has not chosen to include a siting strategy for solid waste disposal or transfer facilities in this Plan.

The Athens-Hocking Solid Waste District is not including a siting strategy for facilities that do not require solid waste facility permits, like recycling facilities. These facilities are subject to local zoning and building regulations and will be treated like other industrial manufacturing and processing facilities.

# F. Designation

# **Purpose of 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.

The policy committee decides whether the board of directors has the authority to designate facilities. The policy committee does this in the solid waste management plan.

Even if the policy committee gives the board of directors the authority to designate facilities, the board 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 <a href="ORC Section 343.014">ORC Section 343.014</a>. If it chooses not to designate facilities, then the board of directors doesn't act on its authority.

Once the board of directors designates facilities, the SWMD's can go to only designated facilities can take the SWMD's waste. That means, no one can legally take waste from the SWMD to undesignated facilities, and owners/operators of undesignated facilities

cannot legally accept waste from the SWMD. The board of directors can grant a waiver to allow an undesignated facility to take the SWMD's waste.

If the board of directors designates facilities, then the next section will provide a summary of the designation process, and Table 4-6 will list currently designated facilities.

# 1 Description of the SWMD's Designation Process

The current approved Plan Update authorizes the Board of Directors of the Athens-Hocking Solid Waste District to establish facility designations in accordance with Section 343.014 of the Ohio Revised Code. Facility designation shall be established and governed by applicable District rules.

The District is not designating any facilities in this Plan Update. The District reserves the right to designate one or more facilities to receive solid waste.

As required in Section 3734.53(A)(13)(a) of the Ohio Revised Code, the District is identifying all Ohio licensed and permitted solid waste landfill, transfer and resource recovery facilities, and all licensed and permitted out-of-state landfill, transfer and resource recovery facilities anticipated to be used by the District. The District is also identifying licensed and permitted recycling and registered composting facilities, including those that are identified in the inventories of this Plan Update.

# **Authorization Statement to Designate**

The plan must "...contain a clear statement as to whether the Board of Directors is authorized to or precluded from establishing designation under Section 343.014 of the Revised Code..." (Section 3734.53(E)(1) of the ORC). Designation functions as flow control of solid waste for the solid waste management district. At the present time, the District has not designated any facilities to which District waste must be taken. However, in this Plan the Athens-Hocking Solid Waste District Board of Directors reserves the right to designate a facility or facilities.

The Board of Directors of the Athens-Hocking Solid Waste District is hereby authorized to establish facility designations in accordance with Section 343.014 of the Ohio Revised Code. Facility designation shall be established and governed by applicable District rules.

# Waiver Process for the Use of Undesignated Facilities

If the District establishes facility designation and 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

Directors of the Athens-Hocking Solid Waste 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 Athens-Hocking Solid Waste District staff will review the request and may request additional information if necessary. The Board of Directors shall act on the request for a waiver within 90 days after receiving the request. The Board of Directors may grant the request for a waiver if the Board of Directors determines that:

- 1. Issuance of the waiver is not inconsistent with projections contained in the District's approved plan under Section 3734.53 (A) (6) and (A) (7); and
- 2. Issuance of the waiver will not adversely affect implementation and financing of the District's approved plan.

# 2 List of Designated Facilities

The Athens-Hocking Solid Waste District will not be utilizing designation facilities at the time of this plan, but reserves the right as outlined above.

# Table 4-6 Facilities Currently Designated

The Athens-Hocking Solid Waste District will not be utilizing designation facilities at the time of this plan, but reserves the right as outlined above.

# CHAPTER 5. WASTE REDUCTION AND RECYCLING

# **Purpose of Chapter 5**

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.

Between 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. These programs and services collectively represent the SWMD's strategy for furthering reduction and recycling in its member counties.

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 SWMD's existing programs and services, recycling infrastructure, recovery efforts, finances, and overall operations. This review consisted of a series of 12 analyses that allowed the policy committee to obtain a holistic understanding of the SWMD 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/how well is it performing?
- What is the SWMD's financial situation and ability to fund programs?

Using what it learned, the policy committee drew conclusions about the SWMD's abilities, strengths and weaknesses, operations, existing programs and services, outstanding needs, available resources, etc. The policy committee then compiled a list of actions the SWMD could take, programs the SWMD could implement, or other things the SWMD could do 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.

After deciding on programs and services, the policy committee projected 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 the residential/commercial sector and Appendix F for the industrial sector).

#### A. Solid Waste Management District's Priorities

The Athens-Hocking Solid Waste District will promote our Solid Waste Management Hierarchy as illustrated below.



Athens-Hocking Solid Waste District Priorities are to:

- ✓ Ensure access for all those in the district have easy/convenient access to recycling.
- ✓ Continue to build and grow awareness around the district and its mission.
- ✓ Conduct routine events and collect and dispose of reusable, recyclable, hard to recycle and hazardous materials.
- ✓ Grow the composting segment of the district.
- ✓ Build and implement a framework that addresses open dumping and unhealthy living within the district.
- ✓ Be prepared and become more resilient working with District Emergency Management Agencies.
- ✓ Assist in increasing opportunities for collection of materials and the develop and grow markets for recyclable materials. Grow a circular economy.
- ✓ Identify, and implement public policies and programs which improve recycling and proper materials management.

- ✓ Conduct workgroups to resolve issues as raised in the community.
- ✓ Facilitating research and development of new uses of recycled materials

Below are our priorities listed in levels, and we will work on these priorities as we develop partnerships and funds in order to do the programs. In the interim the District will work with partners on ways to increase our recycling rate in areas that generate the greatest return from available resources - theirs or the District's. Primary examples include multi-unit housing, large events and venues, and commercial recycling.

The District would like to implement all of our outlined programs and priorities within the next five years. Yet with limited resources and staff, the District will have to work with partner organizations, consultants and contractors to do additional work to accomplish all our priorities. Therefore, the District outlines three (3) priority levels below and will implement the priorities as staffing, funding and opportunities are available.

Level 1 priorities are current programs, which work well and are the basic programming to meet the recycling goals.

- Maintain Drop off locations
- 2 recycling days in each County =Spring & Fall= 4 events
- HHW collection event every year or develop a new program
- Attend fairs, festivals and do outreach to residential and commercial via flyers, radio, paper and social media
- Continue battery collection at all libraries
- Solicit grants when available for educational materials and programs, equipment & tire collections.
- Seek grants for Health Departments & Sheriff's Offices for Enforcement and clean ups
- Offer community clean up grant funds to townships & villages
- Expand & Renovate Sutton Road Recycling Center-=Drop-off & CHARM for materials
- Commercial & Industrial Sector Reduction and Recycling Programs
- Disaster Debris Assistance
- Upgrades to the Sutton Road Recycling Center and add additional materials to be collected and recycled.

Level 2 priorities are programs or projects which will be focused as opportunities and partners present themselves, and funding and staffing are gained.

- Add Education/Outreach Staff
- Expand Compost
- Inform Multi-Unit Family owners and residents of options to recycle
- Assist with partners on Move Out-Move In on campuses
- Develop strategies for tourist cabin outreach
- Assist and expand school recycling
- Help develop model contracts for communities and commercial entities
- Create programs or assist Large Events/Venue Recycling
- Collection of Tires Year Round

#### CHAPTER 5 WASTE REDUCTION AND RECYCLING

Level 3 priorities are programs or projects which will be focused as opportunities present themselves and partners, funding and staffing are gained and when Level 1 & 2 programming are met or Level 3 items garner more interest or funding options.

- Compost programming with jurisdictions
- Expand Medical Equipment & Pharmaceuticals recycle or proper disposal
- Target books for recycling expansion
- Create Incentive Grants for recycling for local governments, businesses and nonprofits to increase recycling
- Create Market Development Programs
- Conduct Feasibility Studies/Workgroups
- Support Compost Facility expansion or new one in Hocking County
- Expand Municipal Corporation/Township Assistance

There are also large ticket items which many communities and parties have expressed an interest in as a priority. These would require major commitment from the District or the Southeastern region.

- Expansion of Curbside & Drop-off Programs
- Expand Staff for doing waste audits, assistance for business & industry to bring recycling facilities to the region (glass, solar panels, cardboard, paint, freon
- Bio-digester or system to deal with Sewage Sludge
- Tub Grinder
- Regional Recycling for creating jobs and separating materials at a regional CHARM
- Expansion of Composting Program into Hocking County and residential programming
- Supporting Regional CHARM and creating jobs
- Workforce Development Program for expanding staffing options and benefits.

#### B. Program Descriptions

Below are descriptions of our current and planned programs for the planning period.

1. Residential Recycling Infrastructure & Programs

Increasing Opportunities for Household Recycling for Locals and Visitors

- Assist and/or establish additional recycling & composting infrastructure and services for collecting and processing materials equally in each county.
- Increase recycling at the cabins, lodges and mult-iunit housing.
- Identify ways to assist communities in developing events and programs with template contracts & bids to assist them in selecting the most effective and efficient program for their residents.
- Grow the recycling of regular and hard to recycle materials and repair locations along the Recycling Trail.
- Hold Recycling and Clean up events throughout the District.

#### Curbside

	Table 5-1 Curbside Recycling Services		
ID#	Name of Curbside Service/Community Served	Service Provider	When Service Was/Will be Available
NCS1	City of Athens	AHRC	2025
NCS2	City of Nelsonville	AHRC	2025

#### **Drop-Off Recycling**

Drop-off sites in the district are the main avenue of household recycling, especially in the more rural / remote areas, and a must that they be maintained. Currently, there are 22 locations throughout the district, all but three (3) are on public lands. Some of the sites consist of an 8-yard container for mixed recyclables up to five (5) mixed recyclables and two (2) containers for flattened cardboard.

The current materials accepted are paper, cardboard, glass, plastic tubs, jugs and bottles and metal cans. These are accepted as a single stream into the containers with no plastic bags and not in plastic bags. In order to ensure the district is kept aware of the condition of the materials accepted and the level of contamination, it is critical to review the program. The goal of the Drop-off program is to provide a Drop-off site which provides access to information, creative educational signage, respects the visitor and the host site, and is maintained as a clean and tidy recycling station.

In order to meet this, the District will:

- Review annually periodically the effectiveness of each site and adjust the locations, number of containers and number of pick-ups this week.
- Review annually the materials accepted and see if there are additional materials which we could accept at the drop-off sites.

We must also use the sites for education and outreach for our programming.

During the plan period, the District would like to enhance the sites and ensure that it does not become a place to dump material. Steps we have taken at some of the drop off sites are installing concrete pads, fences and signage, but other beautification projects are needed. Early in the planning period, if not before, we will need to increase the number of pick-ups per week for almost all the sites.

- Maintain and Improve Drop-off Recycling Locations;
- Reduce Contamination
- Maintain and Improve Drop-off Recycling Locations;
- Develop plans to increase recycling in multifamily buildings

#### Moving Forward

Upgrade sites as needed

- Continue educational signage
- Keep sites clean and tidy.
- Add sites as requested and the budget will allow them.

 Table 5-2i
 Drop-off Recycling Locations for Hocking County

ID#	Name of Drop-off Site	Service Provider Athens-Hocking Recycling Center	County
FTR1	Green Township	AHRC	Hocking
FTR2	Sutton Road	AHRC	Hocking
FTR3	Benton Twp - Township Maintenance Bldg.	AHRC	Hocking
FTR4	Good Hope Twp Garage	AHRC	Hocking
FTR5	Marion Twp Bldg.	AHRC	Hocking
FTR6	Murray City Village Ward Twp	AHRC	Hocking
FTR7	Starr Township Bldg	AHRC	Hocking
FTR8	Laurelville Village Salt Creek Twp	AHRC	Hocking
FTR9	Logan City - Hocking Valley Community Hospital	AHRC	Hocking
FTR10	Carbon Hill/Ward Twp - Ward Township Bldg.	AHRC	Hocking
FTR11	Gibisonville Laurel Twp - Gibisonville Community Center	AHRC	Hocking

# Recycling Locations for Athens County

FTR12	Albany Village Lee Twp - Township Building	AHRC	Athens
	Thisarry Vinage Lee Twp Tewnering Building	_	71110110
FTR13	Amesville - Athens County Engineer Outpost	AHRC	Athens
FTR14	Buchtel Village/York Twp - Village Hall Parking	AHRC	Athens
FTR15	Canaan Twp - Township Garage	AHRC	Athens
FTR16	Coolville Village Troy Twp - Township Garage	AHRC	Athens
FTR17	Glouster Village/Trimble Twp - HAPCAP Bldg.	AHRC	Athens
FTR18	Guysville/Rome Twp - Marathon Station	AHRC	Athens
FTR19	New Marshfield Village Waterloo Twp - New	AHRC	Athens
FTR20	Shade Village Lodi Twp - Shade Community C	AHRC	Athens
FTR21	Village of Chauncey - Behind Maratho	AHRC	Athens
FTR22	Athens Township - Richland Area VFD	AHRC	Athens

#### **Grow Commercial & Industrial Recycling**

#### Hard to Recycle Materials

Work collaboratively on education and special collections for any community which has curbside collections. The district would like to identify a cost-effective method of picking up recycling at all homes in the district and will work to identify a way to do this over the new plan period.

#### **Multi-Family Unit Recycling**

- ✓ We do not have any special multi-family unit recycling program at this time. There is a big demand for this by students in the City of Athens.
- ✓ We will explore options for this issue and identify ways to increase access to those residents throughout the district.

#### **Special Event Recycling**

✓ The District and our partners have Recycling Days where we collect all household
and commercial materials for reuse, recycling and if we have no way of reusing or
recycling the item, it goes to the landfill. This gives residents twice a year to get
rid of large items and hard to recycle items all at once. These events will continue.

#### Other Residential Recycling

✓ We will work to continue to update the Recycling Trail materials and assist the food, thrift, antique, repair and recycling venues to increase their presence and ability to handle materials safely and efficiently and the types of materials they will or can accept. If we have funding or can assist them in getting funding to upgrade or organize their facilities to sell more materials for reuse. We will also work to identify ways for them to account for materials they accept and sell to be able to get those number for reporting purposes.

#### Commercial/Institutional/Industrial Sectors Reduction and Recycling Programs

#### School Recycling

- ✓ Our goal is to develop partnerships with other organizations and partners to inform and educate students about recycling at schools and at home.
- ✓ Hold an annual Zoom call with school leaders about upcoming events, any changes
  to the recycling program and identify needs at the schools with equipment or materials
  to encourage recycling.
- ✓ Explore with AHRC and the schools to see if we can get composting started at all of the schools with an on-site composting program or pick up program.
- ✓ Develop a middle school Recycling Festival for all district middle schoolers.

#### Collection Services (small businesses, government offices, etc)

✓ Work with all haulers to identify opportunities for growth.

✓ Work with commercial and government entities to identify ways to provide recycling services by the district or partner organizations and businesses.

#### Large Venue Recycling

✓ Our goal is to develop partnerships with organizations and businesses to inform and educate venues about recycling, composting and opportunities available to them.

#### Provide or Assist the Sectors with the following:

#### Waste Assessments/Waste Audits

✓ Our goal is to develop partnerships with other organizations and businesses to inform and educate venues about recycling, composting and opportunities available to them.

#### Contracting Assistance

✓ Our goal is to collect model contracts to share with businesses, governments and organizations to review before signing any waste contract for waste, recycling, composting and opportunities available to them.

#### Workgroup/Roundtable

✓ We will use workgroups and roundtable discussions to identify solutions and problem statements to best meet the needs of the district.

#### Award/Recognition

✓ The district will continue our Recycling Hero Awards given out during National Recycling Week (November 15).

#### Restricted/Difficult to Manage Wastes

- ✓ The district will hold four recycling days/year to collect household, scrap metal, batteries/bulbs, electronics and garbage.
- ✓ The district will maintain and improve ways to repair, reuse or recycle difficult or hard
  to manage wastes at Sutton Road, collection events and with partnerships in the
  district.
- ✓ Strengthen efforts to redirect hard to recycle and hazardous materials from the landfill to reuse, repair and recycling
- ✓ Build out the Sutton Road Recycling Center and identify a location in Athens County to do a CHARM or assist with the development of one.

#### Yard Waste

- ✓ Work with jurisdictions to develop their own program for yard waste and woody debris or find a comprehensive solution for this on the district level.
- ✓ Educate the public on composting with literature.

#### Household Hazardous Waste

- ✓ Hold a Collection Day annually in alternating counties.
- ✓ Respond to calls and emails regarding proper handling and recycling of batteries, libraries,, motor oil and paint, through retailers and on collection days.

✓ Identify options for collecting materials 12 months of the year.

#### Scrap Tires

- ✓ Hold as many tire drives as possible.
- ✓ Apply for scrap tire Recycle Ohio Grants
- ✓ Work with townships to sign up to be scrap tire recycling sites.
- ✓ Have a shipping container for townships to send public right of way tires, which OEPA picks up for free.
- ✓ Identify and maintain a list of local retailers which will take non-customer tires for recycling.

#### Electronic Equipment

- ✓ Collect Electronics at our Recycling Days and at area sites in the district.
- ✓ Our goal is to develop partnerships with other organizations and businesses to inform and educate the public, government and businesses venues about recycling.
- ✓ Maintain Sutton Road Recycling Center to accept materials for recycling and repair.

#### Lead-Acid Batteries

- ✓ Our goal is to develop partnerships with other organizations and businesses to inform and educate the public, government and businesses venues about recycling.
- ✓ Maintain Sutton Road Recycling Center to accept materials for recycling.

#### **Appliances**

- ✓ Our goal is to develop partnerships with other organizations and businesses to inform and educate the public, government and businesses venues about recycling.
- ✓ Maintain Sutton Road Recycling Center to accept materials for recycling and lists of businesses for repair.

#### Pharmaceuticals/Medical Equipment

- ✓ Our goal is to develop partnerships with other organizations and businesses to inform and educate the public, government and businesses venues about disposal.
- ✓ Develop and/or support partner organizations to gather medical equipment for reuse.
- ✓ Develop a needle disposal program with the assistance of partner organizations.

#### **Books**

✓ Our goal is to develop partnerships with other organizations and businesses to inform and educate the public, government and businesses venues about reuse and recycling opportunity for books and magazines.

# Other Material Specific Programs Food Waste

- ✓ Develop partnerships with other organizations and businesses to inform and educate the public, government and businesses venues about reuse and recycling.
- ✓ Work with existing and future composting organizations to offer a wider variety of excepted materials and expand their collection or drop off points within the district.
- ✓ Explore pilot programs for composting and reducing food waste/

### Funding/Grants

#### Incentive Based Grants

✓ Develop grant programs as needed and when funds are available to get entities to reduce, reuse or recycle materials.

#### Improvement Grants

✓ Continue grant programs when funds are available to aid entities with clean up and related improvement of their communities..

#### Other Funding/Grant Programs (list individually)

✓ Develop funding streams or grant programs to assist organizations and businesses to use waste materials to make new products or services.

#### **Economic Incentives**

#### Volume-Based Billing/Pay-As-You-Throw Trash Collection

- ✓ Conduct a review of all programs within the district for hauling, recycling and develop materials to share with residents and businesses as to what haulers or businesses
- ✓ are charging and services they provide.

## Market Development Programs

#### **Facilities**

## Materials Recovery Facilities and Recycling Centers

✓ The district will work with our materials recovery facility in the district to sustain it, so
we will have the ability to provide affordable avenues for household and business
materials. This may include identifying partnerships, funding or infrastructure to
support recycling in the district.

#### Landfills

✓ The district will maintain a good working relationship with all landfill sites in the district, and be used by the district, working with them to inform the public of site programs and policies.

#### **Composting Facilities**

✓ We will work with local composting facilities to increase capacity for composting in the area. Composting and increasing its capacity at the household, community and district levels is a high priority for the district, as is reducing organic and food wastes.

#### **Data Collection**

✓ Identify ways to collect recycling data to capture the tonnage of materials recycled in the district,

# Outreach, Education, Awareness, and Technical Assistance Web Page

✓ The district will maintain a comprehensive website and social media sites throughout the planning period.

#### Resource Guide

✓ The district will maintain and improve on our Move-On Guide and resources for the public, government and business.

#### **Education Provider**

- ✓ We will hire a Education and Outreach Manager for the District.
- ✓ Develop partnerships with other organizations and businesses to inform and educate the public, government and businesses venues about reuse and recycling.

# Outreach and Marketing Plan Residential Sector

✓ We utilize all forms of outreach and marketing for informing the public on our events, services and programs. We place ads in two newspapers, send out news releases,

# Commercial/Institutional Sector/Industrial Sector

- ✓ We utilize all forms of outreach and marketing for informing this sector and through business organizations and associations, conducting special outreach as needed.
- ✓ We will do outreach at the end of the year to encourage these sectors to report recycling data for our annual district report and we will recognize those that report.

#### **Political Leaders**

✓ We will maintain a comprehensive list of all political leaders to communicate with them about issues, events and programs available to them.

# <u>Schools</u>

We will maintain a comprehensive list of all school leaders to communicate with them about issues, events and programs available to them.

## **Outreach Priority**

✓ Every sector and group is a priority, as they all generate waste.

# **Other Programs**

## Health Department Support

- ✓ Provide technical and program assistance for unsafe living conditions by connecting people with sister agency programs and grant funds.
- ✓ Work to establish programs as needed.

#### **County Assistance**

✓ We appreciate all of the tremendous support our County Commissioners, Auditor, Treasurer and Sheriff's Departments give the district. We will partner whenever and wherever possible.

#### Open Dumping/Litter Enforcement/Open dump/tire dump cleanup

- ✓ Working with the Sheriff and Health Departments to develop a
- ✓ litter/open dumping hotline for public reporting, and develop a grant program to assist them in implementing strategies to reduce, deter as well as clean up such sites.
- ✓ Develop strategies to reduce open dumping and burning in the district.
- ✓ Develop education campaigns to reduce burning of garbage and materials.

#### Municipal Corporation/Township Assistance

- ✓ Develop partnerships with other organizations and businesses to inform and educate the Municipal Corporation/Townships about reuse and recycling.
- ✓ Continue grant programs for cleanup days in townships and villages as needed.
- ✓ Work to reduce waste and identify ways to assist in recycling materials.

#### Disaster Debris Assistance

- ✓ Work with the Emergency Management Agency to assist them when dealing with disasters.
- ✓ Develop model contracts and a comprehensive list of contractors to assist with disaster relief.

# If we had all the money in the world, what would you like the Solid Waste District to do?

- ✓ Identify ways to assist haulers in providing curbside recycling and agree to provide services to all properties in Athens and Hocking Counties.
- ✓ Develop strategies to create businesses that use recycled materials as their raw material.
- ✓ Draw in R&D interests to develop ways to re-use all materials, with a focus on employing primarily local residents and talent.
- ✓ Identify and provide opportunities to recycle and to have waste collection more affordable for residents.
- ✓ Build a compost site in Hocking County.
- ✓ Develop local solutions to incorporate recycled materials.

#### C. Waste Reduction and Recycling Rates

1. Residential/Commercial Recycling in the District

The residential/commercial recycling rates in the District in 2021 was 27.4%. This was during the Covid pandemic and students were not at Ohio University and many workers were working remotely. Commercial venues were beginning to open up.

We did conduct Recycling Days both in the spring and fall and conducted a household hazardous waste collection day after not collecting at events in 2020. We had 2 cities, Athens and Nelsonville which had curbside recycling, composting and trash pick-up

#### CHAPTER 5 WASTE REDUCTION AND RECYCLING

through a franchise system. We also had our 21 Drop-off locations and we collected batteries at local libraries and locations throughout the district.

We also saw the emergence of cardboard take over the waste stream due to the remote shopping and delivery of materials to homes. We added cardboard recycling containers instead of mixed recycling containers in 2021.

At our Fall Recycling Days, we added a number of partner organizations and began to collect household goods for reuse at our events instead of materials just to go to recycling. This began a good relationship with Upcycle, Rural Action, Athens-Hocking Recycling Center, Goodwill. New to You Shoppe, Restore/Habitat for Humanity. This addition continues during the planning materials to enable residents and commercial entities the ability to bring materials for reuse and recycling as well as trash materials which are no longer usable and need to go to the landfill. In 2022, Rumpke, McKees Auto Parts and Scrap and Michels Scrap Yard joined as a partner.

These partnerships as well as a focus on increasing recycling at the Sutton Road Recycling Center, by Commercial and Multi-Unit Housing and increasing composting throughout the District positions the District to increase the waste reduction and recycling rates moving forward.

 Table 5-3
 Residential/Commercial Waste Reduction and Recycling Rate

Year	Projected Quantity Collected (tons)	Residential/ Commercial WRR <sup>1</sup> (%)
2025	25,214	30%
2026	28,219	33%
2027	28,325	33%
2028	28,437	33%
2029	28,553	33%
2030	28,676	33%

<sup>&</sup>lt;sup>1</sup>WRR = Waste Reduction and Recycling Rate

# **CHAPTER 6. BUDGET**

#### **Purpose of Chapter 6**

The budget accounts for how the SWMD will obtain money to pay for operating the SWMD 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 is provided in Appendix O.

#### A. Overview of the SWMD's Budget

The Athens-Hocking Solid Waste District over the last 5 years has spent down savings which it received from the Athens-Hocking Recycling Center, Inc., a non-profit organization for the Recycling Center, equipment and vehicles. Funds and services for the first years of the past plan update, we benefited by receiving recycling services for payment of equipment to the district when they split from the recycling and waste disposal hauling portion of the previous version of the district. Not only did the district give up the hauling portion, but the recycling portion as well.

So, when working on the management plan 5 years ago, the District had a large portion of money in the bank and at that time we established tipping fees and increased generation fees, and the district decided to make up the difference by spending down the funds to keep the fees low.

In 2022, the district brought in \$448,417 in revenue from generation and disposal fees, and a Recycle Ohio grant. In 2022, were \$525,491, which included additional expenses for the tire amnesty days held and printing expenses for marketing and educational materials. This left \$482,141, prior to beginning the planning process. In 2023, the District brought in more than \$104,340 in grant income (which required matching dollars of at \$34,250 from the district), \$228,000 in Disposal (Tiered Fees); and \$200,000 in Generation Fees with a total income budget of \$536,580. It is estimated at the end of 2023, the expenses will end up at \$728,865 and a budget deficit of -\$181,286. This includes an unexpected increase to our Recycling Drop-off Collection program, budgeted at \$380,000 but ending \$433,000, due to the contractual fuel surcharge and the recycling rebate going down due to market drop. Over 60% of the budget was spent solely on Drop-off programs over four years, with more to be expended this year, leaving little for programming, program development or District staff.

The District is facing considerable deficit moving forward, having exhausted revenue from the previous split with Athens-Hocking Recycling Center. Deficits may be compounded further, should negative alterations of tiered fees occur, especially when 60% of those fees come from out of state waste entering the District.

District office expenses are minimized in a commercial strip and meeting space in the Nelsonville library. Equipment at the Sutton Road Recycling Center include a forklift and a RAM (elaborate on size) truck for travel. Lease for the Sutton Road Recycling Center is \$1.00 per year. Staffing for District collection/disposal events is hired on demand.

The District's director is the sole full-time employee and conducts all aspects of district management, including reports, financial accounting, public outreach, education, media, planning, and this management plan.

The District has been awarded an AmeriCorps Volunteer by Rural Action, has been successful to some degree in receiving grant funding, which allows this program to move forward and receives a cost share fee every term.

In the past, neither Hocking or Athens County have had the funds needed to adequately fund the District. But they do give in-kind support. Athens County Auditor and Prosecutor's office do the financial and legal work for the District.

Our district ranks as one of the poorest in the state, with residents by and large working service industry jobs and falling under the poverty level. So, after consideration and the opportunity to purchase the AHRC recycling center, the Policy Committee recommended a parcel fee with the fees going to purchase the recycling center and then leasing it back to the newly formed Southeast Ohio Recycling Terminal Council of Government. The Policy voted and the AHSWD Board voted to have a public process to pass along a parcel fee to the residents of both counties. After the public process, the parcel fee was voted down by Hocking County Commissioners and the Athens County Commissioners tabled it. This left the District with the only choice of raising the Generation Fee and the Tiered Fees. So, the District moved to the Contingency

Budget adopted by the Policy Committee and approved these increases for plan ratification.

The District will continue to best maximize minimum resources for as long as it can to achieve as much as possible, while generating and seeking partnerships and grant funds to achieve our goals.

#### B. Revenue

#### **Overview of How Solid Waste Management Districts Earn Revenue**

SWMDs have multiple options to raise the revenue to finance their solid waste management plans. A SWMD can use just one or as many of these options as needed. Two of the most used options 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.

#### <u>Disposal Fees</u> (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 originated – from within the SWMD (in-district), from other SWMDs (out-of-district), or from other states.

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 SWMD and accepted at transfer facilities or landfills I in Ohio. 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 contract 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

Other sources SWMDs use to earn revenue 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.
- Bonds.

#### 1. Disposal Fees

The Athens-Hocking Solid Waste District Disposal Fees are as outlined below:

Waste was generated:	
in district waste fees pd by landfill	\$1/ton
out of district waste fees pd by landfill	\$2/ton
out of state waste fees pd by landfill	\$1/ton

The tiered fees are fees paid by landfills that are located in the district. Only one landfill is sited in the district - Athens-Hocking Reclamation Center, owned by Rumpke Waste and Recycling Inc.

In 2021, the reference year, the tonnage per category was:

Fee Structure	tons		Jan - Dec 2021	
Summary (In-District)	39,642.99	YTD	\$39,642.99	
Summary (Out-of-District)	38,109.94	YTD	\$76,219.88	
Summary (Out-of-State)	101,794.44	YTD	\$101,794.44	
	Jan - Dec 2021	actual fees	\$217,657.31	

A-HSWD Tiered Fees primarily come from the Out of State fees, with out of district fees ranking second, but less tonnage than in-district.. These fees are submitted by Rumpke and they pay monthly to A-HSWD, accompanied by a tiered fee report.

In this Plan Update the District is increasing the tiered disposal fee structure to \$2/ton in-district waste; \$2/ton for out of District and \$2/ton on out-of-state waste. The fee increase will become effective in January 1, 2025.

#### 2. Generation Fees

The Generation Fee for A-HSWD is \$3.00/ton. Any transfer station or MSW landfill which receives our waste pays \$3.00/ton fee to A-HSWD monthly with a report outlining the tons and which county the waste came from.

In this Plan Update the District will be increasing the generation fee from \$3.00/ton to \$5.00/ton for waste generated within the District and this will become effective January 1, 2025.

3. Fees Collected via Designation Agreements

The District does not have any Designation Agreements at this time, but does allow the district to do this if needed in the future.

4. Other Funding Mechanisms

#### Fees and Charges

The District voted down a Parcel Fee to make the District more sustainable and to purchase the Athens Hocking Recycling Center. The District reserves the right to consider this in the future.

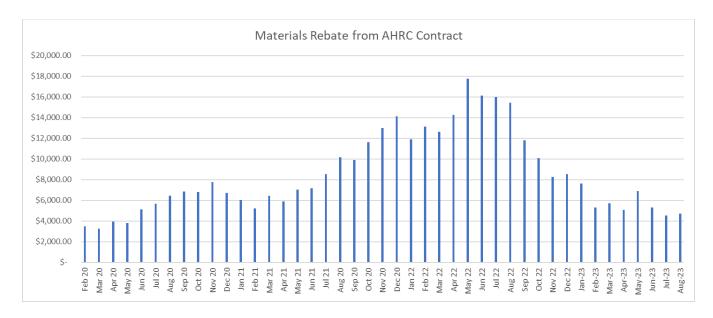
#### Grants

AHSWD does apply for grants, which allows the District to fund things Generation and Tiered Fees don't afford. The grants by and large are an income in and program expenses out - not assigned District salaries and/or similar primary District expenses. Were it not for grants, many programs over the last three (3) years would not have happened.

#### Revenue from Selling Recyclable Materials

As part of the contract with Athens-Hocking Recycling Center, the district gets a tonnage rebate fee from the selling of the processed materials. This rebate reduces the actual costs of recycling for the district and is the only incentive for increasing recycling in the program. In 2020, the program's first year and for 11 months, the rebate amounted to \$59,718.05 which was deducted from our collection and processing fee. By 2022, in the midst of the high market value for recycling, AHSWD received \$155,854.25. off our collection and processing fee from AHRC.

We intend to write this into our bid going forward. However, as can be seen, the market is far from static. We have received \$365,866.38 in material rebates between January, 2020 and August, 2023. The monthly receipts during this time frame ranged from a low of \$3,240.98 to the high of \$17,758.03 in May, 2022. Lowest annual receipts to date occurred in 2020, with a market high of \$155,856.25 in 2022, and 2023 projections being \$60,000.



This funding structure has generated in 5 years almost the entire AHSWD budget for a single year.

#### **User Fees**

The only User Fees the district charges are for residents who drop off items which are expensive to dispose of at our recycling day events and at Sutton Road Recycling Center. These include tires, TVs and bulbs. These fees then go to paying for those items to go to a recycler for recycling. As we expand services at the Sutton Road Recycling Center and the program, the board may consider charging reasonable user fees for the recycling of items. We do charge fees when we receive Recycle Ohio grants for tires, which is required by the grant and those funds go to funding more tire grant matches and tire collection drives.

#### **Donations**

The District does accept donations at Recycling Days when residents are grateful for our work and they state it is support for those not able to pay or to provide more events for the public. These donations are put into our User Fees account for accounting purposes.

#### **Summary of Revenue**

Below is a summary of Revenue & Expenses for the District. The district received funds from Athens-Hocking Recycling Center over a number of years which paid the district for equipment. The income from the agreement with the Recycling Center allowed the district to have a deficit budget over the years, as the District was paying down the funds in the bank. Those payments ended in 2018 and the savings will end in 2024. It is with these funds the District has been able to make work for the next five years.

Table 6-1 Summary of Revenue

	Table 6-1	Summary o	f Revenue		
			Other R	evenue	
Year	Disposal Fees	Generation Fees User Fees		Other	Total Revenue
Referen	ce Year				
2021	\$233,120	\$192,086	\$1,351	\$10,870	\$463,607
Plannin	g Period				
2025	\$406,038	\$253,989	\$10,000	\$0	\$670,027
2026	\$406,038	\$253,989	\$10,000	\$0	\$670,027
2027	\$406,038	\$253,989	\$10,000	\$0	\$670,027
2028	\$406,038	\$253,989	\$10,000	\$0	\$670,027
2029	\$406,038	\$253,989	\$10,000	\$0	\$670,027
2030	\$406,038	\$253,989	\$10,000	\$0	\$670,027

Table 6-2 Disposal Fee Schedule

Table O-1: Disposal Fee Schedule and Revenue							
Year	Disposa	l Fee Sch (\$/ton)	nedule		Revenue (\$)		Total Disposal Fee Revenue (\$)
	In District	Out-of-	Out-of-	la Distalat	Out-of-	Out-of-	
	In-District	District	State	In-District	District	State	
2017	\$1	\$2	\$1	\$39,380	\$57,762	\$130,320	\$227,462
2018	\$1	\$2	\$1	\$46,572	\$67,226	\$148,839	\$262,637
2019	\$1	\$2	\$1	\$40,206	\$57,107	\$120,634	\$217,947
2020	\$1	\$2	\$1	\$33,169	\$55,067	\$89,153	\$177,388
2021	\$1	\$2	\$1	\$43,631	\$79,201	\$110,288	\$233,120
2022	\$1	\$2	\$1	\$58,007	\$51,682	\$104,082	\$213,771
2023	\$1	\$2	\$1	\$59,408	\$51,682	\$117,219	\$228,310
2024	\$1	\$2	\$1	\$59,959	\$51,682	\$117,219	\$228,861
2025	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2026	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2027	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2028	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2029	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2030	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2031	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2032	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2033	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2034	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2035	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2036	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2037	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2038	\$2	_	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2039	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038

**Table 6-2 Generation Fee Schedule** 

Year	Generation Fee Schedule (\$ per ton)	Total Revenue from Generation Fee (\$)
2017	\$3.00	\$183,227
2018	\$3.00	\$208,588
2019	\$3.00	\$189,509
2020	\$3.00	\$177,637
2021	\$3.00	\$192,086
2022	\$3.00	\$193,229
2023	\$3.00	\$200,000
2024	\$3.00	\$190,492
2025	\$5.00	\$253,989
2026	\$5.00	\$253,989
2027	\$5.00	\$253,989
2028	\$5.00	\$253,989
2029	\$5.00	\$253,989
2030	\$5.00	\$253,989
2031	\$5.00	\$253,989
2032	\$5.00	\$253,989
2033	\$5.00	\$253,989
2034	\$5.00	\$253,989
2035	\$5.00	\$253,989
2036	\$5.00	\$253,989
2037	\$5.00	\$253,989
2038	\$5.00	\$253,989
2039	\$5.00	\$253,989

Historical Revenue Analysis (Revenue \$)							
Average revenue received		change in	Annual Percentage Change in Revenue Received		Average perentage change in revenue received		
(\$)	Year	Revenue	Year	%	%		
	2017		2017				
	2018	\$25,361	2018	14%			
	2019	-\$19,079	2019 -9%				
	2020	-\$11,872	2020	-6%			
\$190,209	2021	\$14,449	2021	8%	2%		

### C. Expenses

#### **Overview of How Solid Waste Management Districts Spend Money**

SWMDs can spend revenue on 10 purposes named in law. All 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:

- 1. Preparing, monitoring, and reviewing implementation of a solid waste management plan.
- 2. Implementing the approved solid waste management plan.
- 3. Financial assistance to approved boards of health to enforce Ohio's solid waste laws and regulations.
- 4. Financial assistance to counties for the added costs of hosting a solid waste facility.
- 5. Sampling public or private wells on properties adjacent to a solid waste facility.
- 6. Inspecting solid wastes generated outside of Ohio and disposed within the SWMD.
- 7. 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.
- 8. Financial assistance to approved boards of health for operator certification training.
- 9. Financial assistance to municipal corporations and townships for the added costs of hosting a solid waste facility that is not a landfill.
- 10. Financial assistance to communities adjacent to and affected by a publicly owned landfill when those communities are not located within the SWMD.

Typically, most of a SWMD's budget is used to implement the approved solid waste management plan (allowable use 2). Expenses a SWMD can incur 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 and scrap tires);
- providing outreach and education.
- providing services (such as curbside recycling services).
- paying for community clean-up programs.

Table 6-2 Summary of Expenses

	Year							
Expense	Reference	Planning Period						
Category	2021	2025	2026	2027	2028	2029	2030	
Plan Monitoring / Prep	\$17,087	\$0	\$0	\$0	\$0	\$0	\$69,556	
Administration	\$125,963	\$150,000	\$153,600	\$157,308	\$161,127	\$165,061	\$99,557	
Facility Operation	\$165							
Recycling Collection	\$316,637	\$420,000	\$430,000	\$440,000	\$450,000	\$430,000	\$450,000	
Special Collections	\$35,614	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$40,000	
Education/Awareness	\$6,380	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$5,000	
Recyclng Market Development	\$1,794	\$0	\$0	\$0	\$0	\$0	\$0	
Dump Cleanup	\$1,300	\$0	\$0	\$0	\$0	\$0	\$0	
Litter Collection/Education	\$3,131	\$0	\$0	\$0	\$0	\$0	\$0	
Other	\$0	\$20,000	\$20,000	\$15,000	\$0	\$15,000	\$0	
Health Dept/Law Enforcement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Muncipal/Twp Assist.	\$2,611		·	·	·		·	
Total Expenses	\$510,683	\$649,000	\$662,600	\$671,308	\$670,127	\$669,061	\$664,113	

Source(s) of Information: AHSWD

#### D. Budget Summary

Table 6-3 Budget Summary				
Year	Revenue	Expenses	Net	Ending
			Difference	Balance
Referen	ce Year			
2021	\$463,607	\$510,683	-\$47,075 \$559	
Planning	g Period			
2025	\$670,027	\$649,000	\$21,027	\$227,104
2026	\$670,027	\$662,600	\$7,427	\$234,532
2027	\$670,027	\$671,308	(\$1,281)	\$233,251
2028	\$670,027	\$670,127	(\$100)	\$233,151
2029	\$670,027	\$669,061	\$966	\$234,117
2030	\$670,027	\$664,113	\$5,914	\$240,032

Source(s) of Information: AHSWD Projections

#### E Alternative Budget

#### **Purpose of an Alternative Budget**

The budget that was described earlier in this section represents the policy committee's preferred and anticipated budget. However, there may be circumstances beyond the SWMD's control that make it difficult for the policy committee to confidently project the SWMD's future financial position. In those circumstances, the policy committee may provide an alternative budget. That alternative budget demonstrates how the SWMD would adjust its financial strategy if circumstances significantly change the SWMD's financial position after the solid waste management plan is approved.

The alternative budget presented below is a summary of the policy committee's strategy for addressing uncertainty in the preferred budget. The alternative budget is described in more detail in Section C of Appendix O.

#### Table 6-4 Alternative Budget Summary

There is no alternative budget summary.

#### F. Major Facility Project

# Purpose of a Budget for a Major Facility Project

SWMDs can own and operate solid waste management facilities. These facilities include landfills, transfer facilities, material recovery facilities, recycling centers, household hazardous waste collection centers, and composting facilities.

Solid waste facilities represent major financial undertakings that can result in substantial capital investments along with ongoing operating costs. Thus, when the policy committee decides that the SWMD will develop a new or make extensive renovations to an existing solid waste management facility, the solid waste management plan provides a specific budget for that facility.

This chapter of the solid waste management plan provides a summary of the SWMD's major facility budget. The full details of the budget are provided in Section D of Appendix O.

The District has a goal of expanding the Sutton Road Recycling Center as a center for hard to recycle materials and working with the newly formed SORTCOG to expand services for the District and member communities. The plans for this could include expanding composting of all types, build a larger center for hard to recycle materials to serve as a regional hub and to create jobs and to work with communities to become more sustainable.

# APPENDIX A MISCELLANEOUS INFORMATION

# 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 2021

#### B. Planning Period (first and last years)

The planning period for this solid waste management plan is: 2025 to 2040

#### C. Goal Statement

The SWMD will achieve the following Goal(s): Goal 2

The SWMD shall reduce and recycle at least 25% percent of the solid waste generated By the residential/commercial sector. We are currently at 27% (percent) and we intend to continue our level of service, expanding, educating and working with commercial, private, residential, industrial and government entities to expand their services and exceed 25%.

# D. Explanations of differences between data previously reported and data used in the solid waste management plan

a. Differences in quantities of materials recovered between the annual district report and the solid waste management plan.

The ADR Data show the amount of household commingled materials in tonnage but in the plan; Table E-5 illustrates after the material recovery facility (AHRC) has processed the material and sent it for recycling. The reason this was done was to shed light on what type of materials are being recycled and sent to recyclers to learn what materials are gathered and most recycled in the district.

b. Differences in financial information reported in quarterly fee reports and the financial data used in the solid waste management plan. There were errors identified in the quarterly reports, but they were corrected and the corrected numbers were used in the plan.

There are no differences between the financial information reported in the quarterly fee reports or financial data. If there are differences, we will correct them in the next draft of the plan.

#### E. Material Change in Circumstances/Contingencies

Ohio law [ORC Section 3734.56(D)] requires district plans to be updated when the District Board of Directors determine that circumstances are materially changed from those addressed in the approved plan. If a plan update is required due to a material change in circumstances, the plan update must address those portions of the plan that need to be modified due to the change.

A plan amendment involving fees or designation that does not require modification of any other part of the plan requires ratification, but not Ohio Environmental Protection Agency approval. However, if any other portion of the plan is modified, the entire plan must be updated. Moreover, the updated plan must be ratified, submitted to Ohio EPA, and obtain Ohio EPA's approval prior to becoming effective.

#### 1. Determination Criteria

In determining whether a material change has occurred, the Board of Commissioners will consider the following:

- a. Waste generation; including the addition or loss of industrial waste generation, commercial waste generation, and/or residential waste generation.
- b. Change in the availability of capacity, causing a capacity shortfall prior to the next planned five-year update to the District Plan.
- c. Strategies for waste reduction and/or recycling, limiting the ability of the district to honor the reduction goals itemized in the State Plan.
- d. The availability of revenues for plan implementation.
- e. Changes in the procedures to be followed for plan implementation:
- f. Changes in the timetable for implementation of programs and/or activities;
- g. Any other factor that the Board considers relevant.

#### 2. Monitoring Procedures

The Determination Criteria will be evaluated based on information obtained through the District Policy Committee's annual review of the approved plan, and/or the District Staff's monitoring programs. The staff monitoring program includes the following:

- a. Quarterly analysis of District revenues;
- b. Analysis of information acquired by District Staff for preparation of the District's Annual Report for Ohio EPA;
- c. Information acquired by District Staff through follow-up investigations of citizen complaints which indicate the existence of deviations from or noncompliance with the District plan; and
- d. Analysis of information voluntarily provided to the District Staff by state or local officials and employees, or owners and operators of solid waste collection, disposal, transfer, or recycling operations, which indicate the existence of deviations from and/or noncompliance with the District's plan.

The Policy Committee or the District's staff will immediately notify the Board of Commissioners of any reliable information that is likely to establish that a significant or substantial change from the circumstances addressed in the District's approved plan has occurred.

#### 3. Timetable for Making the "Material" Change Determination

Within 10 days from receipt of notification from the District Staff under paragraph 2, above, the Board of Directors shall request the District Staff to prepare a report which discusses the effects that the changed circumstances identified in the District's Staff notice to the Board of Directors may have on the criteria listed in Section C.1. of this chapter.

The District Staff shall prepare the report and submit it to the Board of Directors within thirty days of the Board's request. Within ten days after the receipt of the District Staff's report, the Board shall decide whether additional information is necessary for the Board to determine whether a material change has occurred. If the Board determines that additional information is required, the District Staff shall revise its report to include such additional information and submit its final report within twenty days from the Board's request for additional information.

Within sixty days after the Board's receipt of the District Staff's final report, the Board shall decide whether the changed circumstances are material pursuant to the criteria listed in paragraph 1, above. During that time, the Board may obtain such information from sources other than the District Staff as the Board deems necessary and proper to making its determination of whether a material change has occurred.

#### 4. Notification Procedure After Making Determination

Upon the Board's determination that a material change has occurred, the Board shall notify the District Policy Committee, in writing, within ten days of the Board's determination. The Board's notice shall request the District Policy Committee to

# **Appendix A Miscellaneous Information**

prepare a draft amended solid waste plan, pursuant to ORC 3734.56 (D), that amends the district plan to address the direct and indirect effects of any such material change in circumstances. The Board of Directors will also notify the Ohio EPA of its determination.

# APPENDIX B. RECYCLING INFRASTRUCTURE INVENTORY

- A. Curbside Recycling Services, Drop-Off Recycling Locations, and Mixed Solid Waste Materials Recovery Facilities
  - 1. Curbside Recycling Services

Table B-1a Inventory of Non-Subscription Curbside Recycling Services Available in the Reference Year

Table B-	1a: Inventory of N	on-Subscription	Curbside	Recycling Service	es Availa	ble in the Referen	ce Year			
ID#	Name of Curbside Service	Service Provider	County     21		Type of Collection	PA YT (Y/ N)	Weight of Materials Collected from SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)		
NCS1	City of Athens		Athens	Contract between city and provider  Contract between	Weekly	metal compost Glass, Plastic,		N	783	
NCS2		Athens-Hocking Recycling Center	Athens		Weekly	Paper, Cardboard, metal compost	single stream	n	115	
Total								n	898	

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

ID#	Name of Curbside Service	County	How Service is Provided	Collection	Materials Collected <sup>(1)</sup>	Type of Collecti on		Weight of Materials Collected from SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
	Athens Township, Albany, Canann Township, Millfield, Chauncey,								
	Amesville The Plains served by								
	Athens-Hocking Recycling Center				Glass, Plastic, Paper,	Single			
SC1		Athens	Curbside	Weekly	Cardboard, metal	Stream	Υ	278	Υ
	City of Logan, Rockbridge and Fall								
	Township served by Athens-				Glass, Plastic, Paper,	Single			
SC2	Hocking Recycling Center	Hocking	Curbside	Weekly	Cardboard, metal	Stream	Υ	100	Υ
Total								378	

2. Drop-Off Recycling Locations

# Table B-2a Inventory of Full-Time, Urban Drop-off Sites Available in the Reference Year

Table B-	2a: Inventory of Full-Time, Urba	n Drop-off Sites Available in th							
ID#	Name of Drop-off Site	Service Provider	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected <sup>(1)</sup>	Drop-off Meets All Minimum Standards (Y/N)	Weight of Materials Collected from the SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
FTU1	none								
Total								0	

# Table B-2b Inventory of Part-Time, Urban Drop-off Sites Available in the Reference Year

Table B-	-2b: Inventory of Part-Time, Urba					0			
ID#	Name of Drop-off Site	Service Provider	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected <sup>(1)</sup>	Drop-off Meets All Minimum Standards? (Y/N)	Weight of Materials Collected from the SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
PTU1	none								
Total								0	

Table B-2c Inventory of Full-Time, Rural Drop-off Sites Available in the Reference Year

Table B-	2c: Inventory of Full-Time, Rural	Drop-off Site	es Availab	le in the Reference	Year			-	
ID#	Name of Drop-off Site	Service Provider Athens- Hocking Recycling Center	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected <sup>(1)</sup>	Drop-off Meets All Minimu m Standar ds? (Y/N)	Weight of Materia Is Collect ed from the SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
FTR1	Green Township	AHRC	Hocking	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Y	196	Y
					24 hrs/Day				
FTR2	Sutton Road	AHRC	Hocking	Bid Contract	365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	143	Y
FTR3	Benton Twp - Township Maintenance Bldg.	AHRC	Hocking	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	23	Υ
FTR4	Good Hope Twp Garage	AHRC	Hocking	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	25	Υ
FTR5	Marion Twp Bldg.	AHRC	Hocking	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Y	38	Y
FTR6	Murray City Village Ward Twp	AHRC	Hocking	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	18	Y
FTR7	Starr Township Bldg	AHRC	Hocking	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	34	Y
FTR8	Laurelville Village Salt Creek Twp	AHRC:	Hocking	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	67	Y
FTR9	Logan City - Hocking Valley Comm		Hocking	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Y	62	
FTR10	Carbon Hill/Ward Twp - Ward To		Hocking	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Y	16	Y
FTR11	Gibisonville Laurel Twp - Gibisonv	AHRC	Hocking	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	38	Y
FTR12	Albany Village Lee Twp - Townshi	AHRC	Athens	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	141	Υ
FTR13	Amesville - Athens County Enginee	AHRC	Athens	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Y	73	Y
FTR14	Buchtel Village/York Twp - Village I	AHRC	Athens	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	56	Υ
FTR15	Canaan Twp - Township Garage	AHRC	Athens	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	83	Υ
FTR16	Coolville Village Troy Twp - Towns	AHRC	Athens	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	39	Y
FTR17	Glouster Village/Trimble Twp - HAF	AHRC	Athens	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	108	Y
FTR18	Guysville/Rome Twp - Marathon S	AHRC	Athens	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Y	66	Y
FTR19	New Marshfield Village Waterloo T	AHRC	Athens	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	54	Y
FTR20	Shade Village Lodi Twp - Shade C	AHRC	Athens	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	70	Υ
FTR21	Village of Chauncey - Behi	AHRC	Athens	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	0	Υ
FTR22	Athens Township - Richland Are	AHRC	Athens	Bid Contract	24 hrs/Day 365 days/year	Glass, Plastic, Paper, Cardboard, metal	Υ	121	Y
Total	22							1,473	J

# Table B-2d Inventory of Part-Time, Rural Drop-off Sites Available in the Reference Year

Table B-	2d: Inventory of Part-Time, Rural D	Prop-off Sites Available in the Re	ference Year						
ID#	Name of Drop-off Site	Service Provider	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected <sup>(1)</sup>	Drop-off Meets All Minimum Standards? (Y/N)	Weight of Materials Collected from the SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
	none								
Total								0	

# 3. Mixed Solid Waste Material Recovery Facilities

# Table B-3 Mixed Solid Waste Material Recovery Facility

Table B-3 Mixed Muni	cipal Solid Waste Ma	terial Recovery Faci						
Name of Material Recovery Facility	Location (County, City)	Communities Served	Types of Materials Recovered <sup>(1)</sup>	Weight of Materials Recovered (tons)	Waste Processed (tons)	Bypass Waste (tons)	Total Waste (tons)	Recovery Rate in Reference Year
▼	~	~	•	(10110)	*	▼	▼	(percent
none								0%
Total				0	0	0	0	

# B. Curbside Recycling and Trash Collection Service Providers

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

B-4: Inventory of Trash Colle								
			Trash Collec	tion Services	Curbside Reycling Services			
	Counties	PAYT				Residential	Commercial	Industria
Name of Provider	Served	(Y/N)	Residential	Commercial	Industrial	2	2	2
Waste Management								
Rumpke Waste & Recycling	Athens, Hocking	у	у	n	у	n	у	n
Brown Sanitation		n	у					
Skaggs Disposal	Athens, Hocking	n	у	n	n	n	n	n
D & D Refuse		n	у					
Leckrone Sanitation	Hocking	n	у	у	у	n	n	n
R.L.S. Disposal		n	у					
Athens-Hocking Recycling Center	Athens, Hocking	у	у	у		у	у	у
Traces Sanitation	Athens, Hocking	n	у	у	у	n	n	n
S & J Disposal	Hocking	n	у	n	n	n	n	n
Bateman's Refuse Hauling Servic	Athens	n	у	у	n	n	n	n
Win Waste	Athens, Hocking	n	у	у	у	у	у	n

There currently is only one hauler who provides curbside recycling services in the district for subscription and non-subscription services.

# C. Composting Facilities

Table B-5 Inventory of Composting Facilities Used in the Reference Year

Table B-5 Inventory of Composting F	acilities	Used in t	he Reference Year			
Facility Name	Compost Facility Classification	Publicly Accessible (Y/N)	Location	Food Waste (tons)	Yard Waste (tons)	Total
Athens Hocking Organics	2	Υ	5991 Industrial Drive Athens, Ohio 4570	306	18	324
Ohio University Composting Facility	2	n	137 Dairy Lane, Athens, Ohio 45701	225	111	336
Latta Earthworks LLC	3	у	6787 BakerRd, Athens, OH, 45701		211	211
Ohio University Composting Facility	4	n	N. BlackburnRd, Athens, OH, 45701		1,838	1,838
Hauler/Grocer Food Waste Data Athens				190		190
Hauler/Grocer Food Waste Data Hocking	0	n		61		61
PINE GROVE REGIONAL FACILITY					4	4
Total				782	2,183	2,964

Ohio University only serves the university and uses the materials on campus. Athens-Hocking an Latta are open to the public and does sell their end use product to the public. All Hocking County compost goes out of the district, because there are not licensed facilities in the county.

## D. Other Food Waste and Yard Waste Management Programs

In Athens County, there are two Food Waste Programs which accept donations of produce, prepared meals and food products and goods which are collected by the Community Food Initiatives and Athens Food Rescue. Community Food Initiatives collects produce and goods at the Athens Farmers Market and the Chesterhill Produce Auction as well as from

farmers and residents for redistribution to local residents directly and to local food pantries. In 2022 (only data I could locate), 25 tons of food was gathered and donated for reuse.

The Athens Food Rescue gathers produce, food goods and prepared food for redistribution to local food pantries and other outlets for reuse. They too in 2022 collected and redistributed 24 tons of food.

There are food waste programs which gather donated, unsellable or catered food and donates them to programs or those in need. These totals were both donations of food and food that would have been taken to the landfill or compost, but was reused, but these were not included in the totals because they were gathered at the end of the drafting period of the plan. These numbers will be included in the next draft.

Table B-6 Inventory of Other Food and Yard Waste Management Activities in the Reference Year

Facility or Activity Name	Activity Type	Location	Food Waste (tons)	Yard Waste (tons)
Community Food Initiatives	Takes donations from farmers and customers at the Farmers Market and the Chesterhill Produce Auction for redistribution	Athens & Morgan	25	
Athens Food Rescue	A volunteer group works to bridge a gap in our food system by increasing food waste diversion by collecting leftover and unused food from partners and transport it immediately to local food pantries and other charities that serve those impacted by food insecurity.	Athens County	24	
Athens Food Rescue  Total	impacted by food insecurity.	Atrieris County	<u>∠4</u>	

# E. Material Handling Facilities Used by the SWMD in the Reference Year

Table B-7 Inventory of Material Handling Facilities Used in the Reference Year

Table B-7: Inventory of Material Handlin	ct in the Reference Year			
Facility Name	County	State	Type of Facility	Weight of Material Accepted from SWMD (tons)
Athens-Hocking Recycling Center	Athens	Ohio	Material Rocovery Faciltiy	5,652
Total				5,652

The Athens-Hocking Recycling Center not only handles our curbside programs by a bid process in City of Athens and City of Nelsonville, and also by bid contract picks up all of the drop-off locations for the district. Athens-Hocking does provide curbside subscription service for residents in and around each of the cities they have programs with and would expand if they had the resources to do it. Athens-Hocking Recycling Center also serves Ohio University Athens Campus and Hocking College Nelsonville Campus. There is only one other hauler that bids on these contracts and it is Rumpke, but they do not provide recycling services for their district clients.

# **Summary Table**

Program Type	Materials Recovered (tons)	Total # of Services/ Facilities	Total # of PAYT Programs
Non-Subscription Curbside	898	2	0
Subscription Curbside	378	2	2
Full Time Urban DO	0	1	
Part Time Urban DO	0	1	
Full Time Rural DO	1,452	22	
Part Time Rural DO	0	1	
Mixed Municipal Solid Waste MRFs	0	1	
Material Handling Facilities	0	0	
Composting (Food Scraps)	782		
Composting (Yard Waste)	2,964	0	
"Other" Food/Yard Waste Programs	49	2	

Total Material Recovered	6,523
--------------------------	-------

# APPENDIX C. POPULATION DATA

#### A. Reference Year Population

**Table C-1a Reference Year Population Adjustments** 

,718
6,718
3
7,935
7,935

Source(s) of Information: Ohio Development Services Agency

In accordance with Ohio law, the entire population of political subdivisions located in more than one solid waste district must be credited to the district containing the largest portion of the jurisdiction's population. No political subdivisions in the District were located in more than one solid waste management district. Therefore, no population adjustments were necessary.

Table C-1b: Total Reference Year Population					
Unadjusted Population	Adjusted Population				
94,653	94,653				

Source(s) of Information: Ohio Development Services Agency

# B. Population Projections

Table C-2 Populati	on Projections		
Year	Athens	Hocking	Total District Population
2021	66,718	27,935	94,653
2022	66,716	27,820	94,536
2023	66,714	27,704	94,418
2024	66,712	27,589	94,301
2025	66,710	27,474	94,184
2026	66,632	27,349	93,981
2027	66,554	27,224	93,778
2028	66,476	27,099	93,575
2029	66,398	26,974	93,372
2030	66,320	26,849	93,169
2031	66,182	26,741	92,923
2032	66,044	26,634	92,678
2033	65,906	26,526	92,432
2034	64,768	26,419	91,187
2035	65,630	26,311	91,941
2036	65,470	26,202	91,672
2037	65,310	26,093	91,403
2038	65,150	25,984	91,134
2039	64,990	25,875	90,865

Source(s) of Information: Ohio Development Services Agency <a href="https://development.ohio.gov/reports/reports\_pop\_proj\_map.htm">https://development.ohio.gov/reports/reports\_pop\_proj\_map.htm</a>

Assumptions: we used the default method when calculating population projections.

# Appendix C Population Data

Table C-	3			
Year	Annual Change persons/year	Athens	Annual Change persons/year	Hocking
2015	65,990	65,990	29,380	29,380
2016	146	66,136	-266	29,114
2017	146	66,282	-266	28,848
2018	146	66,428	-266	28,582
2019	146	66,574	-266	28,316
2020	66,720	66,720	28,050	28,050
2021	-2	66,718	-115	27,935
2022	-2	66,716	-115	27,820
2023	-2	66,714	-115	27,704
2024	-2	66,712	-115	27,589
2025	66,710	66,710	27,474	27,474
2026	-78	66,632	-125	27,349
2027	-78	66,554	-125	27,224
2028	-78	66,476	-125	27,099
2029	-78	66,398	-125	26,974
2030	66,320	66,320	26,849	26,849
2031	-138	66,182	-108	26,741
2032	-138	66,044	-108	26,634
2033	-138	65,906	-108	26,526
2034	-138	65,768	-108	26,419
2035	65,630	65,630	26,311	26,311
2036	-160	65,470	-109	26,202
2037	-160	65,310	-109	26,093
2038	-160	65,150	-109	25,984
2039	-160	64,990	-109	25,875
2040	64,830	64,830	25,766	25,766
2041	-10	64,820	-106	25,660
2042	-10	64,810	-106	25,555
2043	-10	64,800	-106	25,449
2044	-10	64,790	-106	25,344
2045	64,780	64,780	25,238	25,238

# APPENDIX D DISPOSAL DATA

#### A. Reference Year Waste Disposed

Waste Disposal as it has been in the past five years has gone to the Athens-Hocking Reclamation Center. For the Reference year 2021, 68% of the waste generated in the District for direct haul went to the Athens-Hocking Reclamation Center. 30% of the material went to Beech Hollow Landfill in Jackson County owned by Rumpke. The other direct haul waste went to the most convenient landfill for the hauler at 2% of the remaining waste.

We also had over 92% of the waste generated was from residential/commercial waste and the rest coming from industry and exempt waste in the district. With 98% direct haul and only 2% coming from transfer stations.

Table D-1a Waste Disposed in Reference Year – Publicly-Available Landfills (Direct Haul)<sup>1</sup>

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

	Locati	on	Waste	e Accepted fr	om the SWM	ID
Facility Name	County	State	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
A-H Reclamation Center	Athens	Ohio	38,919	3,841		42,760
Pine Grove	Fairfield	Ohio	92	42	206	340
Beech Hollow	Jackson	Ohio	17,621	0	755	18,376
Pike County Landfill	Pike	Ohio	17	0	16	33
Tunnel Hill Reclamation Landfill	Perry	Ohio	201	1		202
Surburban Landfill WM	Perry	Ohio	0	1		1
Gallia County Landfill WM	Gallia County	Ohio	14	0		14
SWACO Franklin County San Landfill	Franklin	Ohio	0	344		344
American Landfill	Stark	Ohio	3	27		31
Northwestern Landfill		West Virginia	400	0	34	434
Green Valley Landfill Total		Kentucky	57,267	3 4,259	1,011	62,538

<sup>&</sup>lt;sup>1</sup> The facilities listed in Table D-1a and identified as able to accept waste from the SWMD (in Appendix M) will constitute those identified for purposes of Ohio Revised Code Section 3734.53(13)(a).

Source(s) of Information: 2021 OHIO EPA WASTE FLOW REPORT

Table D-1b Waste Disposed in Reference Year – Captive Landfills<sup>1</sup>

Table D-1b: Waste Disposed in Reference Year - Captive Landfills

rabio 2 ibi riadio 2 iopocoa iii itoli	oronico rear cap	TITO Land			
	Location	pted from the	e District		
Facility Name	County	State	Industrial (tons)	Excluded (tons)	Total (tons)
None					0
Total			0	0	Q

The facilities listed in Table D-1b and identified as able to accept waste from the SWMD (in Appendix M) will constitute those identified for purposes of Ohio Revised Code Section 3734.53(13)(a).

#### Table D-1c Total Waste Disposed in Landfills (Direct Haul)

Table D-1c Total Waste Disposed in Landfills (Direct

Residential/ Commecial (tons)	Industrial (tons)	Excluded (tons)	Total
57,267	4,259	1,011	62,538

Source(s) of Information: 2021 OHIO EPA WASTE FLOW REPORT

Table D-2: Waste Transferred in Reference Year<sup>1</sup>

Table D-2 Waste Transferred in Reference Year

	Locati	ion	Waste Received from the SWMD				
Facility Name	County	State	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)	
Meigs County Transfer Station	Meigs County	Ohio	281			281	
Chillicothe Transfer WM	Ross	Ohio	774	13		786	
Total			1,055	13	0	1,067	

<sup>&</sup>lt;sup>1</sup> The facilities listed in Table D-2 constitute those identified for purposes of Ohio Revised Code Section 3734.53(13)(a).

Source(s) of Information: 2021 OHIO EPA WASTE FLOW REPORT

According to Ohio EPA Format 4.0, if excluded waste is 10% or less of total disposal in the reference year, then SWMDs are not required to account for excluded waste in the solid waste management plan. For the SWMD, excluded waste accounts for 2% of total disposal in 2021 and we did not include in this analysis.

Table D-3: Waste Incinerated/Burned for Energy Recovery in Reference Year<sup>1</sup>

able D-3: Waste Incinerated/Burned for Energy Recovery in Reference Year									
		Loc	Location Waste Accepted from the SWM						
Facility Name	Facility Type	County State Residential/ Commercial (tons)			Industrial (tons)	Excluded (tons)	Total (tons)		
none							0		
							0		
Tota	I			0	0	0	0		

<sup>&</sup>lt;sup>1</sup> The facilities listed in Table D-3 constitute those identified for purposes of Ohio Revised Code Section 3734.53(13)(a).

Source(s) of Information: 2021 OHIO EPA WASTE FLOW REPORT

Supplement to Table D-4 Incinerated and Excluded Wastes as Percentages of Total Waste Dispo

	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)	% of Total Waste Disposed	
Direct Hauled	57,267	4,259	1,011	62,538	98%	
Transferred	1,055	13	0	1,067	2%	
Incinerated	0	0	0	0	0%	
Total	58,322	4,272	1,011	63,605	100%	
Percent of Total	92%	7%	2%	100%		

Table D-4: T	otal Waste	Disposed in	Reference Y	'ear

93%

	Residential/ Commercial (tons) Industrial (tons)		Excluded (tons)	Total (tons)	% of Total Waste Disposed
Direct Hauled	57,267	4,259	0	61,526	98%
Transferred	1,055	13	0	1,067	2%
Incinerated	0	0	0	0	0%
Total	58,322	4,272	0	62,594	100%

7%

0%

100%

## B. Historical Waste Analysis

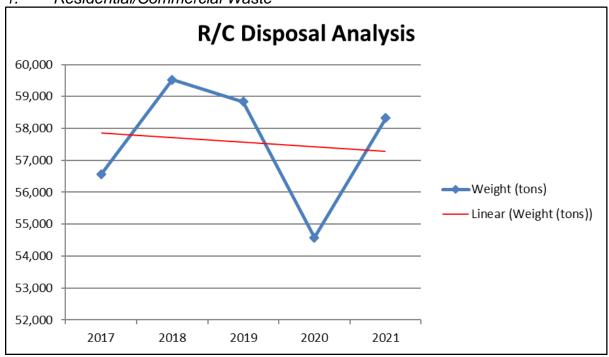
Percent of Total

**Table D-5: Historical Disposal Data** 

Table	D-5 Historical	Disposal Dat	а			
			/ Commercial Waste	Industrial Solid Waste	Excluded Waste	Total Waste
			Weight	Weight	Weight	Weight
Year	Population	Rate (ppd)	(tons)	(tons)²	(tons)3	(tons)⁴
2017	95,071	3.26	56,560	7,605	2,499	66,664
2018	94,259	3.46	59,524	5,488	1,123	66,135
2019	94,259	3.42	58,838	4,703	1,412	64,953
2020	93,306	3.20	54,573	5,247	1,207	61,027
2021	94,653	3.38	58,322	4,272	0	62,594

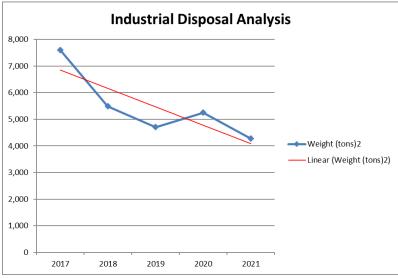
Source(s) of Information: 2021 OHIO EPA WASTE FLOW REPORT

Residential/Commercial Waste



Residential/commercial stream comprises over 90% of waste landfilled. Fluctuations in total disposal tonnages will directly correlate to what occurred in the residential/commercial sector. Year 2020 shows a dip in waste disposal, an impact of COIVD and temporary closure of commercial businesses.





3. Excluded Waste

### C. Disposal Projections

Table D-6 Projections for Waste to be Disposed and Transferred

Year	Residential/ Commercial Solid Waste	Industrial Solid Waste	Excluded Waste	Total Waste	Waste Transferred (as part of Total Disposal)	Waste Transferred (as part of Total Disposal)
	Weight	Weight	Weight	Weight	Weight	Percent
	(tons)	(tons)	(tons)	(tons)	(tons)	1.68%
2021	58,322	4,271	1,012	63,605	1,067	
2022	58,142	3,746	860	62,748	1,053	
2023	58,070	3,285	731	62,087	1,042	
2024	57,998	2,882	621	61,501	1,032	
2025	57,926	2,527	528	60,982	1,023	
2026	57,801	2,217	449	60,467	1,015	
2027	57,676	1,944	382	60,002	1,007	
2028	57,551	1,705	324	59,581	1,000	
2029	57,427	1,495	276	59,198	993	
2030	57,302	1,312	234	58,848	987	
2031	57,151	1,150	199	58,500	982	
2032	57,000	1,009	169	58,178	976	
2033	56,849	885	144	57,877	971	
2034	56,083	776	122	56,981	956	
2035	56,546	681	104	57,331	962	
2036	56,381	597	88	57,066	958	
2037	56,216	524	75	56,814	953	
2038	56,050	459	64	56,573	949	
2039	55,885	403	54	56,342	945	

Assumptions: The Population is slowly decreasing and the economy has shifted from an industrial economy to a commercial and tourism one.

D-6a - This table projects waste to be disposed as follows:

# **Appendix D** Disposal Data

- for residential/commercial waste using average per capita waste disposed
  for industrial and excluded wastes, using average percentage change in tons disposed.
- For excluded, no projections since less than 10% of waste disposal

**Table D-7** Waste Imports

Table D-7: Waste Imports													
										Year			
Facility Name	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Athens-Hocking Reclamation Landfill DH	154,211	152,969	128,561	103,597	130,744	134,016	134,016	134,016	134,016	134,016	134,016	134,016	134,016
Athens-Hocking Reclamation Landfill TW	16,853	16,681	18,372	22,571	21,308	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Total Imported	171,065	169,650	146,932	126,169	152,052	154,016	154,016	154,016	154,016	154,016	154,016	154,016	154,016

2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
134,016	134,016	134,016	134,016	134,016	134,016	134,016	134,016	134,016	134,016
20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20000
154,016	154,016	154,016	154,016	154,016	154,016	154,016	154,016	154,016	154,016

Source(s) of Information: Ohio EPA's Annual Facility Data Report report

Sample Calculations: Took averages of the past Four years (DH=134,016 and TW= 19,157) and used that to project future waste imports

Assumptions: AHSWD's fee will remain steady and not much transfer in because there are less expensive landfills in the region.

# APPENDIX E RESIDENTIAL/COMMERCIAL REDUCTION AND RECYCLING DATA

#### A. Reference Year Recovery Data

Table E-1: Com	mercial S	urvey Resul	ts											
NAICS	Electronic s	Lead-Acid Batteries	Glass	Ferrous Metals	Non- Ferrous Metals	Corrugated Cardboard	All Other Paper	Plastics	Wood	Rubber	Other Rechargeab le & Batteries	motor oil	Tires	
44		12			0	2,463	4	75	241			2		
45		2	3	15	125	17	6	5	3			8	2	
49						600								
51						6	162							
54	0					8	0		1					
56														
61	35	1		79	3		16	1	2			2	3	
62					1	4	3	2		2				
72					3	3								
81		18		50	1	13						36		
23				4	4	10	1	3						
Other:				88					559			1		
Unadjusted Total	35	33	3	235	137	3,124	192	85	806	2	0	49	5	
Adjustments					82	2,309	11	68						
Adjusted Total	35	33	3	235	55	815	181	17	806	2	0	49	5	

Source(s) of Information: Surveys for 2021 ADR

Unadjusted Total – Adjustments = Total which in this case are materials that were handled by AHRC.

Table E-2 Data from Other Recycling Facilities

Table E-2: Data from Other Recycling Facili	ties																	
	c/ "Mhito	Electronics	Lead-Acid Batteries	Food		Metals			All Other Paper	Plastics	Textiles	Wood		Commingled Recyclables (Mixed)	Yard Waste	Christm as Lights	Ballasts	
Buybacks Scrap Yards																	-	
Mckee Auto parts						4,098	314											
Michel's Iron & Metals		1	7			2,145	118					1				1	2	
Brokers																		
Processors/MRF's																		
Athens-Hocking Recycling Center		14			502	124	122	3,663	727	344								
Unadjusted Totals	0	15	7		502	6,367	554	3,663	727	344	0	1	(		0 (	) 1	2	12,183
Adjustments						133	123		727	344								1,327
Adjusted Totals	0	15	7	0	502	6,234	431	3,663	0	0	0	1		ol (	0 (	) 1	2	10,850

Source(s) of Information: These were taken from the 2021 ADR Surveys done by GT Environmental

Unadjusted Total – Adjustments = Total

Assumptions: The adjustments made on other facilities by type were the materials that Athens-Hocking Recycling Center reported in 2021 as their breakdown of materials leaving their facility. I felt it was important to see these figures for planning for a circular economy.

AHSWD understands that Auto Recycling-Ohio Administrative Code Rule 3745-27-90(F)(2) prohibits solid waste districts from crediting metal from motor vehicle bodies and parts and construction and demolition debris towards achieving Goal 2. The metals reported from both Michels and McKees in table E-2 are commercial and residential metal recycling reported in our 2021 ADR. These numbers were confirmed with McKee's in April 2024 that these are not violating the 3745-27-90(F)(2) Rule. These are

Page E-1

the only two metal recycling locations in the district where metal is recycled by commercial and residential customers and AHSWD stands by these diversion numbers.

Table E-3 Data Reported to Ohio EPA by Commercial Businesses

E-3: Data Reported to Ohio	EPAby	Comme	rcial Business	ses												
Ohio EPA Data Source	Glass	Plastic	Newspaper	Cardboard	Mixed Paper	Nonferrous	Ferrous	Wood	Food: Compost	Food: Other	Commingled	Other	Other	Other	Other	
Walmart -Athens		19		697	1	0						65				
Dollar General Corporation Atl	hens	2		187	1											
Kroger-Athens		20		669								17				
CVS-Athens				5												
Advance Auto Parts Athens		0		2			1					41				
Dayton Glass Plant	681															
Rumpke-Chillicothe				5												
Walmart Recycling in Ohio Ho	ocking	17		577	1	0						56				
Dollar General Corporation Ho	ocking	1		78												
Kroger-Hocking		9		85								6				
Advance Auto Parts Hocking		0		2			1					37				
Unadjusted Total	681	68	0	2,306	3	0	2	0	0	0	0	222	0			
	001	00	0	2,306	3	0		- 0	0	- 0	0	222	U	U	U	
Adjustments					_	_			_		_					
Adjusted Total	681	68	0	2,306	3	0	2	0	0	0	0	222	0	0	0	

Source of information for the Commercial Survey was from Ohio EPA data as well as surveys completed for the 2021 Annual District Report.

Table: E-4 Other Recycling Programs/Other Sources of Data

Table E-4 Other Recycling Programs/Oth	er Source	es of Data													
Other Programs or Sources of Data	ннพ	Thrift Other	Electronics	Scrap Tires	Dry Cell Batteries	Lead-Acid Batteries	Food	Non- Ferrous Metals	All Other Paper	Commingled Recyclables (Mixed)	Yard Waste	Rubber Other	Unadjusted Total	Adjustments	Adjusted Total
Curbside Recycling Services										898			898	898	0
Curbside Subscriptions										378			378	378	0
22 Drop-off Recycling Locations										1,452			1,452	1,452	0
Composting Facilities							715				2,182		2,897		2,897
Activities													0		0
Ohio EPA Scrap Tire Data				1,133									1,133		1,133
Special Recycling Days					2	0		13	10				25		25
Library & Community Battery Drop Off					3	1							4		4
HHW Collection Day	20												20		20
Activities													0		0
Other										8			8		8
Thrift Stores/Other		228											228		228
Unadjusted Total	20	228	0	1,133	5	1	715	13	10	2,736	2,182	0	7,042	2,728	4,315
Adjustments										2,728			2,728		<i>-</i> >
Adjusted Total	20	228	0	1,133	5	1	715	13	10	8	2,182	0	4,315		These totals shou

Source(s) of Information: AHSWD data as reported in the ADR with adjustments made removing mixed comingled recyclables, so we didn't double count.

Sample Calculations:

Unadjusted Total – Adjustments = Total

Assumptions: These Other Recycling Programs were the various weekly collections and events throughout the year. Each partner and or recyclers was asked to report tonnage or pounds so this ongoing chart can measure the amount collected at our various programs and events.

Table E 5	Residential/Comn	acraial Matarial	Deceyared in	Deference Veer
l able E-5	Residential/Comn	nerciai wateriai i	Recoverea in	Reference fear

Material	<b>Quantity</b> (tons)
Other Thrift Store	0
Household Hazardous Waste	20
Used Motor Oil	49
Electronics	50
Scrap Tires	1,138
Dry Cell Batteries	5
Lead-Acid Batteries	40
Food	715
Glass	1,186
Ferrous Metals	6,603
Non-Ferrous Metals	622
Corrugated Cardboard	6,784
All Other Paper	920
Plastics	429
Textiles	0
Wood	807
Rubber	2
Commingled Recyclables (Mixed)	8
Yard Waste	2,182
Other (Aggregated)	453
Total	22,013

Source(s) of Information: 2021 AHSWD ADR

Assumptions: We calculated the amount recycled at events, activities and weekly collections to come up with these totals. All non-working appliances go into the metal totals for we do not collect as a special collection for this purpose. For this year, we broke out the commingled recyclables as they were sent to the material recyclers from the Athens-Hocking Recycling Center, not the total for the collected totals.

The totals are the same as the Annual District Report (ADR), but in this chart, the materials are broken down to the different materials instead of just commingled material which was reported in the ADR. These numbers are helpful in realizing the majority by weight and amount for the different materials. Especially when you realize that the majority of materials are corrugated cardboard and metals. Not only these materials but also for future planning purposes of how the district is doing per capita for recycling

different materials. The totals are the same, I am just using the specific commodity for planning and analysis.

Table E-6 Quantities Recovered by Program/Source

Program/Source of R/C Recycling  Data	Quantities (Tons)
Commercial Survey	2,235
Data from Other Recycling Facilities	9,689
Ohio EPA Commercial Retail Data	3,282
Curbside Recycling Services	898
Curbside Subscriptions	378
22 Drop-off Recycling Locations	1,452
Composting Facilities	2,897
Ohio EPA Scrap Tire Data	1,133
Special Recycling Days	25
Library & Community Battery Drop Off	4
HHW Collection Day	20
Total	22,013

Source(s) of Information: These totals were collected from Ohio EPA data, AHSWD data for events and activities/

See Comments for Table E-5 for why these materials are different from what was reported in the ADR.

# B. Historical Recovery Table E-7 Historical Residential/Commercial Recovery by Program/Source

	Table E-7 Historical Residential/Commercial Recovery by Program/Source															
Year	Commercial Survey	Data from Other Recycling Facilities	Ohio EPA Commercial Retail Data	Curbside Recycling Services	Curbside Subscriptions	22 Drop-off Recycling Locations	Compostin g Facilities	0	Ohio EPA Scrap Tire Data	Special Recycling Days	Library & Community Battery Drop Off	HHW Collection Day	Other Food and Yard Waste Manageme	Other	0	Totals
2017	8,784		3,000	913	438	1,321	2,160	838	1,028	75		30				18,586
2018	11,082	10,197	3,279	774	465	1,533	4,638	414	620	126		15		18	74	33,235
2019	10,226	3,500	3,489	837	415	1,412	2,190	960	868	84		17		99		24,097
2020	10,602	64	3,581	889	435	1,436	1,446		1,280			15		502		20,250
2021	2,235	9,689	3,282	898	378	1,452	2,897	0	1,133	25	4	20	0	8	0	22,021

Source(s) of Information: AHSWD Annual District Reports

Assumptions: We estimate that we will be collecting and getting totals for materials at the Sutton Road Recycling Center and all of the materials which AHSWD collects outside to other organizations and partners. The numbers of recovery in 2018 is the first year of single stream recycling and we saw a huge jump of materials due to the outreach and education that year to encourage recycling in single stream.

### C. Residential/Commercial Recovery Projections

The Commercial Sector and the OEPA gathered of commercial box stores will remain the same and may increase due to the increasing in reporting or new programs, but we do not see any major increases in the upcoming years.

Our hope is that with our new Southeastern Ohio Recycling Terminal Council of Governments that our curbside numbers will increase with the City of Logan adding a curbside program and perhaps a few townships. These will then decrease some of the drop-off location numbers. This is not guaranteed, so no curbside numbers have been added.

Our Drop-off increases are due to increased recycling from cabins, lodges and venues and also outreach to commercial entities throughout the plan period.

Table E-8a:

Residential &

Commercial

Recovery Projections

Year	Recycle (tons)
2021	22,013
2022	25,619
2023	25,161
2024	25,213
2025	25,214
2026	26,219
2027	26,325
2028	27,437
2029	27,553
2030	27,676
2031	28,805
2032	28,941
2033	29,083
2034	29,232
2035	29,389
2036	29,553
2037	29,726
2038	29,907
2039	30,098

The increase in compost is a new focus on food waste and working to increase composting at our current and future composting sites. There are commercial facilities and schools which want to compost. It will take time to increase capacity, but this will increase the amount of composting. The increase in shredding & Sutton Road is because it is new and it will be a main focus for the District to increase the use of the facility year round.

Table: E-8 Residential/Commercial Recovery Projections by Program/Source

							sidential/Com										
Year	Commerci al Survey	Data from Other Recycling Facilities	Retail	Curbsid e Recyclin g Services	Curbside Subscript ions	22 Drop-off Recycling Locations	Composting Facilities	othert Food waste programs			Library & Communit y Battery Drop Off	HHW Collection Day	pumpkin & Holiday recycling	Shreddin g	Sutton Road	Books	Totals
2021	2,235	9,689	,	898	378	, -	2,897	0	1,133	25	2	20	0	2	2	0	22,021
2022	10,000	5,000	3,573	900	380	1,524	3,070		1,000	45	2	16	0	2	5	2	25,619
2023	9,000	5,000	4,000	900	400	1,600	3,100	100	1,000	30	2	13	1	3	10	2	25,161
2024	9,000	5,000	4,000	900	420	1,600	3,100	100	1,000	30	2	18	10	5	25	3	25,213
2025	9,000	5,000	4,000	900	420	1,600	3,100	100	1,000	30	2	18	10	6	25	3	25,214
2026	9,000	5,000	4,000	900	441	1,680	4,000	100	1,000	30	2	18	10	10	25	3	26,219
2027	9,000	5,000	4,000	900	463	1,764	4,000	100	1,000	30	2	18	10	10	25	3	26,325
2028	9,000	5,000	4,000	900	486	1,852	5,000	100	1,000	30	2	18	10	10	25	3	27,437
2029	9,000	5,000	4,000	900	511	1,945	5,000	100	1,000	30	2	18	10	10	25	3	27,553
2030	9,000	5,000	4,000	900	536	2,042	5,000	100	1,000	30	2	18	10	10	25	3	27,676
2031	9,000	5,000	4,000	900	563	2,144	6,000	100	1,000	30	2	18	10	10	25	3	28,805
2032	9,000	5,000	4,000	900	591	2,251	6,000	100	1,000	30	2	18	10	10	25	3	28,941
2033	9,000	5,000	4,000	900	621	2,364	6,000	100	1,000	30	2	18	10	10	25	3	29,083
2034	9,000	5,000	4,000	900	652	2,482	6,000	100	1,000	30	2	18	10	10	25	3	29,232
2035	9,000	5,000	4,000	900	684	2,606	6,000	100	1,000	30	2	18	10	10	25	3	29,389
2036	9,000	5,000	4,000	900	718	2,737	6,000	100	1,000	30	2	18	10	10	25	3	29,553
2037	9,000	5,000	4,000	900	754	2,873	6,000	100	1,000	30	2	18	10	10	25	3	29,726
2038	9,000	5,000	4,000	900	792	3,017	6,000	100	1,000	30	2	18	10	10	25	3	29,907
2039	9,000	5,000	4,000	900	832	3,168	6,000	100	1,000	30	2	18	10	10	25	3	30,098

Our Drop-off increases are due to increased recycling from cabins, lodges, etc and also outreach to commercial entities throughout the plan period.

The increase in compost is a new focus on food waste and working to increase composting at our current and future composting sites.

The increase in household hazardous waste, shredding & Sutton Road is because it is new and it will be a main focus for the District to increase the use of the facility year round.

# APPENDIX F INDUSTRIAL WASTE REDUCTION AND RECYCLING DATA

This Section not required by OEPA

# APPENDIX G WASTE GENERATION

#### A. Historical Year Waste Generated

Table G-1 Reference Year and Historical Waste Generated

			Residential/	Commercia	I		Industrial		Excluded	Total	А	nnual % Chang (tons)	е
Year	Population	Disposed (tons)	Recycled (tons)	Generated (tons)	Per Capita Generated (ppd)	Disposed (tons)	Recycled (tons)	Generated (tons)	(tons)	(tons)	Residential/ Conmmercial	Industrial	Excluded
2017	95,071	56,560	18,586	75,146	4.33	7,605	0	7,605	2,499	85,250	-		
2018	94,259	59,524	33,235	92,759	5.39	5,488	0	5,488	1,123	99,370	23%	-28%	-55%
2019	94,259	58,838	24,097	82,935	4.82	4,703	0	4,703	1,412	89,050	-11%	-14%	26%
2020	93,306	54,573	20,250	74,823	4.39	5,247	0	5,247	1,207	81,277	-10%	12%	-15%
2021	91,180	58,322	22,013	80,335	4.83	4,272	0	4,272	1,012	85,619	7%	-19%	-16%

Source(s) of Information: AHSWD ADR 2017-2021

Waste generation = disposed + recycled = generated

Per Capita Generation = ((generated \* 2,000) / 365) / population

#### 1. Residential/Commercial Waste

Waste Disposal as it has been in the past five years has gone to the Athens-Hocking Reclamation Center. For the Reference year 2021, 68% of the waste generated in the District for direct haul went to the Athens-Hocking Reclamation Center. 30% of the material went to Beech Hollow Landfill in Jackson County owned by Rumpke. The other direct haul waste went to the most convenient landfill for the hauler at 2% of the remaining waste.

We also had over 92% of the waste generated was from residential/commercial waste and the rest coming from industry and exempt waste in the district. With 98% direct haul and only 2% coming from transfer stations.

#### 2. Industrial Waste

The Ohio EPA 2020 State Plan no longer requires Solid Waste Management Districts to demonstrate the industrial sector percentage goal of 66% diverted waste. Upon removal of this goal, Districts may choose whether to survey the industrial sector or not. The District is not surveying the industrial sector and thus has no diversion data to record. Waste disposal as shown is declining.

#### 3. Excluded Waste

Per Ohio EPA Format 4.1, excluded waste will not be accounted for in this plan update as it comprises less than 10% of waste disposed.

# **B.** Generation Projections

**Table G-2** Generation Projections

Year	Population	Residential/ Commercial										
		Disposal (tons)	Recycle (tons)	Generation (tons)	Per Capita Generation (ppd)							
2021	94,653	58,322	22,013	80,335	4.65							
2022	94,536	58,142	25,61 <mark>9</mark>	83,761	4.85							
2023	94,418	58,070	25,161	83,231	4.83							
2024	94,301	57,998	25,213	83,211	4.84							
2025	94,184	57,926	25,214	83,140	4.84							
2026	93,981	57,801	28,219	86,020	5.02							
2027	93,778	57,676	28,325	86,002	5.03							
2028	93,575	57,551	28,437	85,988	5.04							
2029	93,372	57,427	28,553	85,980	5.05							
2030	93,169	57,302	28,676	85,978	5.06							
2031	92,923	57,151	28,805	85,956	5.07							
2032	92,678	57,000	28,941	85,940	5.08							
2033	92,432	56,849	29,083	85,931	5.09							
2034	91,187	56,083	29,232	85,314	5.13							
2035	91,941	56,546	29,389	85,935	5.12							
2036	91,672	56,381	29,553	85,934	5.14							
2037	91,403	56,216	29,726	85,941	5.15							
2038	91,134	56,050	29,907	85,957	5.17							
2039	90,865	55,885	30,098	85,982	5.19							

Source(s) of Information: A-HSWD

Sample Calculations: Per capita generation rate = ((tons generated x 2000) ÷ 365) ÷ population)

### C. Waste Composition

Table G-3 Composition of Residential/Commercial Waste

			Year																	
	Percent of Total																			
Material	Generation <sup>1</sup>	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Paper and Paperboard	23.10%	18,557	19,349	19,226	19,222	19,205	19,871	19,866	19,863	19,861	19,861	19,856	19,852	19,850	19,708	19,851	19,851	19,852	19,856	19,862
Glass	4.20%	3,374	3,518	3,496	3,495	3,492	3,613	3,612	3,611	3,611	3,611	3,610	3,609	3,609	3,583	3,609	3,609	3,610	3,610	3,611
Ferrous	6.60%	5,302	5,528	5,493	5,492	5,487	5,677	5,676	5,675	5,675	5,675	5,673	5,672	5,671	5,631	5,672	5,672	5,672	5,673	5,675
Aluminum	1.30%	1,044	1,089	1,082	1,082	1,081	1,118	1,118	1,118	1,118	1,118	1,117	1,117	1,117	1,109	1,117	1,117	1,117	1,117	1,118
Other Nonferrous	0.90%	723	754	749	749	748	774	774	774	774	774	774	773	773	768	773	773	773	774	774
Plastics	12.20%	9,801	10,219	10,154	10,152	10,143	10,494	10,492	10,491	10,490	10,489	10,487	10,485	10,484	10,408	10,484	10,484	10,485	10,487	10,490
Rubber and Leather	3.10%	2,490	2,597	2,580	2,580	2,577	2,667	2,666	2,666	2,665	2,665	2,665	2,664	2,664	2,645	2,664	2,664	2,664	2,665	2,665
Textiles	5.80%	4,659	4,858	4,827	4,826	4,822	4,989	4,988	4,987	4,987	4,987	4,985	4,985	4,984	4,948	4,984	4,984	4,985	4,986	4,987
Wood	6.20%	4,981	5,193	5,160	5,159	5,155	5,333	5,332	5,331	5,331	5,331	5,329	5,328	5,328	5,289	5,328	5,328	5,328	5,329	5,331
Other	1.50%	1,205	1,256	1,248	1,248	1,247	1,290	1,290	1,290	1,290	1,290	1,289	1,289	1,289	1,280	1,289	1,289	1,289	1,289	1,290
Food	21.60%	17,352	18,092	17,978	17,974	17,958	18,580	18,576	18,573	18,572	18,571	18,566	18,563	18,561	18,428	18,562	18,562	18,563	18,567	18,572
Yard Trimmings	12.10%	9,721	10,135	10,071	10,069	10,060	10,408	10,406	10,405	10,404	10,403	10,401	10,399	10,398	10,323	10,398	10,398	10,399	10,401	10,404
Misc inorganic wastes	1.40%	1,125	1,173	1,165	1,165	1,164	1,204	1,204	1,204	1,204	1,204	1,203	1,203	1,203	1,194	1,203	1,203	1,203	1,203	1,204
R/C	waste generated	80,335	83,761	83,231	83,211	83,140	86,020	86,002	85,988	85,980	85,978	85,956	85,940	85,931	85,314	85,935	85,934	85,941	85,957	85,982
	1From Advancing	Sustainable Materi	iala Managan	ont. 2019 Tob.	no and Figures	Accessing Tree	ada in Mataria	la Conoration		and to the start										

Source(s) of Information: From Advancing Sustainable Materials Management: 2018 Tables and Figures Assessing Trends in Materials Generation and Management in the United States December 2020

**Table G-3** presents the residential/commercial waste generated totals from **Table G-2** and the estimated percent of total generation by material. Using the quantities of waste generated and the estimated percent of total generation, each material is projected during the planning period. The estimations above are based on a U.S. EPA National Study of waste generated from 2018.

# APPENDIX H STRATEGIC EVALUATION

The Athens-Hocking Solid Waste District Policy Committee in developing the 2025 Management Plan decided to get input from the public, waste haulers, recyclers, law enforcement, health departments, environmental and regional development organizations and the Emergency Management Agencies. The members of the Policy Committee asked the hard questions, raised issues, and from their perspectives developed priorities to move forward for the next planning period.

It is through this series of analyses; the policy committee and staff informed their decisions on how to move forward on the development of a new management plan in an ever-changing world to become more resilient for the future.

The series of analysis as required by the plan are:

- Residential Recycling Infrastructure Analysis
- Commercial/Institutional Sector Analysis
- 3 Industrial Sector Analysis
- \* Residential/Commercial Waste Composition Analysis
- Economic Incentive Analysis
- Restricted and Difficult to Manage Waste Streams Analysis
- Diversion Analysis
- Special Program Needs Analysis
- Financial Analysis
- Regional Analysis
- Data Collection Analysis
- Education/Outreach Analysis
- Processing Capacity Analysis

#### 1. Residential Recycling Infrastructure Analysis

In order to evaluate the existing residential recycling infrastructure, Appendix B was completed to determine if the district meets the needs of the residential sector and how the infrastructure is performing. This analysis provided us with information to make decisions regarding the recycling infrastructure.

#### **Residential Recycling Infrastructure Analysis**

The following section describes programs and activities that occurred in the reference year 2015 in the 2018 update with the latest information from 2021, our reference year. This review will reflect the past and current issues and the progress we have made. The strengths and challenges of District programs are presented following each program description.

#### **Evaluation**

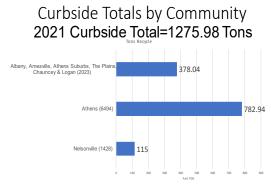
#### 1. Curbside Recycling

In 2015, there were 19 communities that had curbside recycling programs. One of the programs was non-subscription-based and the remaining programs were subscription-based. All curbside programs were operated by Athens-Hocking Recycling Centers, Inc. (AHRC), with the exception of one program, which was operated by Southern Ohio Disposal. After 2016, Southern Ohio Disposal was no longer a service provider and their accounts were taken over by Rumpke. In 2015, The City of Athens was the only community to have non-subscription based curbside recycling. Both curbside recycling haulers delivered materials collected to one of AHRC's facilities, so materials accepted and methods for preparing recyclables were the same for all communities throughout the District.

Source separated collection of curbside materials continued for many residents until June of 2015. For the first half of 2015, residents were instructed to bag or bundle each material separately. Around July of 2015, the City of Athens, Ohio University, and customers of Southern Ohio Disposal transitioned to single stream collection. In July, curbside recycling transitioned to single stream collection. The rest of the District transitioned to single stream collection between the very end of 2015 and the beginning for the Drop-off program.

In 2021, we have 2 non-subscription curbside recycling programs serving the Cities of Athens and Nelsonville in Athens County. These two (2) communities make up **32% of the population** of the District. The City of Athens recycled 244 pounds per capita and City of Nelsonville recycled 161 pounds per capita.

Athens-Hocking Recycling Center is the only subscription service for curbside recycling serving the District which includes the suburbs of the city of Athens, Nelsonville, Albany, the Plains, Chauncey, Logan and Rockbridge which serves 2023 households in the district. The per capital rate for subscription services for the 2023 households was 374. pounds per capita as a group.



The City of Logan at the time of this plan update was considering curbside and a franchise, but it is unclear due to pressure by local haulers if they will move forward. If this does occur, it will reduce the need for three (3) drop-off sites in and around the City of Logan, thus giving the District flexibility to reduce or move containers to other locations.

#### **Drop-Off Program**

In 2015, the District contracted with AHRC to provide the following services:

- Recycling containers
- Collection of recyclable materials
- Processing and recycling of recyclable materials

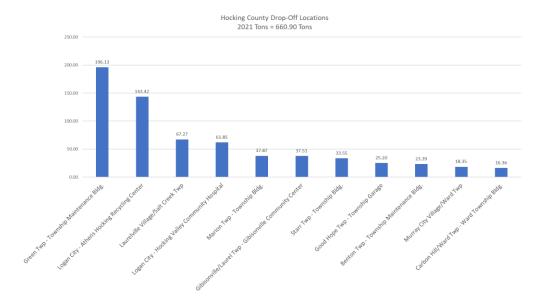
Both haulers servicing drop-offs during 2015 delivered materials collected to one of AHRC's facilities, so materials accepted were the same each drop-off throughout the District. Staffed collection sites (such as sites open from 8AM-12PM one day per month) required recyclables to be sorted. Weekly roll-offs a{so required that recyclables be sorted. Source separated collection of recyclables continued through June of 2015 for all other sites. In July, some drop-off centers transitioned to single stream collection.

In 2015, there were six full-time publicly available recycling drop-offs located throughout the District. Full-time means the drop-off was open for at least 40 hours per week. Four of the District's full-time drop-offs were open during daylight hours. Two full-time drop-offs were open Monday through Friday from 7:30AM to 3:30PM and on Saturdays from 8AM to noon. There were 18 part-time publicly available recycling drop-offs. Part-time drop-off schedules varied by community. At a minimum, drop-offs were available from 8AM-12PM one Saturday each month. At most, they were available during daylight hours for one week each month. At the end of 2015 and beginning of 2016, all drop-off sites transitioned to being single stream, full-time sites.

In 2021, there were 21 drop-off locations and then in 2022 grew to 11 in each county for a total of 22 location, which recycled 1473 tons of materials in 2021. In 2021, Athens County generated 810.12 tons at their drop-off sites and Hocking County generated 660.90. 401.40 tons of the 660.90 tons at drop-offs in Hocking County were the three (3) sites in Logan which is 61% of the tonnage (Green Twp., Hospital & Sutton Road). The program is a single stream drop-off program of the following materials: paper, cardboard, metal cans, plastics 1-7 and glass and the sites are open 24/7.

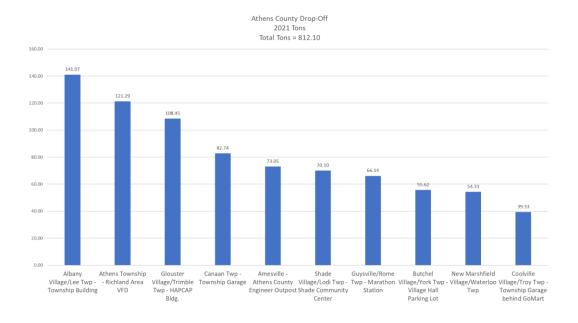
The total cost of the drop-off per ton was \$199.20. This included the container, collection at 22 sites, processing materials and sending to recyclers, less the material rebate. The cost with an additional Drop-off site bringing the total to 22 was \$301,599 for 1524 tons for \$197.90/ton and is estimated to be \$443,000 for 2023 with an estimated 1569 tons for \$282.35/ton. Below are the tonnages for each county's sites:

#### **Appendix H** Strategic Evaluation



The dramatic increase for the cost of the Drop-off was due to the increased cost of fuel with our fuel surcharge and the low rebate from the recyclables. In 2021 and 2022, we enjoyed low gas prices and high rebates, so our estimate moving forward has to take into account these factors. Also, in 2024, the District will be reviewing the program and analyze the locations, read surveys and see it the program needs to be changed prior to issuing a new Drop-off Contract for the program, which begins in 2025.

The Hocking County sites have changed since the 2021 totals with the Community Hospital site growing to be one of the top tonnage sites in Hocking County. It is due to increasing the number of containers (per hospital and public demand) and the amount of cardboard dropped off at that site by commercial entities in the Logan area.



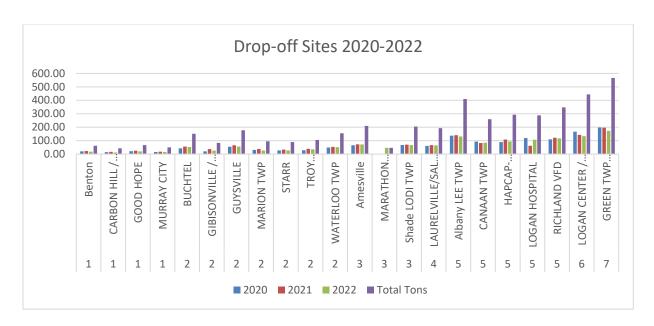
These 22 sites have 70 containers which are for mixed recycling and flatten cardboard. The sites are equally distributed across the counties and are both in very rural areas and village and near cities. The capacity is checked on an on-going basis for the number of containers and the number of times picked up during the week. These sites are open to all district residents and the commercial sector.

This chart is organized by the number of containers a site has and the actual number of tons per site for the period of 2020-2022.

# of	·				
containers					
2022		2020	2021	2022	<b>Total Tons</b>
1	Benton	20.80	23.39	18.52	62.71
1	CARBON HILL / WARD	14.60	16.36	12.65	43.61
1	GOOD HOPE	21.30	25.20	20.14	66.64
1	MURRAY CITY	16.00	18.35	15.48	49.83
2	BUCHTEL	42.80	55.65	52.53	150.98
2	GIBISONVILLE / LAUREL	20.30	37.51	25.94	83.75
2	GUYSVILLE	55.30	66.14	55.83	177.27
2	MARION TWP	30.60	37.87	26.78	95.25
2	STARR	28.00	33.55	27.55	89.10
2	TROY TWP/COOLVILLE	29.00	39.33	36.26	104.59
2	WATERLOO TWP	49.40	54.31	51.17	154.88
3	Amesville	65.50	73.05	71.55	210.10
	MARATHON STATION -				
3	CHAUNCEY	0.00	0.00	46.65	46.65
3	Shade LODI TWP	68.50	70.10	66.42	205.02
4	LAURELVILLE/SALT CREEK	61.40	67.27	64.41	193.08
5	Albany LEE TWP	137.20	141.07	131.60	409.87
5	CANAAN TWP	92.90	82.74	84.22	259.86
5	HAPCAP-GLOUSTER	89.50	108.45	94.62	292.57
5	LOGAN HOSPITAL	119.40	61.85	107.53	288.78
5	RICHLAND VFD	109.80	121.29	117.05	348.14
6	LOGAN CENTER / Falls C	167.00	143.42	133.96	444.38
7	GREEN TWP LOGAN	197.80	196.13	172.99	566.92

Since the number of containers is a limitation to the number of tons which can be collected two or three times a week, it still appears that the same number of containers doesn't necessarily get the same number of tons as each other.

It appears that in 2021, the total for almost all sites went up. Other than COVID, there is no clear answer why the totals went up in 2021 and then down in 2022.



# PROGRAM GRANTS TO IMPROVE DROP-OFF PARTICIPATION & CONTAMINATION

In 2022, the District received a Recycle Ohio grant focus to increase recycling at current locations and to reduce contamination. The District rebranded the materials and developed a Jingle, signage, and brochures to inform the visitors to our drop-off locations.

In 2023, the District received Recycling Partnership and Ohio EPA grant to reduce contamination at the drop-off sites. The Grant included signage for each of the 22 recycling drop-off sites; 2 District wide mailings each to over 34,000 single family households to inform residents of accepted materials and targeted non-accepted materials. The District surveyed recyclers at eight (8) of the top volume sites on levels of contamination before and after the project. For an eight (8) week period, where Recycling Guides (hired contractors) greeted recyclers, distributed literature, surveyed them and pointed out any materials which they brought which were not recyclable. After the project, it was found that from the project, we reduced contamination by 18% at the eight (8) sites and reduced the targeted contaminants by 11%. We targeted bagged recyclables and plastic bags and film.

The survey was done for a period of eight (8) weeks in the summer of 2023. 724 completed the survey and the following answers were offered:

		Responses		_
Question	Yes	No	NA	
Is recycling offered at your residence?	69	652	3	
	Yes		No	NA

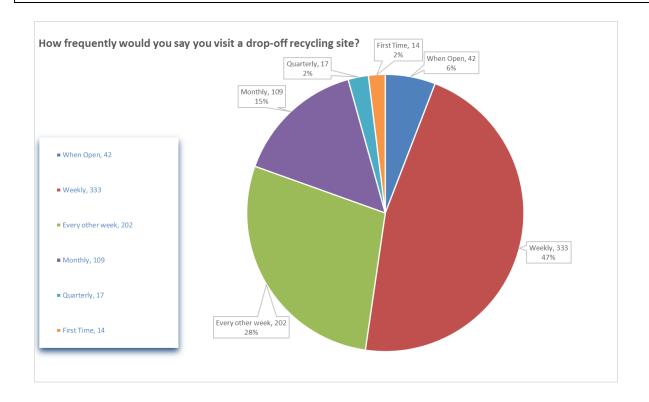
# **Appendix H** Strategic Evaluation

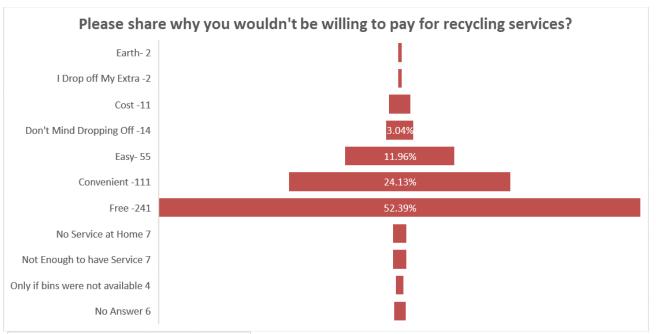
Would you be willing to pay for recycling at your property?	269		453	2
If, yes, how much per month?	\$5-10/month	\$10-15/month		
# of responses	175	85		14

# Are you recycling material today from a single family, multifamily, or commercial property? (#722) Single Family, 688

Single Family, 688 Multifamily, 20

Commercial, 11 responses





Who currently provides you	r garbage s	ervice?
Rumpke	219	
Victory	68	
Doesn't have one	63	
BSS	46	
Brown	31	
Bateman's	29	
WinWaste	25	
Doesn't know	24	
AHRC	21	
WM	16	
Self	14	
First class	9	
J and L	8	
S and j	8	
Scabs	8	
Boleyn	7	
D and j	7	
WasteAway	5	
Paul powell	5	
Traces	5	
Work dumpster	5	
Skids6y6 brown sanitation	4	
A1	3	
Gives trash to Friend	3	
Dwayne	2	
Leckron	2	
Condo provides service	2	
R&L	2	
Allenj	1	
B and j	1	
Burns garbage	1	

When the 724 Recyclers who participated in the Recycling Partnership Survey, the following results were found:

- 47% recyclers visit weekly with another 28% every other week;
- 96% of recyclers were from single family households
- o 63% of drop-off recyclers are not willing to pay, 88.48% said that they like the drop-offs because they are free (52.4%), convenient (24.1%) and easy (12%).
- Of the recyclers that said they are willing to pay for recycling at their property? 65% said they would pay \$5-10/month per month and 32% said they would be willing to pay \$10-15/month.
- A reduction of 18% of contaminants at the eight top sites.
- A reduction of 12% of targeted contaminants (bagged recyclables, plastic bags and film).

Both of the grants were found to benefit the entire Drop-off program to inform what is acceptable and non-acceptable items, new signage and communicating with households in the District for an eight (8) week program and to send them mailings to

inform them of the Drop-off locations and what is acceptable and not acceptable at each recycling station.

#### **FINDINGS**

- ❖ The Drop-off Sites at their current location does meet the 90% goal which was set and recently changed to 80% coverage for the District for residents to access recycling.
- Many communities would like Drop-off sites and or larger sites with containers emptied more often.
- ❖ The cost of the picking up 67 containers at 21 locations and processing the materials; less the cost of the recycling materials rebate was \$293,426 dollars or \$202.08/ton in 2021.
- ❖ In 2022 rose to \$301,599 for 70 containers at 22 locations and \$328,000 with the recycling materials rebate.
- Over 7000 residents within the city of Athens live in Multi Unit Housing and only have access to drop-off sites.
- ❖ The Drop-off sites are throughout the two counties and since 2021, there have been two requests for additional drop-off sites (Chauncey and Alexander Township). Chauncey site was opened in January of 2022 and is doing very well with 3 containers and picked up three (3) times per week. Alexander Township is waiting for the new plan.
- ❖ The Drop-off sites in 2023 are at full capacity with 70 containers at the 22 locations. Some of these sites are picked up twice (2) at week and some three (3) times. The District may have to consider picking up the sites more often because the capacity of space at the 8 most used sites is full and cannot take any more containers.
- All of the 22 Drop-Off sites have signage with acceptable materials, not accepted, our website and phone number for more information near the containers, so these serve as an information hub for the public.
- ❖ Drop-off sites are cleaned up at least every ten (10) days by AHSWD. There are some sites which get items dumped including: mattresses, batteries, household hazardous waste, all types of plastic and Styrofoam containers, TVs, tires, etc. which are usually left outside the containers.
- There are also Wish cyclers which put in items which are not accepted inside the containers. These materials are handled at the Athens-Hocking Recycling Center.

- ❖ Litter and truck droppings are a big problem at the Drop-offs and this is mitigated at the bigger volume sites by installing a permanent concrete pad and 8-foot fence. Otherwise, the sites are cleaned up by on-site site staff out of the kindness of their own heart and by AHSWD every ten (10) days or as needed.
- All of the major holidays which fall on Mondays (largely) cause problems at all drop-off locations, because recyclers recycle largely on the weekend and the containers fill up and remain that way until Tuesday morning.
- ❖ There are a number of sites which need assessed, because they do only get around 50 tons per year. AHSWD needs to re-evaluate this in the future.

#### **GAPS & District Priorities 2018 VS 2025**

Curbside

#### Strengths of the program include:

- Provides a convenient way for residents to recycle.
- · Accepts a wide variety of materials.
- Current curbside recycling program operators each use the local MRF, so all materials accepted at curbside recycling programs throughout the District are consistent.
- Weekly service enables residents to accumulate fewer materials between service intervals.
- Many residents transitioned to single stream during 2015, which is more convenient, less time consuming, and requires less space in residents homes than source-separated recycling (which required multiple bags/containers).

#### Challenges of the program include:

- Tonnage for the curbside recycling program was not available for the overall program or by community. The inability to track tonnage makes measuring the effectiveness of programmatic changes or education and outreach efforts difficult.
- One of the District's largest cities, the City of Athens, has a somewhat transient population due to the presence of Ohio University, making ongoing education necessary.
- Much of the District is rural, which causes collection costs tobe higher than in urban areas.
- The majority of communities have subscription-based curbside recycling. Nonsubscription curbside recycling programs are generally more successful and have higher participation rates than subscription-based models.
- The City of Athens' PAYT disposal model only provides financial incentives for homeowners and some commercial accounts. The PAYT program is not managed or influenced by the District.

#### **FINDINGS CURBSIDE**

- The Athens-Hocking Recycling Center does not have the capacity currently to be able to take any additional households in the district, due to fuel costs, staff and trucks.
- It appears that subscription curbside is much more cost effective per ton than non-subscription curbside. 373 pounds for AHRC burbs vs 244 pounds per capita for Athens and 161 pounds per capita for Nelsonville. This is picked up the same way and the same materials with the same carts and information.
- 4100 of the 7000 utility accounts in the City of Athens do not have curbside recycling because they live in Multi-Unit Housing.
- There are no non-subscription services in Hocking County for curbside recycling, but the City of Logan is considering some type of program.
- There are only 3 cities in the district and two of the three have curbside (Athens & Nelsonville) for their residents and have a franchise.
- The disposal of bulky items and hard to recycle materials are a challenge for all
  of the haulers in the district.
- We lack haulers in the District to serve residents with curbside recycling.

#### **GAPS**

- There is not enough capacity for a great expansion of curbside recycling in the District. The only hauler currently that is collecting the materials will need resources or long-term contracts in order to expand services.
- According to the Drop-off Survey and the Plan Survey, there is an interest and a
  willingness to pay for curbside, but many questioned why pay for pick up when
  the Drop-off containers are easy, convenient and free.
- There is a need to work with communities to increase participation and reduce contamination in the Cities of Athens and Nelsonville. This will not increase costs on anyone, but will increase recyclables and reduce contamination. A pilot or implementation of a curbside contamination study and program should be completed.
- If the City of Logan decides to do a franchise or begin curbside recycling. This
  would reduce the amounts at Drop-offs at our three highest yielding in Hocking
  County. Those saved resources could assist the district in placing Drop-off
  containers in other locations or add containers to current locations. This move
  would also increase recycling without costing the District any additional funding
  and would be more sustainable over time.
- The rural nature of the District is difficult enough, but if townships or villages would form franchises for waste and recycling pick up, it would increase recycling and increase the viability of additional trucks, capacity and future of our only household curbside service, placing it on a more sustainable footing for AHRC, but also the district. The more we can get jurisdictions forming franchises and contracts for recycling at a township, village and city level, the more the resources of the District will be sound and more affordable because the overall

sustainability of AHRC would be stronger and the expenses would be spread over a larger base.

#### In 2018, the District priorities for Curbside were:

- Work with haulers and Cities to obtain tonnage data.
- Sharing information with local government about options to serve their community via franchise, drop-offs and the importance of recycling needs to be a priority.
- Increase the number of haulers who offer recycling programs.
- Work with communities who do offer recycling and assist with education & Outreach and programs to increase participation and reduce contamination.

#### Drop-Off Strengths of the program include:

- Provides recycling opportunities for residents who do not have curbside recycling.
- Education of what is acceptable and non-acceptable can be done District wide because it is the same company who picks up both.
- Full-time drop-offs provide residents the availability to empty recyclables more frequently and on a more flexible schedule than a curbside program would provide.
- Single-stream recycling became available at sites in 2016 and continues today and is more convenient and less time consuming for residents.
- As 82% of the recyclers surveyed said it is free, convenient and easy.

#### Challenges of the program include:

- Providing access in rural areas is costly and yields low tonnage with higher volumes of contaminants and/or non-marketable recyclable materials.
- Tonnage for the curbside recycling program was not available for the overall program or by community. The inability to track tonnage makes measuring the effectiveness of programmatic changes or education and outreach efforts difficult. It is also difficult to track where the contamination is coming from and where to target educational efforts.
- The District has received complaints about drop-off sites overflowing. The District has resolved this issue with adding additional containers and picking up materials more often at certain sites, but it continues to be a problem.
- Overflowing containers and illegal dumping causes drop-off sites to be seen as a nuisance by the hosts of the sites.

## In 2018, the District priorities for the Drop-Off Recycling Program were:

- Drop-off location monitoring by the District
- Maintaining Acceptable Service Standards
- Branding each Drop-off Sites;
- Upgrade sites with cameras, fences, concrete, signage, landscaping-make it a positive experience.

 Develop programs to identify themselves and dumpers of non-recyclables in the drop off containers.

In 2025, the district adds the following

- Keep the recycler in mind by creating a welcome environment at the Drop-Off sites:
- AHSWD staff and/or contract with individuals to educate recyclers at all the sites.
- Use the Drop-off locations and social media to communicate the word to recyclers.
- Identify volunteer Recycling Guides who will monitor the site and alert the District of problems.
- The District will utilize technology and signage to keep illegal dumping down at the Drop-off sites as needed.

#### **Multi-Unit Housing**

#### Review

There are many types of Multi-Unit Housing throughout the district:

**Student Housing:** There are Over 7000 residents within the city of Athens live in Multi Unit Housing and who only have access to drop-off sites, but have no targeted information that the Drop-offs exist for their use. Multi-Unit Housing in the city of Athens does not have curbside recycling or container recycling available, those City of Athens residents have only the Drop-off program available to them. Most owners of those facilities have said they do not have room or cannot afford the program.

#### Low-Income, senior and special need housing:

- The Athens Metropolitan Housing Authority has 71 units of public housing, 44 Multi-family units (townhouses) and 27 scattered single family units.
- The Hocking County Metropolitan Housing Authority has 71 1-Bed room units at the High Rise; 8 apartment complexes (landlord owned) and seven (7) approved landlords for housing and permanent supportive housing vouchers for Shelter Plus Care and Multi-County Permanent Supportive Housing. The Shelter Plus Care Program and Multi-County Shelter Plus Care Program.

Multi-Unit Housing residents and public housing by in large do not have access to recycling at their home, because there is only waste collection included at their location with no recycling included and/or they cannot afford or have the knowledge of the location and/or transportation to recycle at the Drop-off sites.

There have been numerous conversations and pilots done with private landlords, but no general education and outreach effort by the district. There are both opportunities for on-going weekly recycling, but also as residents move in or out of their apartment, the landlords or property owners could be providing residents with Moving instructions and arrangements for their tenants for where materials could go for reuse and recycling.

There are also opportunities for swaps or donation stations at Multi Unit Housing for residents to give unneeded items or swap items instead of throwing them away.

#### **MULTI-UNIT HOUSING GAPS & PRIORITIES**

This issue is low hanging fruit for the district to increase the amount of recycling that could be done. With a workgroup, education and outreach development, model contract and signage, a Multi-Unit Housing program could be implemented in the district. At the very least, the District could get out information to residents about our Drop-off program and raise the issue with the owners of the properties. As with any rural district, the higher population density, the more productive a program will be.

#### **Materials**

The only residential recycling program is done by Athens-Hocking Recycling Center and they process all the materials which are single stream via curbside and drop-off program of the following materials: paper, cardboard, metal cans, plastics 1-7 and glass and are open 24/7.

Over the current planning years, we have seen a major shifts:

- Paper of all types has gone done dramatically due to less newspaper subscribers, electronic submission of bills, papers at colleges, etc.
- ❖ Significate increase in cardboard due to online buying, closing of locally owned and operated businesses and the shipping and receiving and reporting of big box stores which are recycling at the source.
- Cardboard is heavy and plastic is light.
- ❖ Significant increase of plastic single use bottles and reduction of glass bottles.
- ❖ We found the contamination rate of 11% at the Athens-Hocking Recycling Center.

#### **RECYCLING DAYS**

The District has held recycling days to collect recyclables for many years. Many of them up to 2021 were just to recycle items and/or dispose of items in the landfill and many of them for a fee. At our Fall 2021 Recycling Days, we added a number of partner organization and began to collect household goods for reuse at our events instead of materials just to go to recycling. This began a good relationship with Upcycle, Rural Action, Athens-Hocking Recycling Center, Goodwill, New to You Shoppe, Restore/Habitat for Humanity. This addition continues during the planning materials to enable residents and commercial entities the ability to bring materials for reuse and recycling as well as trash materials which are no longer useable and need to go to the landfill. In 2022, Rumpke, McKees Auto Parts and Scrap and Michels Scrap Yard joined as a partners.

#### SUTTON ROAD RECYCLING CENTER

The Recycling Day events only happen twice a year in each county, so that is why the District felt there was a need to open the Sutton Road Recycling Center, so that

residents, local governments and commercial entities could drop off materials for reuse and recycling all year round and have a one stop shop. There was also a need for a location for items in Hocking County, because it only has one Thrift Store where people can donate items.

The District leases the Sutton Road Recycling Center from Hocking County Commissioners for \$1.00 per year for one of the 22 Drop-off locations, but it also comes with three buildings and no water or sewer is available. In 2023 with the support of a Recycle Ohio grant, the District opened it for use as a place to have people drop off items and then the District sorts the items and then sends them off to one of our many partners for reuse or recycling.

The Sutton Road Recycling Center not only serves the District with 3 mixed recycling containers and 3 cardboard only containers for a 24/7 Drop off site. The Center collects household goods, clothing and fiber, electronics, cords and wire, building materials, furniture and scrap metal. These are sorted and then when containers are full, the materials go to their next home for reuse or recycling.

The District also collects batteries throughout the District and sorts, processes and batches them for recycling at the Center. The District also has a shipping container for any local government entity who collects tires from the right of way to bring tire to Sutton Road for the Ohio EPA's Scrap Tire Program to pick them up as needed. At the writing of this plan, a paper shredder and bailer is being installed and will give the District the opportunity to shred paper all year round instead of paying \$8000/year for recycling days shredding services. It is unclear at this time, what the fees or policies there will be for charging for shredding, but it will have to be decided by AHRC (owner of the equipment) and the District due to the three phase electric charges which will be more expensive then the District is currently paying. The District does not charge for the dropping off many of items, but does charge for televisions and monitors, Compact and Long Tube Fluorescent Bulbs due to their expense when recycling those items.

#### THRIFT /RESALE/ANTIQUE SHOPS

The District has seven (7) thrift stores with only one of them in Hocking County. The stores are run by non-profit organizations and actively accept materials from residents and businesses. These organizations benefit foster children, affordable housing, the environment, people with disabilities. people of Ukraine and the Federal Valley Resource Center. The District promotes these organizations in promoting their sites for donations of items and engages them to participate in our four (4) Recycling Days to take items dropped off.

These sites do not track the amounts that they receive or ship off to the landfill or to other recycling locations. The District would like to work with these shops to identify ways to partner, assist them in improving operations and promote their shops as an outlet for residents to recycle.

There are also many auctions, antique and resale shops which promote reuse and recycling goods locally. These are good for the local economy for residents to buy affordable items, but also good for diverting goods out of the landfill for reuse.

The District will continue through our Move-On Guide and Recycling Trail promote these sites to divert as much out of the landfill and to save resources.

### **MOVE ON GUIDE & RECYCLING TRAIL**

The Move On Guide and Recycling Trail were both started in 2023 with the support of Recycle Ohio grants. These are both guides to taking unwanted materials for reuse, repair and recycling. These guides will assist residential, tourists and commercial entities the ability to take their items to the correct locations for reuse or recycling and to also look up repair services.

The Move On Guide and the recycling Trail also gives residents the knowledge of where to take motor oil all year round to reduce the amount of oil dropped off at our Household Hazardous Waste Collection Day and less the District has to pay for one the top materials sent for recycling, but allows residents to take it to a local recycler when they change their oil instead of waiting for one day a year.

The Recycling Trail is a great tool for tourists to find thrift and resale shops and spend money in the District. It is very popular vacation activity. Also, since there are very few phone book anymore, it is a complete list of repair places in the District for all types of repairs.

### **MEDICAL EQUIPMENT & SUPPLIES & WASTE**

Through Rural Action and their networks, the District and many locations in the area are collecting medical equipment and supplies for reuse and distribution to those in need. The District has added these to our collection list for the Sutton Road Recycling Center and to our Recycling Days for collection. The sites are also listed in the Move On Guide and the Recycling Trail.

The District is also looking to develop a needle waste program and also working with the sheriff's department and pharmacies to identify ways to get rid of used needles and medications. This is a big problem in our area.

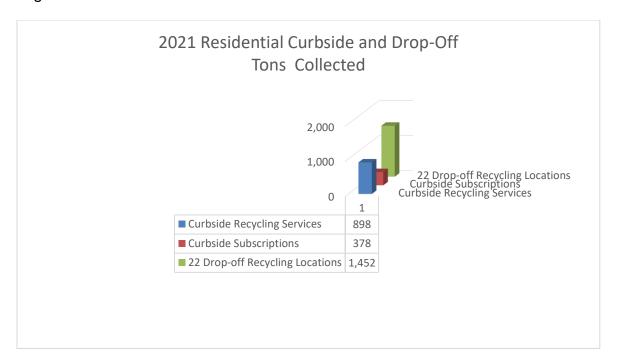
### B. Conclusion

Residential Recycling Infrastructure in the Athens-Hocking Solid Waste District has not changed over the last five (5) years, since the last plan.

Residents who live in the Cities of Athens and Nelsonville have the ability to recycle at curbside, while those in other cities, villages and townships only can have curbside if they sign up when available with Athens-Hocking Recycling Center and only if they live

in the suburbs near Albany, Athens, Nelsonville and Logan for waste and recycling services only.

Besides some 3500 households in the district that subscribe to the Athens-Hocking Recycling Center curbside trash and recycling services, the rest of the residents have only garbage pickup as an option for waste management. The residents that live outside of those areas have no option to recycle curbside and have to use our twenty-two (22) drop off sites which are throughout the district. In the rural parts of Athens and Hocking Counties it is a free enterprise for trash haulers, which do not provide recycling services at all, so at this time for the for seeable future, we only have had one organization providing residential curbside and drop-off recycling in the district. Although when contracts go out for bid in the district for waste and recycling services a number of companies come forward to provide those services, but only when paid through the contract for them.



As written in the 2018 Management Plan, there were 19 communities that had subscription curbside recycling provided by Athens-Hocking Recycling Center and Southern Ohio Disposal and City of Athens with their non-subscription service.

In 2023, Athens-Hocking Recycling Center continues serving subscription and non-subscription services in the district in those same 19 communities. The City of Athens and the City of Nelsonville now do provide curbside services to their residents and it is through a bid contract every 4-5 years. In 2023, the City of Athens will be going out to bid for a four/five-year contract for curbside waste, recycling, compost and bulky item service and as in the past, a number of haulers will bid for these services.

Outside of Athens and Nelsonville, AHRC is the only service provider that offers curbside recycling service in the two counties. There are multiple trash collection

providers. The only homeowners outside these areas that receive curbside recycling services are those that subscribe to AHRC's trash collection service. AHRC does not provide subscription curbside recycling to homeowners that choose a different refuse hauler. They no longer accept new customers, due to their lack of staff and vehicles and financially unsustainable.

These services include picking up paper, cardboard, metal cans, plastics 1-7 and glass-single stream. In Athens only, they have an opt-in composting service they provide for residents for a small monthly fee added on to their monthly bill. The 6494 households are picked up weekly. This assists the district in providing over 50% of the Athens County residents with curbside recycling and meeting our 25% residential/commercial recycling goal. In addition to City of Athens having residential curbside, there is a uptown franchise for commercial residents with recycling and composting services at a negotiated costs and reducing the impact of many different haulers driving down the brick lined streets of the City of Athens.

On the other hand, the City of Logan has up to 6 different haulers picking up just trash throughout the city which is leading to garbage trucks in the city almost every day of the week and as observed is wearing on the streets, alleyways and infrastructure of the City of Logan. Although there have been different approaches have been discussed, no resolution has been adopted as this plan is being written.

Due to the lack of willingness of haulers in the district to provide curbside recycling services, there is only one hauler, outside of city contracts, which is willing to provide those services to the number of residents that they have the capacity to serve and that is the Athens-Hocking Recycling Center. The haulers do not have the capacity to do recycling services on top of the waste pick up, because they are very small and their customers would not be willing to pay for those services. Our haulers can only afford to pick up garbage due to the low fees they charge for their waste hauling services.

Meanwhile our rural roads are being destroyed due to so many haulers driving on the roads trying to get as many customers they can in order to stay in business, the City of Logan has long been working to identify a way to reduce the harm so many garbage trucks are making to the city infrastructure. The trucks are too big and heavy for the alleyways in Logan, and that is where the sewer and water lines are and many of the alleys are not paved, so it is causing many problems having a free enterprise system for the city. They have considered requiring trucks to only pick up garbage only city streets (in the front of people's homes), going to a franchise system so there would only be one truck per week going down alleyways for the entire city or sections of the city. They have not resolved this issue as of yet.

The district cannot require cities, villages and/or townships to franchise solid waste services to save their residents money and protect and maintain their roads, alleyways and infrastructure with this free enterprise system.

Also, the biggest hauler in the district is Rumpke which came into the region in the last 10 years and they have been buying up the largest haulers in the district one by one. In 2022, they purchased the only landfill in the district, so they could provide recycling services with their resources, but they have not to date. They do bid on city and district contracts for recycling, but do not provide curbside recycling for their rural customers and by far charge the most money for their services than any other. They accumulate their customers by buying up the biggest haulers and assume their clients. If Rumpke provided rural recycling to their clients, we could increase recycling in the district 3-fold, but they are not interested in doing this at this time.

### **DROP-OFF**

The district maintains 22 sites throughout the district for single stream drop-off program of the following materials: paper, cardboard, metal cans, plastics 1-7 and glass. In 2021, the program collected 1452 tons of materials, which was picked up and processed by the Athens-Hocking Solid Waste District. This cost of the picking up 67 containers at 21 locations and processing the materials less the cost of the recycling materials rebate was \$293,426 dollars or \$202.08/ton. In 2022 rose to \$301,599 for 70 containers at 22 locations and \$328,000 with the rebate.

We have an agreement with AHRC which was written into the contract which give us a portion of the recycled materials sales which ends up reducing the cost, but it is still rising every year beyond inflation. This is due to fuel surcharges escalator, which is written into the contract) and the number of tons which they pick up and process.

We do get the benefit of getting the rebate for the goods recycled, but all in all it is not a good place to be. In 2021, it was 57% of the budget for our Drop-off pick ups which leaves you very little money to do much more than have drop-off programs. After speaking with other districts, it is very possible, the cost of bids for our Drop-off program may double in price, due to the cost of trucks, fuel and material rebates fluctuating so much, and no certainty in the markets.

This concerns the district a great deal about the future of the drop-off program, if faced with the doubling of our cost for picking up and processing materials, we will have to reorganize the program, perhaps cut the number of sites just as we are at capacity at our current sites. We anticipate that moving forward we would have to increase the number of times a week the container will need to be picked up from three (3) times a week to five (5) times a week at some sites.

If you take the population of the district and subtract the Cities of Athens and Nelsonville, the cost for the Drop-off programs is \$4.79 per capita for the district (61,271 people without curbside). The weight per capita for 2021 would be 47.40 pounds per capita for the district from the drop-off program.

# 2. Commercial/Institutional Sector Analysis

### **FINDINGS**

After reviewing the ADR for both the Commercial and Industrial Sector, the data is not consistent from year to year. Not sure if the surveys were done annually or the data was just prorated year after year until the 3-year use of survey data was done.

There were a number of observations and findings for these sectors.

- ❖ The majority of commercial entities at least in Athens County were serviced for their recycling pick up by Athens-Hocking Recycling Center. Other commercial sites were not reported on a consistent basis. A comprehensive list of these entities should be complied and AHSWD should contact them annually to get regular data so trends or issues can be addressed on an on-going basis.
- This is also the area of which AHSWD could find additional recycling opportunities and should identify strategies to best serve those businesses.
- There are many industries in the district which do and continue to recycle their waste materials.
- There are many opportunities for material exchange and to identify ways to use one companies waste for another one's materials.
- ❖ The data shows a decrease in industrial waste over the past few years and don't anticipate that number going up any time soon.
- ❖ After the District paid for recycling pick up for five years, the school districts have continued the service and are paying for it.
- ❖ We have been working with schools by giving a few presentations, visits delivering materials and containers, but the numbers at schools could be higher and work like to work with them to compost their food wastes.
- ❖ There is also a lack of educational materials at the middle and high school level for students, so it would be good to identify curriculums to share with the districts in the area.
- ❖ Athens and Hocking Counties are known for its fairs, festivals, gathering and large venues. Many of these have regular waste pick up services, but there is a real need to work with these entities to provide a recycling service and containers for these events. The City of Athens and City of Logan do have DORA (Designated Outdoor Refreshment Area) and both cities have selected Aluminum Cups for their visitors to use during certain times of the year and both have recycling containers in their downtown DORA spaces.

### CONCLUSION

After reviewing the data and findings, the district needs to build relationships and do outreach to the commercial and industrial sectors. Although the district is a member to both county's chamber of commerce, we should use this a starting point to assist the businesses that are active in the community.

We also have so many commercial, venues, fair and festivals, schools and local governments who are not recycling yet or have a hit or miss recycling program, so it makes a lot of sense to use this sector to increase recycling due to the volume it

contributes to the waste stream and could potentially lead to more programs and recycling systems to accommodate the volume of materials gathered for reuse and recycling,

The outreach could begin with a meeting, an assessment and encouraging the company to take steps inside the office and outside to find ways to reduce, reuse and recycle materials.

The district should reach out to these entities to ensure that the recycling of which they do gets reported, even though it may just go to the AHRC. In addition, the district should take steps to introduce the Ohio Materials Marketplace and Restore in Athens & Hocking County, Sutton Road Recycling Center, equipment, shredding and other outlets to take materials which they no longer need or want including furniture, books, equipment, metal, building or construction materials.

All in all, the district should do a simple guide for the venues, local government, commercial and industrial sectors to learn of all of the programs and resources they have access to in the community. This also may help lead to volunteers to do Keep Southeast Ohio Beautiful efforts.

# 3. Residential/Commercial Waste Composition Analysis

### **FINDINGS**

The District reviewed the Residential and Commercial Waste Composition and found it to be similar to the national figures for the normal waste stream. Below are specific findings:

- ❖ The Commingled Materials collected by the Athens-Hocking Recycling Center via curbside, drop-off, commercial and industrial materials 2021-2023 has seen a few changes:
  - Mixed Paper has seen a 16% drop from 1/3 of the waste composition to 13%; while office paper went down to 0.%
  - Plastics 1-7 has done up from 4.25% to 6.20%
  - Steel has gone down slightly from 1.46% to 1.25%
  - Cardboard has gone up from 53.99% to over 66%
  - o Glass went up from 7.4% to 11.7% which is interesting.

Material	2021	2022	2023
Mixed paper	29.15%	13.10%	13.10%
Office paper	2.60%	0.00%	0.00%
Plastic 1-7	4.25%	6.20%	6.20%
Film	0.00%	0.00%	0.00%
Steel	1.46%	1.25%	1.25%
Cardboard	53.99%	66.00%	66.00%
Alum.	0.94%	0.94%	0.94%
Glass	7.40%	11.70%	11.70%

- Cardboard has been steadily increasing in our district due to the rural nature of the district. We have a large online ordering and many commercial sites which generate much cardboard.
- ❖ Food Waste went down the past few years, due to COVID with the students not in Athens or Nelsonville and the lack of events and festivals.
- ❖ Drugs and Medical Waste-this is an emerging market for the district as our population is getting older and addiction is at an all-time high. Residents in Nelsonville recently surveyed their neighbors and a major concern was used needles throughout the city. They urged the AHSWD policy Committee to develop a program for used needles for addicts, but also people who are diabetic, allergic and on special medications.
- ❖ The needles are not welcomed at health facilities and people are not sure what to do with them and this causes injury by workers or residents who may have to handle the waste. This is also a problem at porta johns, parks and gathering due to the lack of proper disposal.
- ❖ Tires are a major issue for our rural district, because residents have to drive everywhere. Tire retailers make these questions to their clients, so people do not want to pay extra for disposal, so they take them home. Also, there are many shops who do not handle tires properly. This is why the district applies for Recycle Ohio grants to help people in the district get rid of tires. Although not lately, there are have not been
- ❖ Household Hazardous Waste are an issue for 11 months of the year, because every July we hold a household hazardous waste collection day. We alternate between the counties every other year. People are allowed to bring items for free and most of the material is used motor oil and paint. We have a very transient community in the city of Athens and a lot of rental properties, so people always have chemicals to get rid of especially when they have to move away, so we have a problem with having to tell people to dry out their latex paint cans or donate fresh paint to ReStore, but people always want to get rid of materials

today! This is an issue and would like to see what materials we could store at the Sutton Road Recycling Center safety without getting a permit.

- Electronics-Every sector of our economy has electronics and more and more of the materials we gather are electronics. We have filled roll-offs of electronics for recycling day events and we are now accepting them at Sutton Road Recycling Center. Many of these are broken and not fixable.
- ❖ Batteries-Every home now has some sort of batteries to be recycled. We have a Drop-off program where people can drop off their batteries at local libraries and other locations. This comes at an expense to sort, process and then recycle the batteries once a year. Many of the batteries, 80% at this time are Alkaline Batteries and cannot be recycled, but the public doesn't know what type of batteries there are and which are recyclable, so the District collects all of them.

### CONCLUSION

The Waste Composition will and has changed over the last five years and it will evolve over the next five years, so the District has to be aware of the materials that residential and the commercial sectors are generating and to identify ways to reuse or recycle those materials. Batteries are an example of this. Five years ago, the type and number of non-alkaline batteries grew and the demand for them in the recycling sector has and will grow in the future with new recycling facilities being added every year.

The District needs to be agile and be able to encourage the public to recycle new things and work to capture as much hard to recycle materials as we can. We also have to be able to expand our services and encourage recycling at multi-unit housing sites and commercial sites which do not currently recycle their materials. We have to capture those materials which are now being landfilled. We see these sectors as low hanging fruit and will focus on making sure that everyone has access to recycling and we are capturing all that can be reused or recycled.

# 4. Economic Incentive Analysis

The AHSWD has used economic incentives in the past to pay for the school's recycling containers and pick up for a period of five (5) years. The agreement with them was that they would continue with the service when the time period ended. This was a success. They do recycle with many schools requesting new containers and wanting educational materials to inform their students of the accepted materials.

During the new plan, we may consider doing pilot programs for multi-unit housing, start new areas for composting services, getting local government, venues and/or Airbnbs and cabins to recycle. Although we do not have money for large projects as we move along to reduce, recycle and divert waste, this may be the only way these sectors will do recycling with an easy nudge and incentive.

## 5. Restricted and Difficult to Manage Waste Streams Analysis

### **FINDINGS**

Currently, the AHSWD has worked very hard over the last few years to increase capacity for handling restricted and difficult wastes in the district. With our recycling days four times a year, we increased these items by inviting residents to bring unwanted items to recycling days and if we cannot reuse them, we recycle them and if they are not able to be recycled, then it goes in the garbage truck/roll-off. This has significantly increased our numbers of tonnage. We have been only able to do this with our partners: Athens-Hocking Recycling Center, Rural Action, New-to You Shoppe, Goodwill, Athens Township, Habitat ReStore, McKee's, Michel's Iron & Metal, Rumpke and Ohio University Recycling. All of these partners play an important part in taking items for reuse or recycling.

The mattresses as of late have gone for recycling through a program with Rural Action's Zero Waste program, where they go for recycling the materials. Rural Action has also taken all of our medical equipment for reuse to local, state and international use.

The batteries and bulbs are taken by Ohio University Recycling or AHSWD depending on the event. AHSWD sends these along with batteries collected by the Hocking County Health Department and AHSWD from area libraries and other host sites for recycling. These batteries are stored at the Sutton Road Recycling Center and processed and shipped once a year.

The Electronics, especially Televisions are collected and AHRC processes these and sends them to Accurate IT in Columbus.

The scrap metal donated at the Athens County events for the past 12 years has gone to benefit Habitat for Humanity's efforts to build affordable housing in the area. The other materials get reused or recycled at area thrift stores or goes off to recycling or disposal in the landfill.

We have also done township events and have begun working with townships to hold these comprehensive recycling days and they are quite successful but to do not get the numbers of participants as the big county wide events.

The Sutton Road Recycling Cetner was founded in April 2023 with the support of the Hocking County Commissioners and with the funding from Recycle Ohio Grant. Equipment, supplies and signage was paid to establish the center. This Center provides the opportunity to any resident to bring unwanted materials for reuse and recycling. Hocking County doesn't have the number of thrift and reuse shops as Athens County and we had the opportunity to expand from just collecting drop-off recycling to a

Center for Hard to Recycle Materials (CHARM). Residents, organizations, local government bring items there on an appointment only basis, due to the lack of bathroom facilities and water at the site. All of the items are then sorted and then various organizations and businesses collect the materials for recycling as the pallets or gaylords fill up. This was badly needed and is getting calls every week for dropping off items for the recycling center. Also, items get dropped off all the time and staff have to just clean up the items and put them in storage safely.

Partners in Athens County do take the same items as the Sutton Road Recycling Center, but the district would like to explore new office/recycling center space for residents to drop off materials, just like the Sutton Road Site.

We have a comprehensive list of items and locations inside and out where these items can go and we are building on this list all the time. The district would like to see a large CHARM facility in the district and would support the development of one to create a place and opportunity to collect all unwanted materials that are hard and easy to recycle. This could also provide businesses and organizations an opportunity to reuse, upcycle or recycle these items locally, create jobs and get more from the materials then just throwing them away.

### CONCLUSION

The amount of Hard to Recycle Materials are growing everyday as more and more items are being recycled to capture elements and metals in them to save resources and break down materials to get the best price for the goods.

If the District had access to a larger site, it could be an effective way for people or businesses to be able to get parts, materials and goods for reuse, upcycling and recycling for a better price. It would also allow us to get better prices, due to sorting items, the volume and create jobs. In the meantime, we will continue with the Sutton Road Recycling Center, work to develop a similar site in Athens County or support the development of one and also the larger more comprehensive CHARM site where we could offer the public and businesses a place to take their stuff.

## 6. Diversion Analysis

### **FINDINGS**

### **MATERIALS**

As touched upon above, the AHSWD has worked very hard over the last few years to increase capacity for handling restricted and difficult wastes in the district. With our recycling days four times a year, we increased these items by inviting residents to bring unwanted items to recycling days and if we cannot reuse them, we recycle them and if they are not able to be recycled, then it goes in the garbage truck/roll-off. This has significantly increased our numbers of tonnage. We have been only able to do this with our partners: Athens-Hocking Recycling Center, Rural Action, New-to You Shoppe, Goodwill, Athens Township, Habitat ReStore, McKee's, Michel's Iron & Metal, Rumpke

and Ohio University Recycling. All of these partners play an important part in taking items for reuse or recycling.

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## **Household Recycling**

The household recycling programs were discussed above in the Residential Commercial Analysis, but it is important to discuss the findings here as well. Although the district is meeting the minimum standard of over 25% recycling goal, the District can do better. Especially in the curbside programs, when city programs are compared to the subscription service as far as per capita, the city programs are not doing as well. It seems that when people sign up for curbside service for their garbage and recycling, they recycle more, whereas with the city programs, it is denoted as one charge and perhaps residents don't feel a need to recycle as much as they can.

It is also affected, especially in the City of Athens, that because the population is literally changing every year, the students are not participating as they should. I am not sure if this is a educational issue, a cart issue or that landlords of out campus housing are not sharing with their tenants the need to recycle.

In Nelsonville, although a fairly new program should have much more participation then they have. Is it the Districts, the hauler, the city, the landlord or the resident's fault.

Awareness needs to be raised in all areas to inform residents of the programs and some type of carrot/stick approach may need to be considered. The residents and the city do not benefit in any way if their residents are recycling or reducing the amount of garbage they are generating. Although there are volume controls on the garbage, the hauler picks up everything according to the contracts, because the cities do not want garbage to sit on the curb for a week until the next pick up.

Perhaps some type of provision should be written in the contract like the District has to reap some benefits for reducing garbage and increasing recycling. This way the cities, residents, the haulers and district all benefit from the programs.

### The Drop-off Program

The District's Drop-off Program meets the requirements for the district for access to recycling for residents. As we reach our capacity at some locations for recycling containers with three (3) times a week pick up at those sites, we will be faced with

having to consider a five (5) days a week pick up of the busiest sites. This will significantly increase the cost of the Drop-off programs. As the District approaches a new contract and a new plan, the District may have to consider alternatives to keeping the access throughout the counties and increasing the number of sites and the number of pick-ups a week.

This could be off-set if the City of Logan decides to have a curbside program, because as discussed above, the 401.40 tons of the 660.90 tons at drop-offs in Hocking County were the three (3) sites in Logan which is 61% of the tonnage (Green Twp., Hospital & Sutton Road). Green Township and the Hospital sites are at capacity and cannot handle any additional recycling. These sites are popular because as people come to work in Logan, they use the sites in Logan near their work. These sites are used by the

### **COMPOST**

Food waste, yard waste and wood debris are all able to be composted and used to make soil implement/soil/mulch. These are also big contributors to methane gas in landfills. Although some landfills are able to capture and burn the methane for energy, our landfill does not at this time.

Upwards of 20% of the waste stream is organic waste, this could be captured through programs, at homes or events and composted to make a product badly needed here in Southeast Ohio due to the nature of our clay soils. We are blessed to have four composting facilities more than 2/3 of the counties in Ohio, but so much more could be captured at the home level or program level.

Ohio University saw the advantages of composting years ago and has a comprehensive program for its Athens Campus. It uses the produced compost and mulch on the grounds of the university and runs out of it annually. They do not accept any outside waste currently for taking outside materials. We do however have the Athens-Hocking Recycling Center and Latta Earthworks which does accept outside waste and could easily sell the material and they do.

Hocking County is a net exporter of the compost and the materials do not stay in the district. There is great interest in Logan for composting, but there is not currently any facilities to take this material, so this is opportunity for the district to support an entity to build or expand service areas to capture and divert more waste and compost it.

Lastly, the District does have educational materials on compost, no real educational or awareness program have been done in years on how we could divert more waste and make soil.

# 7. Special Program Needs Analysis

### CABINS/LODGES/PARKS

The District needs to identify ways to increase recycling in the local cabins, lodges and parks. These sites are owned or operated by non-residents and have no economic incentive to recycle. It is also a challenge because our only curbside recycling hauler does not have the capacity to expand services in and around the hocking hills. Recycling at these sites is largely these sites would be another thing that cleaning crews would have to do and it takes time to sort, transport and recycle from these locations. Also, many of our parks in the region do not offer recycling at their parking lots, so visitors have no place to dispose of their recyclables, so they would have to take the materials with them back home or to one of the many drop-offs around the District.

### CONCLUSION

The District wants to work with the cabin/lodge and park owners and operators to identify ways to offer and/or partner with them to increase recycling at these locations throughout the District.

### LACK OF TRASH COLLECTION & FUND

#### **FINDINGS**

- It is reported that to and by local governments and health departments that there are many residents that cannot afford or have weekly trash service.
- Many report that residents cannot afford the monthly or refuse to pay for it, because it is expensive or haulers will not work with residents to deal with late or non-payment.
- The local health departments go to the homes of property renters or owners and give them a notice to clean up the property due to lack of trash collection service.
- > These issues are dangerous for residents, animals and the environment.
- Residents with lack of service also open burn their garbage another serious problem especially with our area being largely to the forest and rural in nature.
- Residents who receive HUD and other supportive housing do not have their trash service paid for if they live in a duplex or single-family home
- People who live in a multi-unit housing complex have trash service at their homes.
- Many residents do not have the funds after paying rent, food and utilities to pay for garbage service, so they don't have service at their place of residence.
- ➤ Except for City of Athens and Nelsonville, trash service in the District is free enterprise, so it up to the renter or home owners of a single family home or duplex to contract with one of the many haulers in the district.
- Garbage Collection ranges from \$20/month to \$37/month, which is a problem for many of our residents.

### CONCLUSION

This issue is one which will require a multi-agency committee to work on the issue, identify resources available and how to approach the situation. The District may lead the effort and conduct the workgroup and bring resources as needed to the problem in the meantime. This issue is also one that may require policy change at the state of national level to change public housing contracts.

It has been suggested that a separate fund be started to assist low-income individuals with trash service in the district. There are agency funds which can be applied for on a case-by-case business to pay for utilities and other expenses.

### **HOARDING**

According to the Mayo Clinic, they define hoarding as "Hoarding disorder is an ongoing difficulty throwing away or parting with possessions because you believe that you need to save them. You may experience distress at the thought of getting rid of the items. You gradually keep or gather a huge number of items, regardless of their actual value.

Hoarding often creates extremely cramped living conditions with only narrow pathways winding through stacks of clutter. Countertops, sinks, stoves, desks, stairways and all other surfaces are usually piled with stuff. You may not be able to use some areas for their intended purpose. For example, you may not be able to cook in the kitchen. When there's no more room inside your home, the clutter may spread to the garage, vehicles, yard and other storage areas.

Hoarding ranges from mild to severe. In some cases, hoarding may not have much impact on your life, while in other cases it seriously affects your daily functioning."

### **FINDINGS**

- Hoarding is taking hold in the District and is reported by social service agencies, fire and code enforcement and other organization to the local health departments.
- ➤ The local health departments go to the home or property renters or owners and give them a notice to clean up the property.
- > The next steps for the health department are to site the dweller and, in some cases, take the case to the board of health or the sheriff's department.
- ➤ We have had a number of notable cases and reoccurring cases, some of which have been on the books for years.
- ➤ The issue is a mental and personal health and not an enforcement issue unless the dwellers are dangerous to themselves or others.
- ➤ These cases are not simple or easy to fix, but need a comprehensive approach to the issue.
- Discussions have begun on how to assist the health departments, law enforcement and the prosecutor's office.
- ➤ The District has obtained ownership of three (3) roll-off containers for us by the district. These containers can be dispatched by filling out an application and to be delivered by a certain data and picked up to be disposed of at the landfill.

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<sup>&</sup>lt;sup>1</sup> https://www.mayoclinic.org/diseases-conditions/hoarding-disorder/symptoms-causes/syc-20356056

- The district also developed a brochure on "How to Tidy up Your Property" to assist people on steps on how to begin cleaning up with agency resources.
- This is not a simple fix, but this is very important to the region and the safety of our residents.

# CONCLUSION

This issue is one which will require a multi-agency committee to work on the issue, resources available and how to approach the situation. The District may not be the lead organization, but we will conduct the workgroup and bring resources as needed to the problem in the meantime.

# 8. Financial Analysis

### **FINDINGS**

- The District has been funded through Generation Fees, Tiered Fees and Funds which were from the split of the district from the Waste Hauling and Curbside Recycling Operation of the District.
- ➤ The District has operated under a deficit budget for the last five years, spending down the savings to very little at the end of 2024.
- > The District has never raised the Generation or Tiered Fees since the late plan.
- The District has had limited staff and resources since the split.
- ➤ There are great needs and with support, creative programs and partners, we could accomplish great things.
- Raising Generation Fees or Tiered Fees will affect residents of the county and low-income seniors and residents the most. Although it is a fee on tonnage and not customers, over time the haulers who collect garbage in the district would see an increase in generation fees and landfill will have to raise tiered fees on all customers from inside the district, outside of the district both in and out of state.
- > The district has no control over what haulers or the landfill charges their customers.
- ➤ Largely all of the services of the district are free to the residents, except for the fees for tires, televisions and bulbs, which the district works to keep these as low as possible.
- ➤ The District does not have a permanent office, and rents the Sutton Road Recycling Center.

# **CONCLUSIONS**

The Athens-Hocking Solid Waste District does an incredible work for the funds which are generated from Generation and Tiered Fees in the District. The District has not raised funds since the last plan, due to the funds from the split of the District and the Athens-Hocking Recycling Center. The District has to raise the funds necessary to take the district for the next 15 years.

After discussions, public comment, surveys and the review of what other districts have done, the policy committee considered many options to balance the budget for the next

15 years. We used the projected budget for 2025 with all of the expenses, we found a shortage of funds. It was proposed to have a new Education/Outreach Coordinator; Current and New Programming; grant funds to jurisdictions, law enforcement and the local health departments; new Drop-off Collection Program Contract for 2025 and the contracts for Household Hazardous Waste Collection Days and lastly operating Recycling Centers for Hard to Recycle Materials, but none of these were possible due to lack of funds. So the committee considered the following options.

Below are different ways to generate enough funds to fund the district:

- A. Increase Tiered Fees at the Rumpke Landfill
- B. Increase Generation Fee to residents in the District
- C. Raise each fee
- D. Use another fee stream--Designation or Fee on Improved Parcels in District
- E. Counties assist with Funds
- F. Any other Stream?

The first option considered was an assessment of what the neighboring district fees were and we found that most nearby districts were charging from 1.25 to \$3.00/ton for Generation Fees and on \$2.00/ton for Tiered Fees.

	Li	awrence Scioto	Southeast Ohio	Α	thens Hocking	GJMV	A	dams Clermont	CFLP
Туре		Rates & Charges	Designation Fee		Gen & Tiered	Tiered		Designation Fee	tiered
Fee		16/parcel	2.00/ton		\$1/\$2/\$1	\$1/\$2/\$1		3.00/ton	\$2/\$4/\$2
Fee 2					3.00/ton				1.25
Revenue	\$	854,688.00	\$ 1,275,990.00	\$	493,227.79	\$ 428,386.00	\$	725,394.94	
per capita	\$	6.34	5.63		5.23	4.09		3.13	
	53,41	18 parcels				•			•

The Policy Committee reviewed how the fee would be approved and who would assess the fee, name of the fee and how much the fee would generate, collected and assessed.

After discussing the matter, the Policy Committee decided to raise the fees to \$2/\$2/\$2 for tiered fees and to raise the Generation fee by \$4.00/ton from 2025-2028; \$5.00/ton from 2029-2033; and then \$6.00/ton from 2033-2040 with a \$30,000 contribution from each county each year.

This allowed for increase in come program areas including grants for the Health Departments and Law Enforcement to work with the District on illegal dumping and cleaning up untidy homes and increase in programming to work on priority issues. This funding does not include any funds for new staff or new major programs, but will allow the district to have match for grant funds when possible.

# 9. Education/Outreach Analysis

Below is a review of the minimum requirements as stated in the State Solid Waste Management Plan for Districts.

### **District Website**

The Athens-Hocking Solid Waste District maintains two web addresses; ahswd.org and recyclingtrail.com. Both of these web addresses goes to one main website which is updated and maintained by the District Director. The District also has a Facebook page for Athens-Hocking Solid Waste District and Recycling Trail which are more dynamic and is able to not only bring people to our website, but also we can do advertising from this platform of which many of our surveyed recyclers say they get their information. We have added a page for the Recyclingtrail.com and the information links for reuse, repair and recycle locations in the District and events and information.

The site is very simple in design and includes in the Heading: Sutton Recycling Center; Recycling Information; Recycle Days; Solid Waste Plan; About Us and Contact Us links. This site was redone in 2019 and is sufficient for our needs at this time. This website will be updated as we add additional programs and information as move forward.

## Comprehensive Resource Guide(s)

**MOVE ON:** The District has done an incredible job creating a number of comprehensive resource guides which were funded with the support of Recycle Ohio grant. The Move On Guide is a comprehensive Guide to getting rid of stuff and was targeted at attorneys, real estate companies and the general public as a guide when moving or emptying an entire home. This paper and online guide will be maintained, updated and printed as needed due to the nature of our community being so transient.

**RECYCLING TRAIL:** The Recycling Trail Map and Guide is a wonderful resource also funded with the support of the Recycle Ohio grant. This is a map and guide to everything reuse, recycle and repair in the district. This is not only a guide, but will be a great marketing effort to get tourists and residents to recycle, reuse and repair items in the District.

#### INVENTORY

The District maintains a comprehensive list of solid waste management infrastructure and updates this list in our recycling trail and Move On guide. The District also has a list of waste haulers available for residents and to pick from upon moving to the area or in need of new ones. This list also contains haulers who have dumpsters for hire.

### **SPEAKER**

The District has the District Director available to speak to any class, group or to the media as requested. The Director has over 35 years of experience speaking on various topics and especially about the issues of reuse, recycling and reducing waste. In order to keep the public, public officials and organizations in the district updated on an annual basis, the Director will work to visit each local government, schools as needed and civic and business organizations as requested.

The District is blessed with many organizations who work on reuse, recycling, conservation and composting, so if the District Director is not available, then they will ask others if they are available.

Although it was requested as part of this new plan to hire a full time outreach and education manager for the District, due to lack of funds this is not possible at this time.

### Goal Four: Outreach & Education

The District approaches outreach and education around events and times of the year. Waste and recycling is seasonal and the public always needs assistance in helping them get rid of their special wastes and what to do to reduce waste at different times of the year. This is also a way to get people to notice what they should be doing every day in reducing, reusing and recycling.

We utilize all forms of outreach and education for our programs and messages and use the most effective way to reach our public and our five target audiences: residents, schools and institutions, commercial and industrial sectors and public officials.

Below is a chart to illustrate our outreach methods for our outreach and educational materials and events.

	Flyers & Postcards or Printed Materials (brochures, guides, stickers)	Website & Social Media	Media via Newspaper & Radio & enewsletters of partner organizations	Third Places: libraries, stores, coffee shops, thrift, civic organizations	Attend or Visit to Organizations to speak, set up a booth or information sharing
RESIDENTIAL	Recycling Right, No to Contamination, Recycling Events, Move On Guide & Recycling Trail	Maintain Website & Social and Paid Media	Purchase paid & Free media in the newspapers, radio and on Facebook	Identify locations where people gather and put flyers & information for them to pick up	Attend community events, fairs, parades to share information
COMMERCIAL & INDUSTRIAL	Distribute Information about waste audits & Drop-off locations & Events	Links to Waste Audit information or referral	Share information to our local Chamber of Commerce Newsletters & Host events	Identify locations where people gather and put flyers & information for them to pick up	Identify four (4) visits per year of each to discuss audits & resourcees
SCHOOLS AND INSTITUTIONS,	Recycling Right, No to Contamination, Recycling Events, Move On Guide & Recycling Trail	Maintain Website & Social and Paid Media	Purchase paid & Free media in the newspapers, radio and on Facebook	Maintain communication with them and provide materials to share with community	Communicate often, visit annually & hold meeting via zoom with schools to identify opportunities
PUBLIC OFFICIALS	Recycling Right, No to Contamination, Recycling Events, Move On Guide & Recycling Trail	Maintain Website & Social and Paid Media	Purchase paid & Free media in the newspapers, radio and on Facebook	Maintain communication with them and provide materials to share with community	Communicate often, visit annually & hold meeting via zoom with schools to identify opportunities
NEW PROJECT OR PROGRAM	obtain input & goals from stakeholders via surveys and speakers	Introduce project, seek input, share success and lessons learned	Introduce project, seek input, share success and lessons learned	Share project objectives, scope, and success	Share & Celebrate project completion and recognize the contributions of team members

Our outreach is designed to go to people where they are and how they take in information. All of the sectors and audiences are not coming to the Solid Waste District for information, so we have to go to them where they are, live or spend their time.

Our goal for the residential sector is to have printed materials at places where they go, media they read or have materials available for them to see or pick up in the community.

The Commercial and industrial companies have much to do, so we reach out to them via associations where they participate and then visit them where they are or go as individuals or representing their business.

Public officials like when the District staff visits their meetings and shares new or upcoming events. They are acknowledged where they are and they can voice their issues at meetings or following up. It is a mission of the District to be familiar with local

officials to help address issues in their jurisdiction or to hold an event or have a drop-off location. Public officials also appreciate sharing information for them to then pass along to their residents. Schools and institutions have much to do, but by providing information to them, provide educational materials to distribute and ensure they have the resources they need; they are great partners in the effort to reduce, reuse and recycling materials. It saves them money and resources.

We target these sectors around events, seasons and with direct communications when needed. We use social media when possible and often to educate and inform the public and can answer questions where people can read the answers for themselves.

We also maintain landlines for those individuals who do not use social media and get our number on all of our printed and online information.

Finally, one must address that the District only has a Director to do all of the work in this plan, except when the District recruits an AmeriCorps Volunteer (when available) or has to hire people to assist them on these efforts. The more face to face time with the public, commercial and industrial, schools and institutions and public officials the better, but there is only one person paid in the District to do all these contacts, so we must rely on the outreach materials and avenues to communicate what we cannot do face to face.

# 10. Processing Capacity Analysis

### **FINDINGS**

Mixed Recycling

The mixed recycling processing capacity for the District of recyclables is only limited by the number of trucks and people that can be used to get materials to the Athens-Hocking Recycling Center. Since there is only one hauler who collects residential and commercial mixed recycling in the District at this time without contracts from the Cities of Athens and Nelsonville, the capacity is only limited by the number of trucks and people available to drive them.

There is processing capacity at the Athens-Hocking Recycling Center and they could be running another shift or two, if necessary, but it is limited by the number of trucks and licensed drivers of the Center. AHRC has also expressed a need for a cardboard screener at the beginning of their conveyer belt and increased storage & dock space at their facility.

# Composting Capacity

Ohio University has capacity at their two facilities for their needs and they currently do not take any public compost. Athens-Hocking Recycling Center does take contracted in the City of Athens compost from homes and businesses, but this is a opt-in program for residents. The Center itself would take drop-off composting and does take in compost from in and outside the district for composting and is not at capacity.

Our only for-profit Composting facility, Latta Earthworks does take drop-off composting from commercial and residential customers but they only take certain items, no food waste at this time. This is a one man operation, but is very interested in expanding operations and lines of compost.

- Besides the City of Athens Opt-In Composting program, there is no opportunities for residential pick up or drop off of composting (except for AHRC) on a grand level:
- Hocking County has no composting facilities in their county and they are a net exporter out of the district for compost waste.
- ➤ There is a great interest in Hocking County, especially in Logan for composting at the residential and commercial level.

There is a great need for equipment for our current composting entities and they have requested the following:

- Debagger
- > Horizontal Bailer
- Mobile Tub Grinder (large one for all entities to share)
- Anaerobic Digester
- Bagger for finished compost for selling compost to retailers.

Many of the organization which work in the District including AHRC, Rural Action, Ohio University, the District and many non-profits would like a District CHARM to be able handle materials on a District Level in order to get the quantities to ship off to recyclers as well as be able to handle additional materials. We would like the following upgrades and expansion to include the following:

➤ A 100,000 square foot District CHARM Facility, which could accept, sort, store and process many materials for reuse in the district or on the regional level and also be able to support reuse or remanufacturing or deconstructing materials for reuse or recycling. This facility could be open all year round and to be able to be an outlet for organizations and businesses drop-off or send off materials for reuse and recycling. We have many large entities which could contribute materials for reuse and recycling and the materials could be used for upcycling as well.

### Or at least

- The Sutton Road Recycling Center needs physical upgrades which include water and sewer services in order for staff to be able to work more than two hours at a time, in case of emergencies and to wash off equipment and clean the facility.
- A new Athens Charm facility to accept materials all year round as a drop-off facility for unwanted materials for reuse or recycling. This could be an old building which has storage & dock space available.

Either a new CHARM site or two sites, but this would significantly increase the ability of the District to reuse, recycle or deconstruct materials for reuse and recycling.

## CONCLUSION

The capacity of the District to increase recycling would just take money and people in order to do it. Unfortunately, our generation and tiered fees and county contributions will only take the District so far. The District will work with the many partners in the district to identify funders in order to make the capacity grow and the operations to expand to assist in the operation, volume and storage needs to increase reuse and recycling in the district.

# APPENDIX I ACTIONS, PRIORITIES, AND PROGRAM DESCRIPTIONS

### A. Actions and Priorities

1. Solid Waste Management District's Priorities

In compiling this plan update, much discussion centered around the solid waste management District's priorities. Four key areas surfaced as themes for the District's programming which include:

- ► Education Strengthen the public's knowledge of recycling and proper disposal of materials.
- ▶ Infrastructure Establishing additional recycling & composting infrastructure and services for collecting and processing materials equally in each county.
- ► Collection & Development of Markets Assist in increasing opportunities for collection of materials and develop and grow markets for recyclable materials. Grow a circular economy.
- ▶ Policy Identify and implement public policies and programs which improve recycling and proper materials management.

Realizing gaps in these four key areas, this plan update is placing emphasis and focus on:

- ✓ Continuing to build and grow awareness around the district and its mission.
- ✓ Conduct routine events to collect and dispose of reusable, recyclable, hard to recycle and hazardous materials.
- ✓ Growing the food waste composting segment of the district.
- ✓ Ensuring access for all those in the district have easy/convenient access to recycling.

### Programmatic priorities include:

- ✓ Provide curbside and drop-off recycling to as many people as possible with a focus on increasing recycling at the cabins, parks, multiunit housing, and commercial sector.
- ✓ Develop comprehensive educational programming on reuse, repair and recycling for all age groups and the skills to do them.
- ✓ Funding support for public health and law enforcement.
- ✓ Identifying, piloting and expanding composting district wide to reduce food and organics going to the landfill and identify ways to compost them.
- ✓ Facilitating research and development of new uses of recycled materials generated locally and made into new items in the district.

✓ Build and implement a framework that addresses litter, open dumping and unhealthy living within the district.

The District would like to implement all of our outlined programs and priorities within the next five years, but as long as there is only one full time employee, the District will have to work with partner organizations, consultants and contractors to do additional work to accomplish all our priorities.

Therefore, the District outlines three (3) priority levels below and will implement the priorities as staffing, funding and opportunities are available.

Level 1 priorities are current programs, which work well and are the basic programming to meet the recycling goals.

- Maintain Drop off locations
- 2 recycling days in each County =Spring & Fall= 4 events
- HHW collection event every year or develop a new program
- Attend fairs, festivals and do outreach to residential and commercial via flyers, radio, paper and social media
- Continue battery collection at all libraries
- Solicit grants when available for educational materials and programs, equipment & tire collections.
- Seek grants for Health Departments & Sheriff's Offices for Enforcement and clean ups
- Offer community clean up grant funds to townships & villages
- Expand & Renovate Sutton Road Recycling Center-=Drop-off & CHARM for materials
- Commercial & Industrial Sector Reduction and Recycling Programs
- Disaster Debris Assistance
- Upgrades to the Sutton Road Recycling Center and add additional materials to be collected and recycled.

Level 2 priorities are programs or projects which will be focused as opportunities and partners present themselves, and funding and staffing are gained.

- Add Education/Outreach Staff
- Expand Compost
- Inform Multi-Unit Family owners and residents of options to recycle
- Assist with partners on Move Out-Move In on campuses
- Develop strategies for tourist cabin outreach
- Assist and expand school recycling
- Help develop model contracts for communities and commercial entities
- Create programs or assist Large Events/Venue Recycling
- Collection of Tires Year Round

Level 3 priorities are programs or projects which will be focused as opportunities present themselves and partners, funding and staffing are gained and when Level 1 & 2 programming are met or Level 3 items garner more interest or funding options.

- Compost programming with jurisdictions
- Expand Medical Equipment & Pharmaceuticals recycle or proper disposal
- Target books for recycling expansion

- Create Incentive Grants for recycling for local governments, businesses and nonprofits to increase recycling
- Create Market Development Programs
- Conduct Feasibility Studies/Workgroups
- Support Compost Facility expansion or new one in Hocking County
- Expand Municipal Corporation/Township Assistance

There are also large ticket items which many communities and parties have expressed an interest in as a priority. These would require major commitment from the District or the Southeastern region.

- Expansion of Curbside & Drop-off Programs
- Expand Staff for doing waste audits, assistance for business & industry to bring recycling facilities to the region (glass, solar panels, cardboard, paint, freon
- Bio-digester or system to deal with Sewage Sludge
- Tub Grinder
- Regional Recycling for creating jobs and separating materials at a regional CHARM
- Expansion of Composting Program into Hocking County and residential programming
- Supporting Regional CHARM and creating jobs
- Workforce Development Program for expanding staffing options and benefits.

## B. Programs

# Residential Recycling Infrastructure

The Athens-Hocking Solid Waste District (AHSWD) does not haul garbage or recycling materials. The District is a free enterprise system, except in the Villages of Coolville, Glouster and the Cities of Nelsonville and Athens, which are all in Athens County.

On May 20, 2024, the Athens-Hocking Solid Waste District Board voted to seek a parcel fee to purchase the Athens-Hocking Recycling Center's (AHRC) land, material recovery and compost facility. It was the intent for the District to lease the facility to the newly formed Southeastern Ohio Recycling Terminal Council of Government (SORT) to haul, collect and process recycling and trash for contracts which the AHRC held at the time of the formation of SORT. After the public hearing and voting process the proposed parcel fee was voted down. Therefore, AHRC's land and facilities will continue to be owned by AHRC and SORT will lease the facility until the mortgage is paid off and then they will own the property for the Council of Governments.

SORT will work with those communities, commercial and governmental entities to offer recycling services performed in the district as well as any other entity which whom chooses to use the services. SORT will maintain the facility in good working order and be able to expand services as required to keep recycling processing local and be able to ensure the historical investment will be ensured for years to come.

Curbside Recycling Services

# Non-Subscription Curbside Recycling

The City of Athens and Nelsonville both have curbside recycling for their residents and it is expected that they will continue through the planning period. We will continue working with them to inform, share and support the communities and provide special collections to their residents.

ID	Name	Start Date	End Date	Goal(s)
NCS1	City of Athens Work collaboratively on education and special collections.	On-going	2040	1,2
NCS2	City of Nelsonville Work collaboratively on education and special collections.	On-going	2040	1,2

Our on-going goals with these communities are to:

- 1. Work collaboratively on education, resources and special collections for communities which have curbside collections.
- 2. Assist local governments to identify options and provide technical assistance and resources on contracts and avenues for them to consider.
- 3. Hold events and share information and resources with communities and residents about how to recycle right.

# Subscription Curbside Recycling

Our goal is to work collaboratively with haulers and residents on education, increase participation and reduce contamination and continue special collections.

ID	Name	Start Date	End Date	Goal(s)
SC1 SC2	Assist Communities to expand services when possible.	On-going	On-going	1,2
SC1 SC2	Work collaboratively on education and special collections and reduce contamination	On-going	On-going0	1,2

# <u>Drop-off Recycling Locations- Full-Time, Rural Drop-offs</u>

# **Drop-off Recycling Locations**

In 2015, all of the District's drop-off sites became single stream recycling and were present full-time. The District will continue to provide drop-off recycling sites throughout the two county area. Drop-off sites in the district are the main avenue of household recycling in the district and it is a must that they are maintained.

We must also use the sites for education and outreach for our programming. Some of the sites will need to be upgraded during the plan period to enhance the site and ensure that it does not become a place to dump materials unwanted at the collection sites. Early in the planning period, if not before, we will need to increase the number of pick-ups per week for almost all the sites.

Name	Start Date	End Date	Goal(s)
Keep Drop-off sites and monitor a variety of elements regarding drop-off recycling sites such as locations, public feedback, underutilization, collection frequency, and excessive abuse from contamination and dumping.  Based on this continual monitoring process, the District may adjust the drop-off program on an as-needed basis. Any programmatic changes will maintain at least a 25% recycling goal for each County of the District.	On-going	2040	1,2
The District will maintain the stand-alone signs for each permanent District drop-off site. Signs will include the District's name and contact information as well as other helpful information.  Signs will be designed to improve drop-off site visibility and to further the District's "brand." Upgrade & formalize Drop-off locations with fences, concrete pads, cameras, signage, etc.	On-going	2040	1,2
The District will revise its contracts to specify acceptable service standards for program operators to reduce problems such as container overflow from continuing. The District reserves the right to contract for the drop-off program with the private sector, public sector or hybrid arrangement or operate the program itself. The District also reserves the right to bid out the contract for drop-off services as needed to ensure a cost effective and high quality program is operated for the residents and businesses in the District.	On-going	2040	4
Identify and implement strategies to continue to reduce litter, illegal dumping and contamination at Drop-off locations	Continue	2040	1,2

Current Full-Time Drop-off Sites in the District

ID#	Name of Drop-off Site	Service Provider Athens- Hocking Recycling Center	County
FTR1	Green Township	AHRC	Hocking
FTR2	Sutton Road	AHRC	Hocking
FTR3	Benton Tw p - Tow nship Maintenance Bldg.	AHRC	Hocking
FTR4	Good Hope Twp Garage	AHRC	Hocking
FTR5	Marion Twp Bldg.	AHRC	Hocking
FTR6	Murray City Village Ward Twp	AHRC	Hocking
FTR7	Starr Township Bldg	AHRC	Hocking
FTR8	Laurelville Village Salt Creek Twp	AHRC	Hocking
FTR9	Logan City - Hocking Valley Community Hospita	AHRC	Hocking
FTR10	Carbon Hill/Ward Twp - Ward Township Bldg	AHRC	Hocking
FTR11	Gibisonville Laurel Twp - Gibisonville Commun	AHRC	Hocking
FTR12	Albany Village Lee Twp - Township Building	AHRC	Athens
FTR13	Amesville - Athens County Engineer Outpost	AHRC	Athens
FTR14	Buchtel Village/York Twp - Village Hall Parking	AHRC	Athens
FTR15	Canaan Tw p - Tow nship Garage	AHRC	Athens
FTR16	Coolville Village Troy Twp - Township Garage	AHRC	Athens
FTR17	Glouster Village/Trimble Twp - HAPCAP Bldg.	AHRC	Athens
FTR18	Guysville/Rome Twp - Marathon Station	AHRC	Athens
FTR19	New Marshfield Village Waterloo Twp - New I	AHRC	Athens
FTR20	Shade Village Lodi Twp - Shade Community C	AHRC	Athens
FTR21	Village of Chauncey - Behind Marathor	AHRC	Athens
FTR22	Athens Township - Richland Area VFD	AHRC	Athens

# Multi-Family Unit Recycling (MFU)

This plan addresses low hanging fruit in that by working with multi-unit family housing owners and operators, we can add many more recycling for residents who are not served at their homes. We will work to identify the latest in MFU resources and identify ways to encourage them through pilot programs, providing incentives and educational materials.

We will also work with MFUs to develop programs and information about moving in and moving out resources, using our current Move On and/or recycling trail information and partnering with other organizations.

Name	Start Date	End Date	Goal
Develop a Workgroup to identify options for MFU to	Priority 2	On-going	1,2
Reduce waste being dumped into dumpsters at MFU			
and give all residents of the district and opportunity to			
recycle at home.			
Develop a plan and outreach to MFU owners to identify	Priority 2	On-going	1,2
ways to encourage reduction and recycling, especially			
move-out at their locations.			
Consider a pilot program and Identify resources to	Priority 2	On-going	1,2
purchase bins, containers and outreach for MFU			
housing			
Provide best practices, educational materials and bins	Priority 2	On-going	1,2
for the MFUs			

# Other Residential Recycling Programs

We will work with MFU and universities and colleges on moving in & out. We will partner with the mental health agencies, health departments and law enforcement to assist them and families in unhealthy living/hoarding situations.

MOVE IN MOVE OUT	Start Date	End Date	Goal
Work with Universities and Colleges on a	2024	On-going	1,2
comprehensive plan for Move-In and Move Out of			
dorms, rentals and off campus housing			
Hoarding/Abandon Homes or Dwellings	Start Date	End Date	Goal
Work with Land Banks in the District to assist them with resources and information regarding the safe disposal of materials and to recycle as much material as possible.	On-going	On-going	4,7
Work with Mental Health Officials, Health Departments, MFU and landlords and Law Enforcement to develop a program to assist families with Hoarding and developing health solid waste disposal practices.	2025	On-going	4,7

# Other Residential Recycling Programs (list individually below)

Tourist Cabins	Start Date	End Date	Goal
Partner with Tourist Cabin and Housing Units to educate and inform visitors of the Recycling Trail and where to recycle in the area as well as expand curbside or drop-off programs to accommodate them.	Priority 2	2040	1,2
Develop outreach plan for Cabin/Airbnb lodging to encourage recycling/composting/safe disposal of materials of tourists	Priority 2	2040	4
Partner with all haulers to identify opportunities for growth.	Priority 2	On-going	2
Work with commercial and government entities to identify ways to provide recycling services in the district or partner organizations and businesses.	Priority 2	On-going	4

## **Commercial/Institutional Sector Reduction and Recycling Programs**

# School Recycling

The District provided recycling containers to all school districts for a period of five years and then they began paying for their pick up. The AHSWD will continue to provide boxes, labels, and related supplies to K-12 schools in Athens and Hocking Counties upon request when funds are available. We will do outreach annually to refresh their materials and containers and also partner on beginning to compost, educational programming and a festival by 2028. The District will work with partner organizations and develop materials to assist in the education of students on recycling as best we can.

Name	Start Date	End Date	Goal
Support Local School Districts to continue to recycle on site and increase the opportunities to divert waste.	Ongoing	Ongoing	1,2
Our goal is to develop partnerships with other organizations and partners to inform and educate students about recycling at schools and at home.	Priority 2	Ongoing	3,4
Hold annual Zoom call with school leaders about upcoming events, any changes to the recycling program and identify needs at the schools with equipment or materials to encourage recycling.	Priority 2	Ongoing	1,2
Explore with local composting facilities to develop a program in local schools or get composting started at all of the schools with an on-site composting program.	Priority 2	Ongoing	1,2,4
Develop a middle school Recycling Festival for all district middle schoolers.	2027	Ongoing	4

## Collection Services (small businesses, government offices, etc)

Our efforts are to provide local governments with information and resources to make choices about waste management. This includes working with providing model contracts, developing a Solid Waste Management Guide for all jurisdictions.

Name	Start Date	End Date	Goal
	Priority 2	Ongoing	4
Develop outreach plan for Cabin/Airbnb lodging to encourage recycling/composting			
	Priority 2	Ongoing	1,2
Encourage haulers and entrepreneurs to develop and expand collection services.			
	Priority 2	On-going	2
Work with all haulers to identify opportunities for growth.			

Work with commercial and government entities to identify ways to provide recycling services by the district or partner organizations and businesses.	Priority 2	On-going	4
Develop and maintain resources and information available on Collection Services to be shared with small businesses, government offices and commercial entities. The District will work with haulers to obtain tonnage statistics for communities with curbside recycling, as well as clarify residential service area boundaries.	On-going	On-going	1,2

# Large Venue Recycling

Name	Start Date	End Date	Goal(s)
Our goal is to develop partnerships with organizations and businesses to inform and educate fairgrounds, fairs, events and venues about recycling and composting.	Priority 2	2040	4
Develop a comprehensive waste assessment and work with them to develop a program for each of their venues, festivals, and fairs	Priority 2	2026	1,2

# **Commercial Recycling**

In the past, the District assisted commercial businesses with resources and technical assistance as requested. Over the last few years, the District has been doing outreach to each of the Chamber of Commerce organizations to share information and participate in activities.

Commercial Recycling is low-hanging fruit to increase recycling rates for commercial businesses. We will work within our local chambers and associations to identify ways to assist businesses through waste audits, model contracts and ways to reduce waste. The District will continue to provide recycling education through presentations and information posted on its website. Technical assistance for implementing or expanding a recycling program will also available to commercial businesses and industries upon request.

Name	Start Date	End Date	Goal(s)
Our goal is to develop partnerships with other organizations and businesses to inform, educate and provide resources about recycling and composting. Commercial cardboard collection services are anticipated to continue and we can work to have shared services at certain areas in the district.	On-going	2040	4

Conduct Waste Assessments/Waste Audits as requested and/or needed. Work with partner organizations to assist with these. 4/year at a minimum	On-going	2040	4
Our goal is to collect model contracts to share with businesses, governments and organizations to review before signing a waste contract for waste, recycling and composting services.	2025	2040	4
The district will continue our Recycling Hero Awards given out during National Recycling Week (November 15).	On-going	On-going	4

# Industrial Sector Reduction and Recycling Programs

Although we have not included data on generation or projections, there are still ways for the District to assist with the Industrial Sector. In the past, we have provided assistance when asked and resources. Partner organizations such as Rural Action and Athens Hocking Recycling Center have provided assistance when funds were available.

We will seek out 4/entities a year to ask for them to report their recycling and identify what assessment, recycling, disposal and composting needs they have and how we can help. We will work within our local chambers and associations to identify ways to assist businesses through waste audits, model contracts and ways to reduce waste. The District will continue to provide recycling education through presentations and information posted on its website. Technical assistance for implementing or expanding a recycling program will also be available to industries upon request. We will recognize them throughout Recycling Hero awards as warranted.

Name	Start Date	End Date	Goal(s)
	On-going	2040	1,2
Our goal is to develop partnerships with other organizations and businesses to inform and educate venues about recycling and composting.	continue	2040	1,2
Conduct Waste Assessments/Waste Audits as requested and/or needed. Work with partner organization to perform these at least 4/year.	Priority 3	2040	1,2
Our goal is to collect model contracts to share with businesses, governments and organizations to review before signing a waste contract for waste, recycling and composting.	2026	2040	1,2
The district will continue our Recycling Hero Awards given out during National Recycling Week (November 15).	On-going	On-going	1,2

# Restricted/Difficult to Manage Wastes

The District intends to conduct two (2) collection events per year in each county during the planning period. The District may alternate collection events from year to year for each county for some of the materials. The District will continue to identify ways to expand the materials collected at the recycling events by bringing in partner organizations.

The District will work to expand the Sutton Road Facility for these and regular reusable items to be reused or recycled and move from a "by appointment only" to regular drop-off times.

The Sutton Road Recycling Center will work to expand the amount and type of materials collected as possible. It is also the intention that when the facility is renovated to include water, restrooms, heating and cooling and electricity, this facility will house the staff of the district.

Name	Start Date	End Date	Goal(s)
The District will seek funds to renovate the facility at the Sutton Road Recycling Center and move offices to ensure regular operating hours for people to drop off materials.	Priority 2		
The district will maintain and improve ways to repair, reuse or recycle difficult or hard to manage wastes at Sutton Road, collection events and with partnerships in the district.	On-going	2040	1,2
Strengthen efforts through education and publicity to reach the public about resources to redirect hard to recycle and hazardous materials from the landfill to reuse, repair and recycling	2026	2040	6

### Yard Waste

The registered compost facilities and municipal leaf collection programs operating during the reference year are expected to continue operating. Neither the facilities nor the collection programs are operated by the District.

Name	Start Date	End Date	Goal(s)
Develop relationships and partner with local governments	On-going	2040	1,2
Educate the public on composting with literature	Priority 2	2040	1,2
Work with jurisdictions to develop their own program for yard waste and woody debris by holding a workshop on innovative uses of yard waste and resources available to them.	Priority 2	2040	1,2

### Household Hazardous Waste

Since the last plan was developed, there have been Household Hazardous Waste Collection events held in alternating counties, except for 2020 (COVID). We average between 250-400 cars from the District and collect all of the usual materials. By far, paint and motor oil are the top materials collected and these are the same materials that there

are alternative programs available, but also could be developed to reduce the amount of those materials collected by our contractor, thus reducing the fee.

The District intends to continue to conduct collection events during the planning period in both counties. The District may alternate collection events from year to year for each county. The District cannot commit to conducting collection events each year of the planning period. Decisions on whether to conduct events will be based on District fund availability and availability of staff resources.

When the Sutton Road Recycling Center gets renovated, it is the goal of the District to begin collecting the top two materials which are collected at the Collection Days- Latex Paint and Motor Oil as long as it is feasible to do so. Other materials will be collected which are allowable by the District, Hocking County Commissioners (the owner of the facility) and the law.

Name	Start Date	End Date	Goal(s)
Hold a Collection Day annually in one of the counties and	On-going	2040	1,2,6
then alternate the next year to the other county			
Answer calls and emails and encouraging drop-off of batteries at local libraries, motor oil at retailers and paint –dispose of in garbage after drying out.		On-going	4
Identify ways and develop a comprehensive plan to handle Household Hazardous Materials between annual events and divert oil and paint from collection events.	On-going	On-going	1,2,6

# Scrap Tires

The District has always worked with Ohio EPA, townships, cities and in each county to hold scrap tire events when funds were available. The District has also worked with townships and counties to store securely abandon tires in their jurisdictions right of ways at local sites which have registered with Ohio EPA for their pick up. The District also has worked with the Health Departments and Law Enforcement to provide opportunities for townships, cities and county offices to drop off their abandoned tires for collections through the scrap tire programs. The District has also secured funds from the Recycle Ohio Grant to collect tires and the funds go to hiring staff and a licensed tire transporter to take tires to an approved tire recycler.

The District intends to conduct collection events during the planning period in both counties. The District may alternate collection events from year to year for each county or simultaneously conduct events. The District can commit to conducting collection events each year of the planning period, but this is dependent on funds and grants. Decisions on whether to conduct events will be based on need and requests.

Name	Start Date	End Date	Goal(s)
Hold annual tire drives if funds are available	On-going	2040	1,2
Continue to apply for Scrap Tire Recycle Ohio Grants	On-going	On-going	1,2

Work with townships to sign up to be scrap tire recycling sites	On-going	On-going	1,2
Have a shipping container for jurisdictions and agencies to send abandoned tires in the public right of way to be picked up Ohio EPA for free	On-going	On-going	1,2
Identify and maintain a list of local retailers which will take non-customer tires for recycling. Also, check in with retailers about collection events, securing their tires and using a licensed transporter	On-going	On-going	1,2

## Electronic Equipment

The District intends to conduct collection events during the planning period in both counties. The District may alternate collection events from year to year for each county. The District cannot commit to conducting collection events each year of the planning period. Decisions on whether to conduct events will be based on District fund availability and availability of staff resources.

We also will collect electronic equipment at the Sutton Road facility as long as the program can afford to pay for the pickup of the materials.

Name	Start Date	End Date	Goal(s)
Our goal is to develop partnerships with other organizations and businesses to inform and educate the public, government and businesses venues about recycling.	On-going	2040	1,2
Maintain Sutton Road Recycling Center to accept materials for recycling and repair.	On-going	2040	1,2

### Lead-Acid Batteries

Name	Start Date	End Date	Goal(s)
Maintain Sutton Road Recycling Center to accept	On-going	2040	1,2
materials for recycling and continue to accept these in			
the battery collection program and events.			

**Appliances** 

Name	Start Date	End Date	Goal(s)
Maintain Sutton Road Recycling Center to accept	On-going	2040	1,2
materials for recycling and lists of businesses for repair.			

# Pharmaceuticals/Medical Equipment/Medical Wastes

As discussed in a number of areas, there is a great need to identify strategies for the proper disposal of these wastes and equipment. By providing and supporting the collection and redistribution and proper disposal will provide a way to reduce and recycle of this special waste and the protection of the community.

Name	Start Date	End Date	Goal(s)
Develop a working group to develop a comprehensive	Priority 2	2040	1,2
plan to handle and disposal of materials.			
Develop partnerships with organizations, health departments, medical facilities and businesses to inform and educate the public, government and businesses venues about proper disposal.	On-going	2040	1,2
Develop an educational program and/or collection events for the proper disposal of medical wastes, drugs, needles	Priority 2	2040	3
and supplies and equipment.			

### **Books**

Being from a county with the Ohio University and Hocking College and many school districts and regional libraries, there is a great need to identify avenues for the reuse and recycling of books. Ohio University, AHRC, Rural Action, the District and libraries have all collected books for reuse, resale and recycling and our goal is to continue this and alert the public of all of the possibilities for them in the future via Recycling Trail & Move On Guide.

Name	Start Date	End Date	Goal(s)
Our goal is to develop partnerships with other organizations and businesses to inform and educate the public, government and businesses venues about reuse and recycling of books and how valuable the paper is to recyclers.	On-going	2040	1,2
Include more information in the Move On Guide, website and recycling Trail information about book recycling and options.	On-going	Ongoing	1,2

# Other Material Specific Programs

### Food Waste

Name	Start Date	End Date	Goal(s)
Develop a working group to develop a comprehensive plan to reduce, reuse and handle and disposal of food and wastes. Our goal is to develop partnerships with other organizations and businesses to inform and educate the public, government and businesses venues about reuse and recycling.	2025	2040	2
Develop partnerships with other organizations and businesses to inform and educate the public, government and businesses venues about food rescue, reuse and recycling food waste.	On-going	2040	1,2
Develop a Food and Yard Waste Education Campaign on how to compost.	Priority 2	2040	2,3

Encourage and assist residential, commercial and	Priority 2	2040	2,3
industrial sectors to identify ways to reduce and compost			
their food waste.			
Partners with local governments and entities to develop	Priority 2	2040	2
a compost facility for Hocking County.	-		

#### Funding/Grants

#### Incentive Based, Improvement & Market Development Grants

Name	Start Date	End Date	Goal(s)
Develop a committee to develop the grant program, who is eligible, project objectives, submission information and schedule for them	Priority 3		
Develop new grant programs to assist entities to reduce, reuse, upcycle or recycle materials.	Priority 3	2040	1,2
Continue grant programs when funds are available to get provide entities funds to improve and clean up their communities.	Continue	2040	1,2,7

#### Market Development Programs

Name	Start Date	End Date	Goal
Identify ways to support local businesses, individuals and governments to develop local markets and the development of goods made from materials, reused, recycled or diverted waste.	On-going	On-going	9
Work with the Ohio Materials Marketplace to recruit and develop opportunities for local companies and entities to promote the reusing, recycling goods to diverted waste.	On-going	On-going	9

#### Feasibility Studies

The District may conduct special feasibility studies during the planning period to assist communities or entities that are considering developing recycling programs. The studies would assist the communities or entities in determining if the proposed recycling program would be feasible and/or cost effective to implement. A community or entity would need to request assistance from the District and the District would conduct the study if approved by the Policy Committee and if there is sufficient funding to conduct the study.

Name	Start Date	End Date	Goal
Conduct Feasibility Studies as needed to assess issues	On-going	On-going	9
and develop comprehensive solutions locally to			
develop a circular economy.			

#### Workgroup/Roundtable

The District has had a number of workgroups over the years, including plastic bag recycling, composting, reusing acid mine waste, recycling, Composting is one that continues and we are working to increase composting and resources as needed

Name	Start Date	End Date	Goal
Develop workgroups to identify ways to solve issues or	On-going	On-going	1, 2
problems in the district.			

#### **Facilities**

Materials Recovery Facilities/Recycling Centers

Name	Start Date	End Date	Goal
Purchase, maintain and expand as needed the Athens-	On-going	On-going	1
Hocking Recycling Center which will be purchased			
Work with materials recovery facilities to assist them in	On-going	On-going	1
providing affordable avenues for household and			
business materials. This may include identifying			
partnerships, funding or infrastructure to support			
recycling in the district.			
Maintain and expand the Sutton Road Recycling Center	On-going	2040	1,6
to accept all reusable and recyclable materials			
Establish an Athens County Recycling Center for reuse	2026	2040	1,6
and recycling hard to recycle materials similar to the			
Sutton Road Recycling Center			

#### Landfills

Name	Start Date	End Date	Goal
The district will maintain a good working relationship	On-going	On-going	7
with all landfill sites in the district and work with them to			
inform the public the programs and policies of the site.			
Maintain the Pay as you Throw programs.	On-going	On-going	7

#### Composting Facilities

The District has had a number of workgroups over the years, including plastic bag recycling, composting, reusing acid mine waste, recycling, Composting is one that continues and we are working to increase composting and resources as needed

Name	Start Date	End Date	Goal
Purchase, maintain and expand as needed the Athens-	On-going	On-going	1
Hocking Composting facility which will be purchased in			
2024.			
Work with local composting facilities to increase	Priority 2	2040	1
resources, programs and capacity for composting in the	-		
area.			

Composting is a high priority for the district and we will work to increase capacity at the household, community and district level to reduce organic and food wastes.

#### Award/Recognition/ Recycling Hero Award

Since 2021, the District has awarded Recycling Hero Awards to individuals, businesses and nonprofits, who demonstrate a commitment to recycling and did great work that year

which should be recognized. The District releases the winners on National Recycling Day, November 15<sup>th</sup> each year and give certificates and does news releases and social media.

Name	Start Date	End Date	Goal
Annually recognize individuals, businesses,	On-going	On-going	4
governments who excel in Reuse, reduce, recycle in			
the district.			

The program is given out in November and recognizes heroes who make a difference. We post these on our social media and do a news release.

#### **Other Programs**

#### **Data Collection**

Name	Start Date	End Date	Goal
Develop an annual reporting card or avenue for	2025	2040	1,2
commercial, industrial, schools to report recycling and			
diversion of waste.			

#### Health department support (Allowable Use 3)

Name	Start Date	End Date	Goal
Provide with technical and program assistance for	On-going	On-going	3
unsafe living conditions through programs and grant			
funds.			

#### Open dump/tire dump cleanup

Name	Start Date	End Date	Goal
Working with the Sheriff's Department and Health	2025	On-going	7
Departments work to develop a litter/open dumping			
hotline for people to report.			
Develop strategies to reduce open dumping and	Priority 2	2040	7
burning in the district.			
Develop an education campaign to reduce open	Priority 2	2040	7
burning garbage and materials.			
Work with health departments & law enforcement to	Continue	On-going	7
provide assistance with dumpsters, supplies and			
educational materials			

#### Litter law enforcement (boards of health and sheriff offices) (allowable use 7)

Name	Start Date	End Date	Goal
Facility and/or Participate in Keep Southeast Ohio	On-going	On-going	7
Beautiful			
Provide grants annually to support the efforts in the	2025	On-going	7
district by the health departments & law enforcement			

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Work with health departments & law enforcement to	Continue	On-going	7
provide assistance with dumpsters, supplies and			
educational materials			

#### **Municipal Corporation/Township Assistance**

The District wants to foster good working relationships with all 41 jurisdictions in the District.

Name	Start Date	End Date	Goal
Develop partnerships with other organizations and	On-going	As Needed	4
businesses to inform and educate the Municipal			
Corporation Townships about reuse and recycling.			
Partner on Recycling, Clean up Days, Litter Pick ups	Continue	On-going	6
and Scrap Tire events in the community			
Grant Program for Recycle/Clean up Days Continue	Continue	On-going	4
grant program for cleanup days in townships and			
villages as needed.			

#### **Disaster Debris/Disaster Assistance**

Name	Start Date	End Date	Goal
Work with the Emergency Management Agency to assist them when dealing with Disasters.  The District provides financial assistance to manage debris resulting from natural disasters such as flooding or tornadoes when funding is available.	Continue	On-going	1,2
Develop model contracts and a comprehensive list of contractors to assist with disaster relief.	On-going	On-going	1,2

# APPENDIX J: REFERENCE YEAR OPPORTUNITY TO RECYCLE AND DEMONSTRATION OF ACHIEVING GOAL 1

Athens Hocking solid waste district has two choices to demonstrate achieving waste reduction and recycling goals in accordance with Ohio's 2020 State Plan. The District chooses to demonstrate Goal 2, which is detailed in Appendix K. Thus, Appendix J is not required.

## APPENDIX K WASTE REDUCTION AND RECYCLING RATES AND DEMONSTRATION OF ACHIEVING GOAL 2

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

Year	Population	Recycled	Disposed	Total Generated	Waste Reduction & Recycling Rate (%)	Per Capita Waste Reduction & Recycling Rate (ppd)
2021	94,653	22,013	58,322	80,335	27.40%	1.27
2022	94,536	25,619	58,142	83,761	30.59%	1.48
2023	94,418	25,161	58,070	83,231	30.23%	1.46
2024	94,301	25,213	57,998	83,211	30.30%	1.47
2025	94,184	25,214	57,926	83,140	30.33%	1.47
2026	93,981	28,219	57,801	86,020	32.81%	1.65
2027	93,778	28,325	57,676	86,002	32.94%	1.66
2028	93,575	28,437	57,551	85,988	33.07%	1.67
2029	93,372	28,553	57,427	85,980	33.21%	1.68
2030	93,169	28,676	57,302	85,978	33.35%	1.69
2031	92,923	28,805	57,151	85,956	33.51%	1.70
2032	92,678	28,941	57,000	85,940	33.68%	1.71
2033	92,432	29,083	56,849	85,931	33.84%	1.72
2034	91,187	29,232	56,083	85,314	34.26%	1.76
2035	91,941	29,389	56,546	85,935	34.20%	1.75
2036	91,672	29,553	56,381	85,934	34.39%	1.77
2037	91,403	29,726	56,216	85,941	34.59%	1.78
2038	91,134	29,907	56,050	85,957	34.79%	1.80
2039	90,865	30,098	55,885	85,982	35.00%	1.81

Sources of Information:

Sample Calculations:

Total Generated = Recycled + Disposed

Waste Reduction & Recycling Rate = Recycled / Total Generated

Per Capita Waste Reduction & Recycling Rate = (Recycled x 2000 lbs/ton) / (Population x 365 days)

Assumptions:

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

The Ohio EPA 2020 State Plan no longer requires Solid Waste Management Districts to demonstrate the industrial sector percentage goal of 66% diverted waste. Upon removal of this goal, Districts may choose whether to survey the industrial sector or not.

The District is not surveying the industrial sector and thus has omitted this Table.

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

	Annual Nate of	Waste Readulier	i. Total Colla Wa	
Year	Waste Reduced and Recycled (tons)	Waste Disposed (tons)	Waste Generated (tons)	Waste Reduction and Recycling Rate (percent)
2021	22,013	58,322	80,335	27.40%
2022	25,61 <sup>9</sup>	58,142	83,761	30.59%
2023	25,161	58,070	83,231	30.23%
2024	25,213	57,998	83,211	30.30%
2025	25,214	57,926	83,140	30.33%
2026	28,219	57,801	86,020	32.81%
2027	28,325	57,676	86,002	32.94%
2028	28,437	57,551	85,988	33.07%
2029	28,553	57,427	85,980	33.21%
2030	28,676	57,302	85,978	33.35%
2031	28,805	57,151	85,956	33.51%
2032	28,941	57,000	85,940	33.68%
2033	29,083	56,849	85,931	33.84%
2034	29,232	56,083	85,314	34.26%
2035	29,389	56,546	85,935	34.20%
2036	29,553	56,381	85,934	34.39%
2037	29,726	56,216	85,941	34.59%
2038	29,907	56,050	85,957	34.79%
2039	30,098	55,885	85,982	35.00%

Sources of Information: AHSWD 2021 ADR, population projections and material recycling estimates. Sample Calculations:

Total Generated = Recycled + Disposed

Waste Reduction & Recycling Rate = Recycled / Total Generated

Per Capita Waste Reduction & Recycling Rate = (Recycled x 2000 lbs/ton) / (Population x 365 days)

Assumptions:

In 2021, the District met the recycling goal by 27.40%. In 2022, the District met the goal by rounding up the percentage from 22.7%. The District believes with additional recycling days, the Sutton Road Recycling Center being open to collect materials in Hocking County and the focus on commercial and Multiunit housing units, we will meet our goals set out in the plan.

Although the District need funds to operate the district, over 60% of the budget goes to the Drop-off program. The District has high hopes that the City of Logan will move to some type of curbside program and reduce the need for the three large drop-offs in and around Logan allowing for the District to add additional drop-offs or release funds for other programming.

The District is working on low hanging fruit to focus on multiunit housing and commercial sites which will benefit financially by reducing the trash to the landfill and be able to increase recycling.

#### Appendix K Waste Reduction Rates and Demonstration of Achieving Goal 2

The District is also going to be more organized about reaching out to communities, commercial and MUH sites to encourage them and reward them for beginning, increasing and recycling at their sites. The materials gathered at commercial will increase cardboard recycling which not only weighs more, there is an emerging market for cardboard in Ohio as new recycling plants come on-line.

We will work to identify a location to develop a hard to recycle materials location in Athens County to be able to collect those materials all year round instead of just during events. This will increase the number of materials recycled in Athens County as well.

The more materials we are able to divert, increasing our ability to recycle more, we will be able to get quantities which increases our ability to market the materials for reuse, upcycling or recycling in the area and not always having to send them out of the region for much money. As we move forward to diverting more and more materials, the District will work with partners and organizations to record and document the diversion tonnage on all events, programs and identify industry standards of tracking them.

Along with these efforts, the Ohio University continues to increase their recycling and this will assist us in meeting our goals.

Lastly, the key to recycling materials is to measure them. There is quite a bit of recycling which goes unreported and under the District radar. Our goal is to have a better tracking system as well as working strategically with haulers, recyclers and partners to record their efforts to divert waste. This also goes for food, yard, clothing, furniture, building materials, and the like. We feel strongly that we can achieve these goals with our proposed strategies.

# APPENDIX L MINIMUM REQUIRED EDUCATION PROGRAMS: OUTREACH AND MARKETING PLAN AND GENERAL EDUCATION REQUIREMENTS

The District believes that education, outreach and marketing are the key to have a successful implementation of the Management Plan. The District is meeting the required education and outreach requirements now and we will continue over the next 15 years. The District will continue using innovative techniques and methods to communicate our mission and our goals for change. The District will be expanding our efforts to reach our communities where they are and how they are informed about solid waste issues.

We are so invested in these requirements; we will be working to bring on communication interns or AmeriCorps Volunteers to assist in implementing the goals and programs in the plan. The District does not have the funds to be able to bring on a staff person within the first years of the plan, but it is a goal or if funds allow it. The District will implement Social Based Community Marketing as a way to meet our education and outreach goals.

The definition of Community Based Marketing is as follows:

"Community-based social marketing also uses a set of "tools" which have been identified as being particularly effective in

fostering such change. While each of these tools on its own is capable of promoting healthy and/or sustainable behavior under the right conditions, the tools are most effective when used together.

Community-based social marketing is pragmatic. It involves:

- identifying the barriers to a behavior
- developing and piloting a program to overcome these barriers
- implementing the program across a community
- evaluating the effectiveness of the program

Sources: https://toolsofchange.com/en/programs/community-based-social-marketing/

The District learned that Community Based Marketing is effective most recently with the Drop-off Contamination Grant partnering with the Recycling Partnership and Ohio EPA. We brought together Recycling Guides (people from the community) to be at the Drop-off sites to inform, survey and follow up on how to recycle rights. We used mailings, face to face and signage to inform the residents on how to reduce contamination. So, we identified the barriers that people didn't know what is correct to recycle, we piloted the outreach and

education at 8 of our 22 drop-off sites and used Recycling Guides, people from the community and they informed each resident what was correct to recycle. We also surveyed them to get their input on programs and outreach. We could not afford to hire Guides for all the sites, but we did mail to all residents, ran a jingle and also put-up signs at all of the drop-off locations. We saw an 18% drop in contamination.

Since the project, we have worked to identify ways to inform and educate the public with clear messages and communicate with residents when we see them at drop-off locations. We also did follow up on issues and/or problems at specific sites.

Although we will be doing the required elements as outlined below, we will be using the Community Based Marketing when implementing our priority areas.

## A. Minimum Required Education Programs Web Page

Name	Start Date	End Date	Goal
Maintain AHSWD.org	On-going	ongoing	4
Maintain Recyclingtrail.com	2023	Ongoing	4

The <u>www.ahswd.org</u> and recyclingtrail.com (established in 2023) are the District's websites and are maintained by the district staff. It is updated as needed, and new information is shared as we add new programs or there is topic of interest to the public.

The website announces our board meetings, provides links to resources, and event information. The recyclingtrail.com goes to our AHSWD.org and is maintained with sites where people can donate, buy, repair, recycle and disposal of materials in the district.

All of our educational, outreach and marketing materials and announcements direct people for more information to our website, so it is important for us to maintain it on an on-going basis.

Although we only have 550 followers on Facebook on our page, we have many people who engage with the page on an on-going basis, due to the advertising or information we share. For example, for a 28 day period, posts reached over 8,723 people; engaged 1,129 and had 27 new followers. We have over 183 people react and share and over 436 links click for more information. When we boosted an event on Facebook for an investment of \$60.00, we reached over 8,722; 1,124 engagements and 121 Shares. We are reaching 25-64 age groups with men and women evenly and most of this is on their mobile devices.

It is with the support of Recycle Ohio grant and district funds that we are able to buy Facebook advertising, radio ads, newspaper ads and social media.

#### Infrastructure Inventory

Name	Start Date	End Date	Goal
Maintain Infrastructure Inventory	On-going	On-going	2,4

An inventory of the haulers, recycling, compost and disposal sites are maintained and updated on our Recycling Trail materials, website and literature on an annual basis.

#### Resource Guide

Name	Start Date	End Date	Goal
Maintain the Resource Guide On-Line	On-going	On-going	4
Maintain Move-On Guide Printed	On-going	On-going	4
Recycling Trail	2023	On-going	4
Maintain the Recycling Trail information	2023	On-going	4

The Move-On and Resource Guide, which lists items and where they can be donated, sold, bought, repaired, recycled and disposed in the district, is available both online and printed in our Move-On Guide and Recycling Trail. These are available at events, our office, Sutton Road Recycling Center and we have and will continue to distribute these to attorneys' offices, real estate offices, title offices and moving companies. We purchased 2000 copies of the Move-On Guides and 20,000 Recycling Trail Maps and Guides and these will be re-printed as needed or until they are replaced with an updated Resource Guide.

#### Speaker/Presenter

Name	Start Date	End Date	Goal
The Director and Education and Outreach Manager, AmeriCorps volunteers are all available for making presentations and speaking on a variety of topics at any event big or small.	On-going	On-going	4
The Director will visit jurisdictions and present new programs, opportunities, and status of the District at least annually or more if needed.		On-going	4

#### B. Outreach and Marketing Plan

#### Residential Sector

Over just the last two years, we have done quite a bit in education and outreach in the residential sector. We received a grant from Recycle Ohio to rebrand our materials and to teach people how to recycle right. We did this due to the fact that we had quite a bit of contamination and wishcycling dropped off at our Drop-off locations. People were using the sites as a way to get rid of any and all unwanted items. We developed new brochures, signs, banners and began to use the materials to simplify the process.

We have learned that people are generally confused about recycling and what is recyclable and what is not. We battled the myth that all of the recycling went to the landfill and also that all plastics including bags are recyclable.

With new signage, signs, outreach via social media, and literature distributed throughout the district, we began the process of cleaning up the contamination.

In early 2023, we were selected to do a pilot program with Recycling Partnership to reduce drop-off site contamination. We mailed 34,000 households a postcard which outlines what is recyclable and not; then we mailed out another postcard which said no bagging recycling and no plastic bags to the same households. These went to all single family households in the district. We hired 5 Recycling Guides for a period of eight (8) weeks to spend 12 hours/week at the top 8 Drop-off sites in the District. They handed out literature, surveyed recyclers and also measured contamination for every visit. We also placed permanent signs at all 22 locations, which serve as a constant reminder of what is accepted at our sites. We were able to reduce contamination by 18% and reduce plastic bags and bagged recyclables by 12%. We will continue these efforts and hope to recruit volunteer recycling guides or at least have staff spend time at sites to communicate with the recyclers on an on-going basis, now that we know when the high traffic times are due to the project. We also distributed OOPs cards to recyclers as well, so they would be reminded of what is and is not recyclable.

We also sent the postcards and printed OOPs cards to residents in Athens and Nelsonville, because the information is the same as the drop-offs since we only have one company in our district which does residential recycling.

We also have been going to a number of events, fairs and distributed materials to the public at community spaces. In some cases, it is a post office or gas station/store or community centers. The events or fairs, the District works to identify ways to interact with people by having them do a reuse, repair or recycle activity.

Name	Start Date	End Date	Goal
The Outreach & Marketing Plan is developed on an	On-going	On-going	4
annual and on-going basis. This includes outreach on			
the drop-off program, events, policies, board and policy			
meetings and special messages as needed.			

The marketing and outreach plan is developed annually and updated as needed. We plan out the entire year for events, programs and then map out how we will get information out about our programs. We do outreach on free and paid social media outreach and lead people to our website as the foundation. We will expand our social media presence and our outreach online. A large portion of our participants and our Facebook as an outreach tool for free as well as promotional advertising.

Although we only have 550 followers on Facebook on our page, which was started in 2021. We have slowly built a presence. We have many people who engage with the page on an on-going basis, due to the advertising or information we share. For example, for just one 28-day period, we reached over 8,723 people; engaged 1,129 and had 27 new followers. We had over 183 people react and share and over 436 links click for more information. When we boost an event on Facebook for an investment of \$60.00, we have reached over 8,722; 1,124 engagements and 121 Shares. We are reaching 25-64 age groups with men and women evenly and most of this is on their mobile devices.

These numbers may not seem large for an urban county, but for our two small rural counties, it is quite a lot.

It is with the support of Recycle Ohio grant and district funds that we are able to buy Facebook advertising, radio ads, newspaper ads and flyers. We also use printed signs at drop-off locations, brochures and flyers at local libraries, community centers, local and regional agency locations and places where people gather in the district.

We also do a number of events throughout the district each year where people of all ages gather. We usually do the Athens and Hocking County Fairs, Ag Days (Hocking County), Senior Days in both counties.

We have an extensive amount of outreach materials, signs, flyers and banners which we use as needed. We also use our big recycling days to publicize upcoming events and information which we feel is important for recyclers today.

#### Commercial/Institutional/Governmental Sector

Over the past few years, the focus has been on residential recycling due to the contamination, but we have plans to do outreach to this sector as a priority in the planning period. Many of the materials which are found in this sector are the same as residential, so we have been doing education and outreach to them through our normal news and social media.

Commercial businesses use our drop-off locations, especially our cardboard recycling containers. It is clear from the same types of boxes from or to the same location or the same food or beverage containers. The messages are the same as residential and have been effective looking at the mixed recycling at our 22 locations. Our containers are the only way this sector in the reaches of each of our counties can recycle. Many of the haulers, including our only curbside recycler, do not do recycling pick up for commercial sites due to the lack of cost effectiveness or lack of customers to serve, so this leaves our Drop-off sites as their only place to recycle.

With the opening of Sutton Road, we now can also serve the commercial sector by taking their hard to recycle materials. We will also be able to do shredding beginning in 2024 with a partnership with Athens-Hocking Recycling Center. These programs will and have provided the commercial sector an option to recycle where they would not be able to or have to travel into town to take them there.

Our recent Recycle Ohio grant also gave us the opportunity to do outreach to realtors, attorneys, moving companies and the public with our Move On guides. The purpose was to outreach to those who serve people who are moving, families who have lost loved ones and have to empty an entire house/barn/shed, etc of items. These were welcome packets of information to those moving thing on to a new location where they can be reused or recycled and not just be dumped into a dumpster.

We will move forward in identifying sectors of which we can develop materials, programs and outreach to help them assess their waste and to reduce their waste or help their customers reduce waste and increase reuse and recycling as much as possible.

Name	Start Date	End Date	Goal
Participate and build relationships within the two Chamber of Commerce and the Hocking Hills Tourism	On-going	On-going	4
Association.			
Share information on the Chamber and HHTA Weekly	On-going	On-going	4
Newsletters.			
Conduct Outreach visits to develop relationships and	2026	On-going	4
encourage them to share recycling data and do waste			
assessments.			
Identify the needs of each sub-sector and see where	2026	On-going	4
we can help to encourage reuse and recycling at their			
establishments.			
Establish Working Groups or develop outreach	2026	On-going	4
materials to assist sub-groups in the sectors			
Develop a best practice for each sub-group in the	2026	On-going	4
sector and develop materials to distribute and do			
outreach to those groups.			
Visit sub-group organizations, events and speak at	2026	On-going	4
gatherings to inform of best practices			

Our Commercial Sector is largely in education, tourism and entertainment. We participate in the Local Chambers of Commerce events and use their newsletter to share information about recycling and events. We are also a member of the Hocking Hills Tourism Association, which are the land owners and businesses involved in tourism of the Hocking Hills. We will work with them more actively with our Recycling Trail and assist them, their guests and staff to know where they can recycle their household materials at our Drop-off sites, due to the lack of curbside service available to them in Hocking County.

Although many businesses use our services at our 22 Drop-off locations and our recycling days, we will work on a one-on-one basis and sub-sectors to identify ways we can assist them in recycling at their place of business.

The district wants to make the commercial sector one of our main priorities because we feel that we can get the most from our efforts in this sector in reaching a much higher recycling goal. We will encourage the sector to hire curbside services, but also work with them to use our Sutton Road and Athens County Recycling Centers or partners for hard to recycle materials.

We will do best practices educational materials and do outreach as we go to different sub-sectors. For Example: Develop a work group of cabin owners or care takers and ask them what their recycling goals and needs are for their sub-sector. Then do a waste assessment of a few sites and research best practices and then develop outreach materials to share with them about everything from purchasing to everyday recycling to closing and remodeling. This way they are identifying from the beginning how to reduce, reuse and recycle even their hard to recycle materials.

Lastly, we can reach as many commercial businesses, institutions and schools and ask them to report recycling numbers or efforts to us, so that we can recognize and be able to measure effectiveness.

#### Industrial Sector

Name	Start Date	End Date	Goal
Participate in the Chamber of Commerce and the	On-going	On-going	
Hocking Hills Tourism Association.			
Conduct Outreach Visits to develop relationships and	2026	On-going	
encourage them to share recycling data and do waste			
assessments as requested.			
Identify the needs of each sub-sector and see where	2026	On-going	4
we can help to encourage reuse and recycling at their			
establishments.			
Establish Working Groups or develop outreach	2026	On-going	4
materials to assist sub-groups in the sectors			
Develop a best practice for each sub-group in the	2026	On-going	4
sector and develop materials to distribute and do			
outreach to those groups.			
Visit sub-group organizations, events and speak at	2026	On-going	4
gatherings to inform of best practices			

As we do not have a large, we will work on a one-on-one basis and sub-sectors to identify ways we can assist them in recycling at their place of business and share resources with them. After doing the many analyses on the industrial sector, many of them have the same wastes as the commercial sectors. Cardboard, motor oil, hard to recycle materials, etc. We will work with them to identify resources for them to increase and report recycling.

The district wants to make the commercial sector one of our main priorities, but our industrial sector will be a great help to document their efforts and encourage their employees and others in the area to recycle. We will encourage the sector to hire curbside services, but also work with them to use our Sutton Road and Athens County Recycling Centers or partners for hard to recycle materials.

We will do best practices educational materials and do outreach as we go to different sub-sectors. For Example: Develop a work group of the Industrial sector and ask them what their recycling goals and needs are for their sub-sector. Then do a waste assessment of a few sites and research best practices and then develop outreach materials to share with them about everything from purchasing to everyday recycling to closing and remodeling. This way they are identifying from the beginning how to reduce, reuse and recycle even their hard to recycle materials.

Lastly, we can reach as many industrial businesses and ask them to report recycling numbers or efforts to us, so that we can recognize and be able to measure effectiveness, even though we don't have to report it.

#### Political Leaders

Name	Start Date	End Date	Goal
Visit 41 jurisdictions annually	2023	On-going	4
Via Email send updates on programs and grants to	2023	On-going	4
cities, townships and village officials as needed			
Print and send out via email and an Annual Report	2026	On-going	4

We have 41 jurisdictions in the district to visit every year, but it is important to interact and learn of issues throughout the district. In preparation of developing the management plan, the Director visited most of the jurisdictions to meet and also learn of their issues and concerns regarding solid waste and recycling. While most of the leaders were pleased with our programming, they all requested clean up grants and free tire pickups for their residents.

Our efforts will be to do quarterly email updates to jurisdictions and an annual report, so that all of our political leaders know of our efforts, events and programming. We will also be doing an annual report beginning in 2026 to inform the public and public officials of our programming, fiscal management and where we are with our recycling programs and goals.

#### Schools

Name	Start Date	End Date	Goal
AHSWD is a resource for schools for materials,	On-going	On-going	4
education and outreach and passes along			
announcements of funding or programs for them			

Hold an annual meeting with all schools in the district to	2025	On-going	4
provide updates, literature, educational materials and			
speakers and awards as warranted.			
Develop an annual comprehensive Outreach Plan with	2026	2040	4
our partners to serve all schools in the district			
Establish a Recycling Festival for Middle Schoolers in	2027	2040	4
the District			

Over the last Management Plan, we were able to establish recycling at the schools in the district. We paid for their recycling containers for a period no longer than 5 years and they continued paying for the service once we stop paying. The program with the schools will be on-going with our partner organizations to get them started at the beginning of the school year recycling and then do special programming when able with partners helping to focus on different age groups. Our partners include the Soil & Water, EMA, health departments, Rural Action among others who visit schools for educational programming.

Lastly, by the end of the plan period, it is our hope to have organized a Recycling Festival for all middle schoolers to attend annually to learn, be inspired, recycle and upcycle at a festival with their peers with our partners agencies and local organizations.

#### C. Outreach Priority

Our Outreach Priority is to increase the amount of hard to recycle materials using the community-based social marketing strategy and plan to implement our strategies by using the steps identified in the model. Our focus will be to use the Recycling Trail as the mode to create the change we want to happen. Our strategy will follow the model's steps as follows:

#### **Identifying The Barriers To A Behavior**

We will do this by working with partner organizations on the Recycling Trail in the reuse, repair and recycling sectors, including the food sector to identify barriers to people using their services to gather hard to recycle materials. Once we identify the barriers, we will develop additional materials and strategies for the Recycling Trail and address the hard to recycle materials one at a time. We will begin by identifying the barrier and metrics to remove the barriers.

We will begin by measuring how much and types of materials are sent to our reuse partners and what they do with them. We will identify barriers to gather them more efficiently and reduce, reuse or recycle to the materials they could take to make donation visits more effective for their donors and then the most effective way to gather them centrally for reuse or recycle.

#### **Developing And Piloting A Program To Overcome These Barriers**

The District will select one material and do a pilot program to see if we can develop tactics and messages to overcome the barriers. We will develop metrics to see if the pilot is being effective and efficient.

Once we develop a scope of work, we will begin at one material or site and develop a pilot program to address the issue. We will then see if it was effective and if so, we will work to implement the program across the District.

#### **Implementing The Program Across A Community**

We will implement the program developed and refined in the pilot and then implement the program district or sector wide.

#### **Evaluating The Effectiveness Of The Program**

As we move forward with the program, we will evaluate the program by using the metrics developed at the beginning of the process.

As an example.

Books are hard to recycle for most people. Since we have Ohio University, Hocking College, local, state and federal governments, businesses, thrift stores, estate auctions and residents which all have books, we could identify ways that they are handling the material now. We could develop a survey and ask how they are handling materials now and how much they are disposing of on an annual basis.

Once we have a baseline of how much and the methods of disposal, we could identify how we could communicate and develop methods to facilitate with those entities, how they could reuse, recycle, shred or dispose of their books most effectively.

We could do a pilot with libraries. The libraries accept donations of books for resale as well as they have books which people do not borrow or they are outdated. We could develop a program with them to pick up their books and/or do trainings of how to sell books online or to wholesalers (more valuable ones) or how to recycle them.

If the pilot with libraries works, then we would extend it to all of the libraries in the District and then be able to capture those books instead of throwing them in a dumpster. We could also identify entities who would want the books to sell at their antique or thrift or resale shops or upcycle them.

Then we would evaluate the program using the metrics and then go to the next sector to identify what they do with their books and repeat the effort: auction and estate sales; local, state and federal government offices; thrift and resale shops, colleges and universities, etc.

We could also use this as a way to develop pipelines for these entities to gather other hard to recycle materials at their public sites to be rerouted to other entities or recycling hubs.

#### HARD TO RECYCLE MATERIALS WILL BE OUR PRIORITY!

Hard to Recycle materials will be our priority, we have a baseline to work from our ADR data from previous years and Recycling Day tonnage. When we are able to renovate Sutton Road, it will give us a base to bring materials and encourage organizations to collect material and the regular hours for drop off of these materials as well. We intend to triple the amount of hard to recycle materials by year four of our plan. We will have established Sutton Road Recycling Center and hopefully have a second location to collect material in Athens County.

We will market Hard to Recycle material recycling and alert that recycling is more than glass jars, metal cans, cardboard and plastic jugs, but it is that microwave, scrap metal and getting those tires recycled instead of dumped.

We will identify barriers to participation like transportation and identify options to overcome those barriers. We will find out how people are learning about your facility and programs and identify other ways they get information so we can move forward.

We will work on the outreach as much as we are able to on the following areas:

Name	Start Date	End Date	Goal
Drop-Off Programs & Curbside with Cities & Customers	On-going	2099	Maintain and Grow amounts without contamination to meet the recycling goals set out for next five years.
Commercial & Industrial	2025	2099	Identify and Work with Commercial associations and businesses to assist with increasing recycling, through outreach, audits and education and reach out to 8/year
Events & Activities	On-going	2099	Ensure all residents know dates of events and program and services available to them. We will measure this with a survey annually.

Focus on Target Areas -One	2025	2030	
per year in order to move the			
district forward in			
composting/food waste,			
CHARM, Hoarding and Litter,			
and building community pride.			

## APPENDIX M WASTE MANAGEMENT CAPACITY ANALYSIS

#### A. Access to Publicly Available Landfill Facilities

Table M-1 Remaining Operating Life of Publicly Available Landfills

I-1: Remaining Operating Life of Publicly-Available Landfills						
Facility	Location	Years of Remaining Capacity	Status (enter no change, planned expansion, pending expansion, or closing)	Applicable Dates		
Athens Hocking Landfill	Athens County	48	no change	2022		
Franklin County Landfill	Franklin County	46	no change	2022		
Pine Grove Regional Landfill	Fairfield County	88	no change	2022		
American Landfill	Stark County	74	no change	2022		
Gallia County Landfill	Gallia County	9	no change	2022		
Suburban Landfill	Perry County	77	no change	2022		
Tunnel Hill Reclamation	Perry County	7	no change	2022		
Beech Hollow Landfill	Gallia County	76	no change	2022		
Plke Sanitation Landfill	Pike County	36	no change	2022		

Source(s) of Information: OEPA

The Athens-Hocking Reclamation Center is our district's landfill and has 48 years of capacity left -well beyond this planning period. This is where 92% of our waste goes at the time of this plan. Due to the rural nature of our district, the haulers will go to the nearest place to dispose of their waste. In the region, surrounding landfills have sufficient capacity for managing district waste over the management plan time period.

#### B. Access to Captive Landfill Facilities

#### Table M-3 Remaining Operating Life of Privately Available Landfills

There are no captive landfills in Athens or Hocking County, thus this section is not applicable.

#### C. Incinerators and Energy Recovery Facilities

There are no incinerators and/or energy recovery facilities is not planned. There is well over 300 years of combined landfill capacity currently in the region.

## APPENDIX N EVALUATING GREENHOUSE GAS EMISSIONS

#### The Waste Reduction Model (WARM)

WARM is a tool that US EPA developed to quantify the effects of waste management decisions on greenhouse gas emissions. The model demonstrates the benefits of alternative management technologies over traditional management methods. The most recent version of WARM was made available in March 2015. A SWMD can use a different but comparable modelling program to calculate greenhouse gas emission reductions provided the model accounts for waste management and recycling activities.

WARM is intended to compare municipal solid waste management scenarios. Therefore, use data for only the residential/commercial sector.

Each SWMD will run WARM twice and include the results in the solid waste management plan:

- For the first run, enter all quantities recycled in the reference year in the landfill column (for the baseline year) and for the alternative scenario, enter the quantities recycled in the tons recycled column.
- For the second run, enter the quantities of residential/commercial material recycled in the reference year in the tons recycled column (for the baseline scenario), and then enter the quantities projected to be recycled in the sixth year of the planning period in the alternative scenario column.

According to the WARM User's Guide, "The Waste Reduction Model (WARM) was created by the U.S. Environmental Protection Agency (EPA) to help solid waste planners and organizations estimate greenhouse gas (GHG) emission reductions and economic impacts from several different waste management practices.

WARM calculates GHG emissions, energy, and economic impacts for baseline and alternative waste management practices, including source reduction, recycling, combustion, composting, and landfilling. The model calculates emissions in metric tons of carbon dioxide equivalent (MTCO2E), energy in millions of BTUs (MMBTU), wage impacts, tax impacts, and labor hours supported across a wide range of material types commonly found in municipal solid waste (MSW).

The user can construct various scenarios by simply entering data on the amount of waste handled by material type and by management practice. WARM then automatically applies material-specific emission and economic factors for each management practice to calculate the GHG emissions, energy savings, and economic impacts of each scenario. Several key

inputs, such as landfill gas recovery practices and transportation distances to MSW facilities, can be modified by the user.

The GHG emission factors used in WARM are based on a life cycle perspective. The model documentation describes this methodology in detail."

Athens-Hocking Solid Waste ran the WARM Each SWMD will run WARM twice and the results are below:

• For this first run, enter all quantities recycled in the reference year were inserted into the landfill column (for the baseline year) and for the alternative scenario, the enter the quantities recycled were placed in the tons recycled column.

GHG Emissions from Baseline Waste Management (MTCO <sub>2</sub> E):			GHG Emissions from Alternative Waste Management Scenario (MTCO <sub>2</sub> E):				
	Tons Landfilled	Total MTCO₂E	Tons Recycled	Tons Composted	Total MTCO₂E	Change (Alt - Base) MTCO₂E	
Corrugated Containers	9,093.00	1,651.56	9,093.00	NA	(28,509.62)	(30,161.18)	
Mixed Paper (general)	200.00	14.94	200.00	NA	(709.10)	(724.05)	
Food Waste	1,015.00	504.96	NA	1,015.00	(117.32)	(622.28)	
Yard Trimmings	2,183.00	(437.73)	NA	2,183.00	(116.92)	320.81	
Branches	248.00	(132.94)	NA	248.00	(13.28)	119.66	
Mixed Plastics	153.00	3.10	153.00	NA	(141.61)	(144.70)	
Mixed Electronics	50.00	1.01	50.00	NA	(39.27)	(40.28)	
Mixed Metals	7,116.00	144.13	7,116.00	NA	(31,247.50)	(31,391.63)	
Glass	685.00	13.87	685.00	NA	(189.12)	(203.00)	
Tires	1,176.00	23.82	1,176.00	NA	(442.53)	(466.35)	
Total		1,786.72			(61,526.27)	(63,312.99)	

In 2021, according to the WARM model, with the recycling and composting, the District had a change in Green House Emissions (MTCO2E): -63,312.998 which they state is equivalent to removing annual emissions from:

- o 13,442 Passenger Vehicles Conserving
  - o 7,124,226 Gallons of Gasoline, or
  - 2,638,041 Cylinders of Propane Used for Home Barbeques

С

#### Waste Reduction Model (WARM) -- Results

Total GHG Emissions from Baseline MSW Generation and Management (MTCO₂E):	1,786.72
Total GHG Emissions from Alternative MSW Generation and Management (MTCO <sub>2</sub> E):	(61,526.27)
Incremental GHG Emissions (MTCO <sub>2</sub> E):	(63,312.99)

 $MTCO_2E$  = metric tons of carbon dioxide equivalent

According to Model Information on the Summary Report:

 "b) Emissions estimates provided by this model are intended to support voluntary GHG measurement and reporting initiatives." o "c) The GHG emissions results estimated in WARM indicate the full life-cycle benefits waste management alternatives. Due to the timing of the GHG emissions from the waste management pathways, (e.g., avoided landfilling and increased recycling), the actual GHG implications may accrue over the long-term. Therefore, one should not interpret the GHG emissions implications as occurring all in one year, but rather through time."

#### **Total Change in Energy Use (million BTU)**

For the first run, enter the quantities of residential/commercial material recycled in the reference year in the tons landfill column (for the baseline scenario), and then enter the quantities projected to be recycled in the reference year of the planning period in the alternative scenario column to see total Change in Energy Use.

Energy Use from Baseline Waste Management (million BTU):			Energy Use from Alternative Waste Management Scenario (million BTU):			
Material	Tons Landfilled	Total Million BTU	Tons Recycled	Tons Composted	Total Million BTU	Change(Alt - Base) Million BTU
Corrugated Containers	9,093.00	(1,896.80)	9,093.00	NA	(137,333.82)	(135,437.02)
Mixed Paper (general)	200.00	(34.57)	200.00	NA	(4,112.82)	(4,078.25)
Food Waste	1,015.00	(2.57)	NA	1,015.00	737.94	740.51
Yard Trimmings	2,183.00	319.35	NA	2,183.00	564.25	244.89
Branches	248.00	3.65	NA	248.00	64.10	60.45
Mixed Plastics	153.00	41.05	153.00	NA	(5,358.36)	(5,399.41)
Mixed Electronics	50.00	13.41	50.00	NA	(584.43)	(597.84)
Mixed Metals	7,116.00	1,909.03	7,116.00	NA	(473,568.90)	(475,477.93)
Glass	685.00	183.77	685.00	NA	(1,455.91)	(1,639.67)
Tires	1,176.00	315.49	1,176.00	NA	(4,236.62)	(4,552.11)
	21,919.00	851.81			(625,284.57)	(626,136.38)

Total Change in Energy Use (million BTU): (626,136.38)

This is equivalent to		
Conserving	6,835	Households' Annual Energy Consumption
Conserving	107,769	Barrels of Oil
Conserving	5,198,207	Gallons of Gasoline

#### 2030 YEAR WARM MODEL ESTIMATES

For this second run, enter all quantities recycled in the reference year were inserted into the landfill column for the baseline year) and for the alternative scenario, the enter the quantities recycled were placed in the tons recycled column for the sixth year (2030) of the plan.

The run of the WARM for the second run, the quantities of residential/commercial material recycled in the reference year in the tons recycled column (for the baseline scenario), and then enter the quantities projected to be recycled in the sixth year (2030) of the planning period in the alternative scenario column.

GHG Emissions from Baseline Waste Management (MTCO<sub>2</sub>E): 2206.13 GHG Emissions from Alternative Waste Management Scenario (MTCO<sub>2</sub>E): (80,368.59)

Material	Tons Recycled	Tons Landfilled	Total MTCO₂E	Material	Tons Source Reduced	Tons Recycled	Tons Composted	Total MTCO₂E
Corrugated Containers	-	11,896.00	2,160.67	Corrugated Container	-	11,896.00	NA	(37,297.97)
Magazines/third-class mail	-	261.66	-111.69	Magazines/third-class	-	261.66	NA	(803.22)
Food Waste	NA	1,327.91	660.63	Food Waste	-	NA	1,327.91	(153.49)
Yard Trimmings	NA	2,855.98	-572.68	Yard Trimmings	NA	NA	2,855.98	(152.97)
Branches	NA	324.45	-173.93	Branches	NA	NA	324.45	(17.38)
Mixed Plastics	-	200.17	4.05	Mixed Plastics	-	200.17	NA	(185.26)
Mixed Electronics	-	65.41	1.32	Mixed Electronics	NA	65.41	NA	(51.37)
Mixed Metals	-	9,309.74	188.56	Mixed Metals	-	9,309.74	NA	(40,880.56)
Glass	-	896.17	18.15	Glass	-	896.17	NA	(247.42)
Tires	Ē	1,531.93	31.03	Tires	=	1,538.54	NA	(578.96)

#### The tonnage for 2030 were calculated as follows:

Material	2021 Tons	%	2030 Tons
CC	9,093.00	0.41	11,896.21
MP	200.00	0.01	261.66
FW	1,015.00	0.05	1,327.91
YW	2,183.00	0.10	2,855.98
Branches	248.00	0.01	324.45
mixed pla	153.00	0.01	200.17
electronic	50.00	0.00	65.41
metals	7,116.00	0.32	9,309.74
glass	685.00	0.03	896.17
Tires	1,176.00	0.05	1,538.54
	21,919.00	1.00	28,676.25

This is equivalent to						
Removing annual emissions from	17,532 Passenger Vehicles					
Conserving	9,291,646 Gallons of Gasoline					
Conserving	3,440,619 Cylinders of Propane Used for Home Barbeques					
<b>0.00463%</b> Annual CO <sub>2</sub> emissions from the U.S. transportation sector						
	0.00456% Annual CO <sub>2</sub> emissions from the U.S. electricity sector					

#### **Total Change in Energy Use (million BTU)**

For the second run for the sixth year, enter the quantities of residential/commercial material recycled in the reference year in the tons landfill column (for the baseline scenario), and then enter the quantities projected to be recycled in the reference year of the planning period in the alternative scenario column to see total Change in Energy Use.

Energy Use from Baseline Waste Management (million BTU): 1,175.61

Material	Tons Recycled	Tons Landfilled	Total Million BTU
Corrugated Containers	-	11,896.00	(2,481.51)
Magazines/third-class mail	-	261.66	15.93
Food Waste	NA	1,327.91	(3.36)
Yard Trimmings	NA	2,855.98	417.80
Branches	NA	324.45	4.78
Mixed Plastics	-	200.17	53.70
Mixed Electronics	-	65.41	17.55
Mixed Metals	-	9,309.74	2,497.55
Glass	-	896.17	240.42
Tires	-	1,538.54	412.75

Energy Use from Alternative Waste Management Scenario (million BTU): (812,844.47)											
Material	Tons Source Reduced	Tons Recycled	Tons Composte d	Total Million BTU		Change (Alt - Base) Million BTU					
Corrugated	-	11,896.00	NA	(179,668.22)		(177,186.71)					
Magazines/I	-	261.66	NA	(179.41)		(195.34)					
Food Waste	-	NA	1,327.91	965.44		968.80					
Yard Trimmi	NA	NA	2,855.98	738.19		320.39					
Branches	NA	NA	324.45	83.86		79.08					
Mixed Plasti	-	200.17	NA	(7,010.35)		(7,064.05)					
Mixed Electr	NA	65.41	NA	(764.55)		(782.09)					
Mixed Metals	-	9,309.74	NA	(619,562.02)		(622,059.57)					
Glass	-	896.17	NA	(1,904.73)		(2,145.15)					
Tires	-	1,538.54	NA	(5,542.69)		(5,955.44)					

2030

#### **Total Change in Energy Use (million BTU):**

(814,020.08)

This is equivalent to		
Conserving	8,886	Households' Annual Energy Consumption
Conserving	140,107	Barrels of Oil
Conserving	6,758,024	Gallons of Gasoline

#### **APPENDIX O FINANCIAL PLAN**

#### A. Funding Mechanisms and Revenue Generated

#### 1. Disposal Fee

**Table O-1 Disposal Fee Schedule and Revenue** (in accordance with ORC Section 3734.57(B))

Year	Disposa	al Fee Sch (\$/ton)	edule		Total Disposal Fee Revenue (\$)		
	In- District	Out-of- District	Out- of- State	In-District	Out-of- District	Out-of- State	
2017	\$1	\$2	\$1	\$39,380	\$57,762	\$130,320	\$227,462
2018	\$1	\$2	\$1	\$46,572	\$67,226	\$148,839	\$262,637
2019	\$1	\$2	\$1	\$40,206	\$57,107	\$120,634	\$217,947
2020	\$1	\$2	\$1	\$33,169	\$55,067	\$89,153	\$177,388
2021	\$1	\$2	\$1	\$43,631	\$79,201	\$110,288	\$233,120
2022	\$1	\$2	\$1	\$58,007	\$51,682	\$104,082	\$213,771
2023	\$1	\$2	\$1	\$59,408	\$51,682	\$117,219	\$228,310
2024	\$1	\$2	\$1	\$59,959	\$51,682	\$117,219	\$228,861
2025	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2026	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2027	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2028	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2029	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2030	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2031	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2032	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2033	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2034	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2035	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2036	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2037	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2038	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038
2039	\$2	\$2	\$2	\$119,918	\$51,682	\$234,438	\$406,038

Source(s) of Information: AHSWD Annual District Report

Sample Calculations:

2021 Revenue: \$43,631 + \$79,201 + \$110,288 = \$233,120

Assumptions: The assumptions for the revenue for the Disposal Fee are:

- 1. In District Revenue: The tonnage coming to the landfill was projected for the next fifteen (15) years by tons in Appendix D. Tonnages were multiplied by disposal fee schedule to calculate revenue in Table O-1.
- 2. Out of District Revenue: Flatlined projections to be the same. Although Rumpke stated they are planning to build a transfer station in Zanesville, it is uncertain whether the transferred waste will be coming to the Athens-Hocking Landfill. There are so many landfills in the region, they could take it to one of their other sites or a less expensive one. Therefore, it was projected to be the same for the next 15 years.
- 3. Out of State Revenue: Out-of-state disposal tons comes from a special waste brought to the landfill from as far away as lowa. Rumpke invested in this special waste process. The six-year average from 2017 to 2022 is 117,219 tons. The tonnage is flatlined through the planning period. This seems appropriate because it is tied to production and manufacturing of special metals.

If anything, we may see additional out-of-state waste, due to the fact that many Solid Waste Districts do not want out of state waste. For Athens-Hocking Solid Waste District it makes up nearly half of our disposal fees at the landfill.

We are raising the Disposal Tiered Fees for this time period from \$1/ton in-district, \$2/ton/out of district \$1/ton/out of state to \$2/ton in-district, \$2/ton/out of district \$2/ton/out of state. This is our only choice at this time. These increases are the same if not lower than the districts which are around Athens-Hocking, except for Gallia, Meigs, Jackson and Vinton District.

#### 2. Generation Fee

Table O-2 Generation Fee Schedule and Revenue

Year	Generation Fee Schedule (\$ per ton)	Total Revenue from Generation Fee (\$)
2017	\$3.00	\$183,227
2018	\$3.00	\$208,588
2019	\$3.00	\$189,509
2020	\$3.00	
2021	\$3.00	\$192,086
2022	\$3.00	\$193,229
2023	\$3.00	\$200,000
2024	\$3.00	\$190,492
2025	\$5.00	\$253,989
2026	\$5.00	\$253,989
2027	\$5.00	\$253,989
2028	\$5.00	\$253,989
2029	\$5.00	\$253,989
2030	\$5.00	\$253,989
2031	\$5.00	\$253,989
2032	\$5.00	\$253,989
2033	\$5.00	\$253,989
2034	\$5.00	\$253,989
2035	\$5.00	\$253,989
2036	\$5.00	\$253,989
2037	\$5.00	\$253,989
2038	\$5.00	\$253,989
2039	\$5.00	\$253,989

Assumptions: We did not consider raising the Generation Fee at the beginning of the process, due to the fact that the costs would be passed down to the year-round residents and felt that even though it has not been raised since 2018, The Generation fee will be raised from \$3.00/ton to \$5.00/ton in order to have a stable budget moving forward.

The Generation Fee was the average calculated for the last five (5) years. The permanent resident population is declining to some degree. Our students, visitors, overnight guests and the hotel and tourist industry still brings a constant stream of waste as does our stable commercial sector.

Source(s) of Information: AHSWD Annual District Reports

Sample Calculations: Averaged last five (5) years.

#### 3. Designation Fees

#### Table O-3 Designation Fee Schedule and Revenue

The District does not have any Designation Fees at this time, but we reserve the right to consider it in the future.

#### 4. Debt/Loans

#### Table O-4 - Loans

The District does not have any loans at this time.

#### 5. Other Sources of District Revenue

Year	Contracts	Recycling Revenue	Grants	User Fees	Other	Total Other Revenue
2017	\$0		\$24,270	\$1,351	\$5,921	\$31,542
2018	\$0			\$1,351	\$42,667	\$44,018
2019	\$1,600	\$946	\$24,710	\$1,351	\$57,165	\$85,772
2020		\$4,700		\$1,351	\$673	\$6,725
2021			\$26,180	\$1,351	\$10,870	\$38,401
2022		\$4,992	\$32,908	\$1,351	\$2,165	\$41,416
2023			\$104,340	\$1,351	\$2,579	\$108,270
2024			\$75,000	\$1,351	\$2,757	\$79,108
2025				\$10,000		\$10,000
2026				\$10,000		\$10,000
2027				\$10,000		\$10,000
2028				\$10,000		\$10,000
2029				\$10,000		\$10,000
2030				\$10,000		\$10,000
2031				\$10,000		\$10,000
2032				\$10,000		\$10,000
2033				\$10,000		\$10,000
2034				\$10,000		\$10,000
2035				\$10,000		\$10,000
2036				\$10,000		\$10,000
2037				\$10,000		\$10,000
2038				\$10,000		\$10,000
2039				\$10,000		\$10,000

As discussed in above, we will seek grants, receive funds from the sale of recyclables and user fees for recycling hard to recycle materials. We reserve the right to consider it in the future.

Source(s) of Information: AHSWD Annual District Reports and Actual and Projections

We did not put in grants which we may receive in the future, but there is no guarantee that we will get them and the funds come in and go out, so except for the match, the district will not gain in the bottom overall budget in the end.

The User Fees are funds collected at the Sutton Road Recycling Center and the four recycling days for tires, televisions, freon, mattresses and batteries and bulbs.

#### 6. Summary of District Revenues

These revenues will have to accommodate the needs of the District for the next five years and beyond. The biggest expense (60%) of the district is our Drop-off program, so it will have to be redesigned if there are significant changes to the revenue of the district.

Year	Disposal	Generation	Other	Total				
Teal	Fees	Fees	Revenue	Revenue				
2017	\$227,462	\$183,227	\$31,542	\$442,231				
2018	\$262,637	\$208,588	\$44,018	\$515,244				
2019	\$217,947	\$189,509	\$85,772	\$493,228				
2020	\$177,388	\$177,637	\$6,725	\$361,750				
2021	\$233,120	\$192,086	\$38,401	\$463,607				
2022	\$213,771	\$193,229	\$41,416	\$448,417				
2023	\$228,310	\$200,000	\$108,270	\$536,580				
2024	\$228,861	\$190,492	\$76,351	\$495,704				
2025	\$406,038	\$253,989	\$10,000	\$670,027				
2026	\$406,038	\$253,989	\$10,000	\$670,027				
2027	\$406,038	\$253,989	\$10,000	\$670,027				
2028	\$406,038	\$253,989	\$10,000	\$670,027				
2029	\$406,038	\$253,989	\$10,000	\$670,027				
2030	\$406,038	\$253,989	\$10,000	\$670,027				
2031	\$406,038	\$253,989	\$10,000	\$670,027				
2032	\$406,038	\$253,989	\$10,000	\$670,027				
2033	\$406,038	\$253,989	\$10,000	\$670,027				
2034	\$406,038	\$253,989	\$10,000	\$670,027				
2035	\$406,038	\$253,989	\$10,000	\$670,027				
2036	\$406,038	\$253,989	\$10,000	\$670,027				
2037	\$406,038	\$253,989	\$10,000	\$670,027				
2038	\$406,038	\$253,989	\$10,000	\$670,027				
2039	\$406,038	\$253,989	\$10,000	\$670,027				

Source(s) of Information: A-HSWD ADR and estimates based on averages and costs as discussed in narrative

#### B. Cost of Implementing Plan

The Cost of Implementing the Plan is outlined below in the Budget Chart. The line items are flat because there is not much money to be spent other than for the basic programs (Recycling Days,

Drop-Off Program, Staff and an Office with education and outreach and an AmeriCorps volunteer to assist with outreach and education. The budget assumptions and narrative are below.

Category/Program	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
1. Plan Monitoring/Prep.	\$46,239	\$48,987	\$40,632	\$86,404	\$17,087	\$17,820	\$44,000	\$0	\$0	\$0	\$0	\$0	\$0	\$69,556	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
a. Plan Preparation	\$13,345	\$17,066	\$18,403	\$16,651	\$0	\$9,479	\$40,000	* -	* -				• -	\$69,556	* -	• -		• -	, -	• -	•	•	
b. Plan Monitoring	\$20,017	\$17,288	\$18,471	\$66,605	\$15,474	\$6,553																	1
c. Other	\$12,877	\$14,632	\$3,758	\$3,148	\$1,614	\$1,788	\$4,000																(
2. Plan Implementation	\$386,667	\$473,309	\$460,981	\$375,937	\$490,984	\$507,671	\$673,865	\$590,483	\$649,000	\$662,600	\$671,308	\$670,127	\$669,061	\$594,557	\$664,113	\$664,113	\$664,113	\$664,113	\$664,113	\$664,113	\$664,113	\$664,113	\$664,113
a. District Administration	\$98,250	\$91,353	\$94,330	\$40,194	\$125,963	\$96,904	\$95,203	\$109,483	\$150,000	\$153,600	\$157,308	\$161,127	\$165,061	\$99,557	\$169,113	\$169,113	\$169,113	\$169,113	\$169,113	\$169,113	\$169,113	\$169,113	\$169,113
Personnel	\$50,043	\$51,531	\$49,424	\$4,543	\$87,797	\$67,724	\$59,886	\$107,877	\$120,000	\$123,600	\$127,308	\$131,127	\$135,061	\$69,557	\$139,113	\$139,113	\$139,113	\$139,113	\$139,113	\$139,113	\$139,113	\$139,113	\$139,113
Office Overhead	\$41,924	\$35,881	\$39,143	\$33,188	\$34,185	\$27,581	\$35,317	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Other	\$6,283	\$3,941	\$5,762	\$2,463	\$3,981	\$1,600																	
b. Facility Operation	\$0	\$0	\$5,127	\$0	\$165	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MRF/Recycling Center	,		\$5,127		\$165								· ·						1	-			
Compost																							
c. Landfill Closure/Post-Closure																							1
d. Recycling Collection	\$186,656	\$291,133	\$264,463	\$275,212	\$316,637	\$333,315	\$432,000	\$400,000	\$420,000	\$430,000	\$440,000	\$450,000	\$430,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000
Curbside	\$88,212								. ,		. ,												
Drop-off	\$89,593	\$290,357	\$237,688	\$264,627	\$293,426	\$301,599	\$432,000	\$400,000	\$420,000	\$430,000	\$440,000	\$450,000	\$430,000	\$440,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000
Combined Curbside/Drop-off	\$1,764		, , ,	, , ,	, , , ,	,	, , , , , , , , , , , , , , , , , , , ,			, , , , , , , , , , , , , , , , , , , ,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	,	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,					,,	1
Multi-family	, .,. J.																		1				i
Business/Institutional				\$6,482	\$9,805														†				
Other	\$7,088	\$776	\$26,775	\$4,103	\$13,406	\$31,716													†				i
e. Special Collections	\$75,763	\$59,208	\$52,464	\$40,524	\$35,614	\$56,457	\$80,898	\$70,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Tire Collection	\$46,800	\$23,412	\$34.043	\$24,589	, , , , , , ,	\$23,055	\$44,254	\$25,000	, 2,230	,	, ,,,,,,	,,	,	,,	, 1,130	, 5,550	, 1,110	,,	,	, 1,150	,	,,.50	
HHW Collection	\$20,513	\$15,926	\$2,056	4-1,000	\$19,145	\$24,106	\$16,644	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Electronics Collection	, ,,		, , , , , , , , , , , , , , , , , , , ,		, ,,	, ,	, ,,,	, ,,		,		,	, .,	* -/	, ,,	,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, ,,,,,,,,	,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(
Appliance Collection																							í
Other Collection Drives	\$8,451	\$19,870	\$16,365	\$15,936	\$16,469	\$9,296	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
f. Yard Waste/Other Organics	, , ,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,, .,	, , ,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , ,		,		* -/	, .,	* -/	, ,,	,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, ,,,,,,,,	,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(
g. Education/Awareness	\$18,600	\$22,970	\$30,110	\$14,534	\$6,380	\$14,326	\$65,765	\$11,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Education Staff	\$6,303	\$12,615	\$4.076	\$5,648	* - /	\$2,137	\$22,424	, , , , , , , , , ,	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	¥ - ,	*-,	¥ - ,	, , ,	· · · · · ·	, , , , , ,	, , , , , , , , , ,	* - ,	* - ,	1
Advertisement/Promotion	\$9,900	\$6,745	\$9,943	\$4,345	\$560	\$10,066	\$30,553	\$8,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Other	\$2,397	\$3,609	\$16,091	\$4,541	\$5,821	\$2,123	\$12,788	\$3,000	* - 7	, , , , , ,	1 - /	* - /	* - /	* - /	, , , , , , , , , , , , , , , , , , , ,				, , , , , ,		* - /		(
h. Recycling Market Development	\$2,800	\$0	\$0	\$0	\$1,794	\$252	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Market Development Activities	\$2,800				\$1,794	\$252						,	•					•		•			
i. Service Contracts	, , , , , , , , , , , , , , , , , , , ,				, ,																		ſ
j. Feasibility Studies																							1
k. Waste Assessments/Audits																							<i></i>
I. Dump Cleanup					\$1,300																		1
m. Litter Collection/Education	\$4,598	\$7,189	\$6,262	\$5,473	\$3,131	\$1,279																	
n. Emergency Debris Management	, , , , , , , , , , , , , , , , , , , ,		, , ,	, ,	, , ,	, ,																	1
o. Loan Payment																							í l
p. Other		\$1,457	\$8,225			\$5,138			\$20,000	\$20,000	\$15,000		\$15,000										
,																							
3. Health Dept. Enforcement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4. County Assistance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5. Well Testing																							
6. Out-of-State Waste Inspection																							
7. Open Dump, Litter Law Enforcement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
a. Heath Departments	<b>V</b> O	ΨΟ	ΨΟ	Ψ0	ΨΟ	Ψ	Ψ0	Ψ0	ΨΟ	Ψ	Ψ0	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	Ψ0	ΨΟ	ΨΟ	Ψ0	ΨΟ	40	<b>4</b> 0
b. Local Law Enforcement		-			+	+				+							<b>-</b>		†		-		i
c. Other		<del>                                     </del>		<b> </b>	+	+				+									†				
S. Gillor																							
8. Heath Department Training																							
Municipal/Township Assistance	\$0	\$0	\$0	\$0	\$2,611	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.2	\$0
	Ψ0	Ψ0	ΨΟ	ΨΟ	ψ <u>-</u> ,017	Ψ	Ψ0	ΨΟ	ΨΟ	Ψ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	Ψ0]	ΨΟ	ΨΟ	ΨΟ	- 40
10. Compensation to Affected																							
Community (ORC Section 3734.35)																							
***Total Expenses***	\$432,006	\$522.206	\$501.612	\$462.340	\$510.692	\$525.404	\$717 965	\$500.482	\$640,000	\$662 600	\$671 200	\$670.127	\$660,064	\$664 112	\$664 112	\$664 112	\$664 112	\$664 112	\$664,113	\$664 112	\$664 112	\$664,113	\$664,113
Total Expenses	\$432,900	φυ <b>∠∠,∠9</b> 0	ψ301,013	φ402,340	40 10,063	ψυΖυ,491	φ/1/,000	φυ <del>συ,4</del> 63	φυ49,000	φ002,000	φ07 1,308	φ0/0,12/	\$009,061	φ <del>υυ4,</del> 113	φυυ <del>4</del> , 113	φυυ4, 113	φ <del>004, 113</del>	φ <del>υυ4</del> ,113	φυυ4, 113	φυυ4, 113	ψ004, 113	φυυ4,113	φυυ <del>4</del> , 113

#### **Explanation of Expenses**

#### 1 Plan Monitoring/Prep.

- 1.a <u>Plan Preparation-</u>The budget reflects a portion of the Director's Salary to assist in the data gathering, outreach and development of the Management Plan during the planning years.
- 1.b Plan Monitoring-
- 1.c Other- If the District decides to pay consultants for annual or financial reports, this will be within the budget of the organization.

#### 2 Plan Implementation

#### 2.a District Administration

- 2.a.1 Personnel: The personnel written into the plan consists of a District Director. The personnel will be employed by Athens County and will receive benefits as directed by the Athens County Commissioners unless otherwise decided by the Board of the Athens-Hocking Solid Waste District Board. An average of eight (8) percent was used to calculate the benefits annually. The actual costs will be used annually and not the forecasted amounts, if there is any difference in the two. In 2023 and 2024, the Director's pay was divided by 2 Plan Preparation and Administration, and then goes back to the total in 2025 and again in 2030.
- 2.a.2 Office Overhead: Office Overhead includes the cost of rent, insurance for the District, utilities for both the office and Sutton Road Recycling Center and communications for both office and cellular services, supplies, equipment and materials for the office. This also included the cost of maintaining and fueling the District vehicle. This remains relatively flat, as the costs are relatively low for any item. Other items will be adjusted in order to keep overhead at that level. If and when the Sutton Road facility or the Recycling Center allows for it, the Director could move to save the District funds.
- 2.a.3 Other: The Travel expenses are always written into the quarterly reports to demonstrate how much it costs to travel around the District, but it is not in this budget as such, it is included into the overall overhead above. The District owns a 2015 Ram Pick-up Truck and maintains it as part of the overhead of the District.

#### 2.b Facility Operation

#### 2.b.1 *MRF/Recycling Center:*

The costs written in the plan for the Sutton Road Recycling Center are written into the overhead costs and the other special collections costs which would be to maintain the building, upgrade equipment and supplies. These sites have to be large enough to store materials, process them and then send them off on a dock or have semi-trailers and gaylords for storage and transport of materials. The District's costs are in the Plan Implementation area and overhead for Sutton Road. If any improvements are done, they will be done with grant funds.

- 2.b.2 <u>Compost:</u> The cost of improving or expanding the compost program or facility will be included in the budget if funds become available.
- 2.b.3 <u>Transfer:</u> No plans were developed to spend funds in this area, but reserve the right to consider it.
- 2.b.4 <u>Special Waste:</u> No plans were developed to spend funds in this area, but reserve the right to consider it.
- 2.c <u>Landfill Closure/Post-Closure</u>: No plans were developed to spend funds in this area, but reserve the right to consider it.

#### 2.d Recycling Collection

- 2.d.1 <u>Curbside:</u> The funds for any curbside programs will have to be offset by the drop off program, if possible.
- 2.d.2 *Drop-off:* The funds outlined in the management plan are for the Drop-off program specifically. The District will be seeking a contract for maintaining, collecting and processing our 22 drop-off locations for a period of three (3) years with the option to add two (2) additional years. We will contract with the newly formed SORTCOG, if possible first. We estimated the cost of the Drop-off program by the 2023 numbers with high fuel adjustment costs and low rebates for recyclables sold. The majority of materials by weight is cardboard. It is forecast by OEPA that a number of cardboard recycling plants will be located in the area. We believe that with our outreach to the commercial and industrial sector more cardboard will be brought in, which does have market value in the new online purchase economy. The upkeep and maintenance of the drop-off sites is key to keeping sites at local township, village and business locations. Over the years, the sites have had concrete pads installed, along with fences, signage and other site improvements conducted and we will use funds to maintain the integrity of these sites over time.

The Budget for the Drop-off program falls between \$400,000-\$450,000 in the budget. If the program's costs exceed these amounts, then the drop off program will consider all options for reducing costs to the program to allow for the small amount for staff and programming.

- 2.d.3 <u>Combined Curbside/Drop-off</u>: No plans were developed to spend fund in this area, but reserve the right to consider it.
- 2.d.4 <u>Multi-Family</u>: The plan includes identifying ways to increase recycling at Multi-Family Units in the district. If there are funds available, they will be used for grant matches or funds to start a pilot program within the district.
- 2.d.5 <u>Business/Institutional:</u> The plan includes specific goals to identify ways to increase the amount of recycling done at the commercial, business, institutional, industrial and tourism sectors. These funds will be used for grant match funds or to start a program within the district. The funds may be used for supplies, materials, containers, service connection, pilot study, waste assessments and contracts for doing waste assessments for the district to increase reduction and recycling.

#### 2.d.6 Other

#### 2.e Special Collections

- 2.e.1 <u>Tire Collection:</u> The district will use any of our Other (2p) funds in the plan to hold or match state funds for tire collections within the district. It is an ongoing issue due to the rural nature of our district. People put many miles on their vehicles.
  - There is also a need for collections of tractor tires and large truck tires, so all of these will be collected where possible. There will be matching funds generated as needed for tire collections.
- 2.e.2 <u>HHW Collection:</u> The District will hold an annual household hazardous waste collection day in alternating counties, unless a program is developed at the Sutton Road Recycling Center. There will also be an effort to identify any options in the future for an on-going collection program and see if it would be more cost effective for the district.
- 2.e.3 <u>Electronics Collection</u>: Electronics Collection will be covered under the expenses of the district for the Sutton Road Recycling Center and our Collection Drives
- 2.e.4 <u>Appliance Collection</u>: Collection will be covered under the expenses of the district for the Sutton Road Recycling Center and our Recycling Days. Costs for this item are under special collections and Sutton Road.
- 2.e.5 <u>Other Collection Drives:</u> Our twice a year in each county Recycling Drives expenses will come under this line item. There are costs for recycling batteries and bulbs collected at the four events and at local community hubs. There are also expenses to get roll-offs, delivered, extra staff, processing of materials. Largely, it is due to the partnerships, we have developed the cost of these events has gone down due to partners recycling or disposing of the

materials gathered at these events. This line item will also cover materials sent for recycling from the Sutton Road Recycling Center. In the most recent past, the District gave out grants to communities to hold clean up days. With the limited budget, these grants will only be given out if there are special funds designated for them or there is grant money available. These clean up grants will also be one of the first items to be increased if the budget improves over time.

2.f <u>Yard Waste/Other Organics:</u> No plans were developed to spend fund in this area, except the Compost items above, but reserve the right to consider it.

## 2.g Education/Awareness

- 2.g.1 <u>Education Staff:</u> This line item covers the AmeriCorps volunteer which will serve as an outreach and education person for the district. They will assist with the drop off program, Sutton Road Recycling Center and do educational programming and outreach.
  - After the great success from the Ohio EPA and Recycling Drop-off Pilot Program, the district may use implementation funds to hire summer staff to visit the drop-off sites to inform and educate residents about contamination, if funds are made available through a grant or extra funds.
- 2.g.2 <u>Advertisement/Promotion:</u> Due to the rural nature of our District, we have to use many methods of communicating our messages. We will use this line item to develop, print, distribute and inform the public of our programs, events.
- 2.q.3 Other: -none
- 2.h Recycling Market Development
  - 2.h.1 General Market Development Activities-none
  - 2.h.2 Ohio EPA pass-through grant-as many as possible.
- 2.i <u>Service Contracts</u> none
- 2.j Feasibility Studies none
- 2.k <u>Waste Assessments/Audits</u> none
- 2.I Dump Cleanup none
- 2.m <u>Litter Collection/Education</u> none
- 2.n Emergency Debris Management none

- 2.0 Loan Payment none
- 2.p Other These funds are to match state grants or to develop special programs for the year. It is hard to designate limited funds, but this line-item's intention is to match tire grants or program grants. In the event that there are funds.

## 3 Health Dept. Enforcement - none

## 4 County Assistance

- 4.a <u>Maintaining Roads:</u> No plans were developed to spend funds in this area, but reserve the right to consider it.
- 4.b <u>Maintaining Public Facilities:</u> No plans were developed to spend funds in this area, but reserve the right to consider it.
- 4.c <u>Providing Emergency Services:</u> No plans were developed to spend funds in this area, but reserve the right to consider it.
- 4.d <u>Providing Other Public Services:</u> No plans were developed to spend funds in this area, but reserve the right to consider it.
- 5 Well Testing- No plans were developed to spend funds in this area, but reserve the right to consider it.
- 6 Out-of-State Waste Inspection: No plans were developed to spend funds in this area, but reserve the right to consider it.

## 7 Open Dump, Litter Law Enforcement

- 7.a <u>Heath Departments</u> it is the intention of the Policy Committee and the District to work with the Health Department and give them an annual grant to reduce open dumping and litter enforcement. If the District gets increased funding, this will be the first line item added to the budget to give a grant with metrics and reporting mechanisms.
- 7.b <u>Local Law Enforcement:</u> It is the intention of the Policy Committee and the District to work with the Local Law Enforcement and give them an annual grant to reduce open dumping and litter enforcement. If the District gets increased funding, this will be the first line item added to the budget to give a grant with metrics and reporting mechanisms.
- 7.c Other none

# 8 Heath Department Training

# 9 Municipal/Township Assistance

- 9.a <u>Maintaining Roads:</u> No plans were developed to spend fund in this area, but reserve the right to consider it.
- 9.b Maintaining Public Facilities:
- 9.c <u>Providing Emergency Services:</u> These will be provided as needed.
- 9.d <u>Providing other Public Services:</u> No plans were developed to spend fund in this area, but reserve the right to consider it.

## 10 Compensation to Affected Community (ORC Section 3734.35)

This is always allowable under 3734.35 for affected communities and the District would consider this when funds are available.

# **Summary of Revenue & Expenses for Planning Period**

Year	Revenue	Expenses	Annual Surplus/Deficit (\$)	Balance (\$)
2016			<b>Ending Balance</b>	\$712,994
2017	\$442,231	\$432,906	\$9,324	\$722,318
2018	\$515,244	\$522,296	-\$7,053	\$715,265
2019	\$493,228	\$501,613	-\$8,385	\$706,880
2020	\$361,750	\$462,340	-\$100,590	\$606,290
2021	\$463,607	\$510,683	-\$47,075	\$559,215
2022	\$448,417	\$525,491	-\$77,074	\$482,141
2023	\$536,580	\$717,865	-\$181,286	\$300,855
2024	\$495,704	\$590,483	-\$94,779	\$206,077
2025	\$670,027	\$649,000	\$21,027	\$227,104
2026	\$670,027	\$662,600	\$7,427	\$234,532
2027	\$670,027	\$671,308	-\$1,281	\$233,251
2028	\$670,027	\$670,127	-\$100	\$233,151
2029	\$670,027	\$669,061	\$966	\$234,117
2030	\$670,027	\$664,113	\$5,914	\$240,032
2031	\$670,027	\$664,113	\$5,914	\$245,946
2032	\$670,027	\$664,113	\$5,914	\$251,860
2033	\$670,027	\$664,113	\$5,914	\$257,775
2034	\$670,027	\$664,113	\$5,914	\$263,689
2035	\$670,027	\$664,113	\$5,914	\$269,604
2036	\$670,027	\$664,113	\$5,914	\$275,518
2037	\$670,027	\$664,113	\$5,914	\$281,433
2038	\$670,027	\$664,113	\$5,914	\$287,347
2039	\$670,027	\$664,113	\$5,914	\$293,262

Source(s) of Information: A-HSWD

The expenses are bare bones for the district. There is funding for a staff person, an office, outreach, recycling days, household hazardous waste collection, grants to communities, and keeping the drop-off program below \$450,000/year. This could work if other haulers and/or communities add curbside recycling to their services. This number also could be reduced by commodity prices going up therefore rebates would off-set cost of picking up, sorting and processing the materials. The numbers for all categories were flat and the district will make do with the increases by identifying cost saving measures over time.

# C. Alternative Budget

There is no alternative budget at this time.

### D. Major Facility Project

The AHSWD during this planning process had to make hard decisions and we consider our leased-out Sutton Road Recycling Center to be our major facility right now. The District has budgeted funds for maintenance and capital improvements for the Sutton Road Recycling Center, but grants and other funds will be gathered from other sources as required to make these improvements for the sustainability of the Center moving forward.

Also, there have been discussions of getting a Recycling Center in Athens County and also building a large regional Center for Hard to Recycle Materials at the site of the Recycling Center. This would serve all of southeastern Ohio and would allow all of the solid waste district, commercial, governments as well as residents to be able to come together to get the qualities that a recycler would want to handle and also create additional recycling jobs.

# APPENDIX P DESIGNATION

## A. Statement Authorizing/Precluding Designation

The Board of Directors of the Athens-Hocking Solid Waste District are authorized to establish facility designations in accordance with Section 343.014 of the Ohio Revised Code. Facility designation shall be established and governed by applicable District rules.

The District is not designating any facilities in this *Plan Update*. The District reserves the right to designate one or more facilities to receive solid waste.

As required in Section 3734.53(A)(13)(a) of the Ohio Revised Code, the District is identifying all Ohio licensed and permitted solid waste landfill, transfer and resource recovery facilities and all licensed and permitted out-of-state landfill, transfer and resource recovery facilities anticipated to be used by the District. The District is also identifying licensed and permitted recycling and registered composting facilities, including those that are identified in the inventories in Appendix B of this *Plan Update*.

#### **Waiver Process for Designated Facilities**

If the District establishes facility designation and 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 Directors of the Athens-Hocking Solid Waste 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 Athens-Hocking Solid Waste District staff will review the request and may request additional information if necessary. The Board of Directors shall act on the request for a waiver within 90 days after receiving the request. The Board of Directors may grant the request for a waiver if the Board of Directors determines that:

- 1. Issuance of the waiver is not inconsistent with projections contained in the District's approved plan under Section 3734.53 (A) (6) and (A) (7); and
- 2. Issuance of the waiver will not adversely affect implementation and financing of the District's approved plan.

## B. Designated Facilities

## Table P-1 Designated Facilities

No Designated Facilities

# APPENDIX Q DISTRICT RULES

### A. Existing Rules

The district will reserve the right to write rules and amend them during this planning period, if needed.

## B. Proposed Rules

At this time, the Athens-Hocking Solid Waste District does not plan to adopt rules. Since changes may occur during the planning period, the District reserves for the Board of Directors the power to make and enforce rules to the fullest extent authorized by Ohio law.

The Ohio Revised Code, Section 343.01 (G) gives solid waste districts the authority to adopt, publish, and enforce rules 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.

This Plan authorizes the Athens-Hocking Solid Waste District Board of Directors to adopt, publish, and enforce rules doing any of the following:

- 1. Prohibiting or limiting the receipt of solid waste generated outside the district or outside a service area proscribed in the solid waste management plan or amended plan, at facilities covered by the plan.
- 2. Governing the maintenance, protection, and use of solid waste collection or other solid waste facilities located within the district.
- 3. Governing the development and implementation of a program for the inspection of solid waste 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.
- 4. Exempting the owner or operator of any existing or proposed solid waste facility provided for the plan or amended plan from compliance with any amendments to a township zoning resolution.

After this updated Plan has been approved by the Director of the Ohio Environmental Protection Agency, Athens-Hocking Solid Waste District may, as the District deems appropriate, adopt any rules that are necessary to implement the ratified and approved Solid Waste Management Plan.

#### **Procedures**

The District Board of Directors shall use the following procedures for the adoption or amendment of rules.

- 1. The Board shall seek the advice and expertise of the Policy Committee and District staff in the preparation of proposed new or amended rules.
- 2. Upon completion of proposed new or amended rules, the Board will mail copies of the

## **Appendix Q** District Rules

- 3. proposed rules to each Board of County Commissioners, Policy Committee member, and Health Department and invite written comments within a stated period of time. The proposed rules may be mailed to other interested parties.
- 4. The Board will provide public notice of the availability of the proposed rules for review in the newspaper of greatest circulation in each county. The notice will include the date by which written comments on the proposed rules must be received and the dates, times and location of public hearings on the proposed rules. The public comment period on the proposed rules will extend at least 30 days from the date of public notice.
- 5. The Board will provide at least one public hearing on the proposed rules. Additional hearings may be held if deemed necessary by the Board. District staff will preside at the public hearings.
- 6. After the hearing(s) and public comment, the Board may revise and reissue the proposed rules, or proceed to take final action on the proposed rules. If the Board reissues revised proposed rules, the Board will provide another public hearing. The Board may make such changes in the proposed rules as it deems appropriate in taking final action to adopt or amend rules.
- 7. The Board will adopt or amend rules at a regular meeting or a special meeting designed for rules revision. Rules will be adopted or amended by resolution approved by a majority of the quorum of the Board.
- 8. A copy of the adopted or amended rules will be mailed to each Board of Commissioners, each Policy Committee member, and each Health Department. The rule may be mailed to interested parties that have been identified during the comment and public hearing period. The Board may, but is not required, to follow the above procedures when rescinding rules.

# APPENDIX R BLANK SURVEY FORMS AND RELATED INFORMATION

Here is a link to the Survey for the public to comment on the Solid Waste Management Plan.

# APPENDIX S SITING STRATEGY

The Athens-Hocking Solid Waste District does not intend to site or build any District owned or financed solid waste transfer or municipal solid waste disposal facilities during the planning period. The District does not plan to site any privately owned solid waste transfer or solid waste disposal facilities to serve District needs.

If a private owner decides to site a waste disposal facility or solid waste transfer facility in Athens or Hocking County that requires a permit for construction, enlargement or modification, the District will review the permit application that is submitted to the Ohio Environmental Protection Agency and will actively participate in the public review and comment process to the extent deemed appropriate by the District Board of Directors. The Athens-Hocking Solid Waste District has not chosen to include a siting strategy for solid waste disposal or transfer facilities in this Plan.

The Athens-Hocking Solid Waste District is not including a siting strategy for facilities that do not require solid waste facility permits, like recycling facilities. These facilities are subject to local zoning and building regulations and will be treated like other industrial manufacturing and processing facilities.

# APPENDIX T MISCELLANEOUS PLAN DOCUMENTS

District resolutions, certification statements, public notices, other notices (e.g., the notice sent to the 50 largest generators)

# Adopted September 4, 2024 by AHSWD Policy Committee

# **Resolution Adopting the Solid Waste Management Plan**

A RESOLUTION DECLARING THAT THE AMENDED SOLID WASTE MANAGEMENT PLAN FOR THE ATHENS TALKING SOLID WASTE DISTRICT HAS BEEN ADOPTED.

WHEREAS, the Athens-Hocking Solid Waste District ("District") completed the draft amended Solid Waste Management Plan ("Plan") and submitted it to the Ohio Environmental Protection Agency ("Ohio EPA") for review and comment on November 21, 2023, and the Ohio EPA provided comments in a non-binding advisory opinion on January 4, 2024

WHEREAS, the District Policy Committee has reviewed the non-binding advisory opinion received from the Ohio EPA 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 June 25, 2024 to July 26, 2024 and public meetings were held on July 31, 2024 and August 7, 2024 to provide the public an opportunity to have comment on the plan.

## NOW THEREFORE, BE IT RESOLVED that the District Policy Committee:

- 1. Adopts the amended plan as the District Plan in the form: with changes made on September 4, 2024.
- 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 and access to sufficient 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 District Management Plan Format revision 4.1.
- 3. Directs that copies are made available of the adopted plan to the Board of County Commissioners and to the legislative authority of each municipal corporation and township under jurisdiction of the district for ratification.

This resolution shall be in effect immediately upon its adoption.

Athens County				
Representation	Signature for Yes Vote	Signature for No Vote		
County Commissioner (Lenny Eliason)	Long Elin			
Largest City (Steve Patterson)				
Health District (Jack Pepper)	( but			
Townships (Ted Linscott)	3			
Industry (Steve Mack)	In Al			
General Interest of Citizens (John Kotowski)				
Public (Mike Cooper)	Males			
Total Votes				

Hocking County					
Representation	Signature for Yes Vote	Signature for No Vote			
County Commissioner (Mike Linton)	mulan D'aut				
Largest City (Greg Fraunfelter)		,			
Health District (Doug Fisher)	Nonglas S. Fash	_			
Townships (Sam Eggleston)	Ü				
Industry (Karen Raymore)	Karen Raymor	e			
General Interest of Citizens (Jim Raeder)	In Paully				
Public (Michelle Stufflebeam)					
Total Votes					

ure for Yes Vote	Signature for No Vote
/	
9	-Ø-
	9

# Resolution Ratifying the Solid Waste Management Plan

A RESOLUTION DECLARING THAT THE AMENDED SOLID WASTE MANAGEMENT PLANFOR THE ATHENS TALKING SOLID WASTE DISTRICT HAS BEEN RATIFIED.

WHEREAS, the Athens-Hocking Solid Waste District ("District") completed the draft amended Solid Waste Management Plan ("Plan") and submitted it to the Ohio Environmental Protection Agency ("Ohio EPA") for review and comment on November 21, 2023, and the Ohio EPA provided comments in a non-binding advisory opinion on January 4, 2024

WHEREAS, the District Policy Committee reviewed the non-binding advisory opinion received from the Ohio EPA 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 June 25, 2024 to July 26, 2024 and public meetings were held on July 31, 2024 and August 7, 2024 to provide the public an opportunity to have comment on the plan.

WHEREAS, the Policy Committee adopted the Draft plan on September 4, 2024 and the District sent out a letter and the Plan within 30 days after adopting the draft plan to the board of county commissioners of Athens and Hocking County and all legislative authorities within the jurisdiction of the District.

WHEREAS, After the 90 days after receiving a copy of the draft plan, 100% of each board and the legislative authority approved the plan along with the Athens and Hocking County Commissioners and City of Logan and the City of Athens as required by state law.

#### NOW THEREFORE, BE IT RESOLVED that the District Policy Committee:

- Ratifies the amended plan as the District Plan in the form with changes made on December 18, 2024.
- 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 and access to sufficient 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 District Management Plan Format revision 4.1.
- Directs the District Director to send a copy of Plan with attachments within 10 days of the adoption of this Resolution to Ohio Environmental Protection Agency for final approval.
- 4. This resolution shall be in effect immediately upon its adoption.

Page 2 of 2

	Athens County	
Representation	Signature for Yes Vote	Signature for No Vote
County Commissioner (Lenny Eliason)	Long Elin	
Largest City (Steve Patterson)		
Health District (Jack Pepper)	Jelymu -	
Townships (Ted Linscott)		
Industry (Steve Mack)	On The	
General Interest of Citizens (John Kotowski)	A A	
Public (Mike Cooper)	Musicare	
Total Votes		
Representation	Hocking County Signature for Yes Vote	Signature for No Vete
County Commissioner (Mike Linton)	nul-DD Put	Signature for No Vote
Largest City (Greg Fraunfelter)	Frey Framfelte	
Health District (Doug Fisher)	Denglas & Lich	J
Townships (Sam Eggleston)	0	
Industry (Karen Raymore)		
General Interest of Citizens (Jim Raeder)	James Villeder	
Public (open)		
Total Votes		
	At-Large Member	
Representation	Signature for Yes Vote	Signature for No Vote
At-Large Member (Molly Jo Stanley)	W / &	
Total Votes		X

# **APPENDIX U RATIFICATION RESULTS**

Table U-1 Ratification Summary

Athens-Hocking Solid Waste District			
	Ratification	Tracking S	heet Summary
Community	Population	Approve	Disaprove
Athens County		62,706	
Athens County Commissioners		✓	
City of Athens		✓	
Hocking County		27,540	
Hocking County Commisioners		✓	
City of Logan		✓	
Total District Population			90,246
60% Approval Needed	54,148		
Total Population Approved	90,246		
% Approved of 60%		167%	
90,246	100%	Received	

	Hocking County	Population	Approved	Rejected	Date
					Resolution
pass					Adopted
✓	<b>Board of County Commissioners</b>		✓		11/21/2024
	<u>Cities</u>				
✓	Logan	7,166	7,166		11/26/2024
	Villages				
✓	Buchtel	29	29		11/7/2024
✓	Murray City	336	336		10/21/2024
✓	Laurelville	498	498		11/11/2024
	<u>Townships</u>				
✓	Benton	723	723		10/10/2024
✓	Falls	5,026	5,026		11/19/2024
✓	Good Hope	1,313	1,313		9/26/2024
✓	Green	2,607	2,607		10/22/2024
✓	Laurel	1,060	1,060		10/31/2024
✓	Marion	2,453	2,453		9/19/2024
✓	Perry	1,871	1,871		10/9/2024
✓	Salt Creek	1,099	1,099		11/5/2024
✓	Starr	1,416	1,416		11/27/2024
✓	Ward	807	807		12/10/2024
✓	Washington	1,136	1,136		11/26/2024
	Total Pop/Total Approved	27,540	27,540	Votes to date	12/10/2024
	needed 60% of 27540=	16,524	100	% of Votes	

pass √	Athens County	Population	AI		
✓	D	<u> </u>	<u>Approved</u>	<u>Rejected</u>	<u>Adopted</u>
	<b>Board of County Commissioners</b>	✓			10/15/2024
	Cities				
✓	Athens	24,673	24,673		11/4/2024
✓	Nelsonville	4,518	4,518		10/28/2024
	Villages				
✓	Albany	924	924		10/2/2024
✓	Amesville	170	170		12/12/2024
✓	Buchtel	484	484		11/7/2024
✓	Chauncey	944	944		12/12/2024
✓	Coolville	445	445		11/12/2024
✓	Glouster	1,629	1,629		11/4/2024
✓	Jacksonville	396	396		11/20/2024
✓	Trimble	322	322		11/18/2024
	<u>Townships</u>				
✓	Alexander	2,739	2,739		11/13/2024
✓	Ames	1,050	1,050		11/5/2024
✓	Athens	6,501	6,501		10/24/2024
✓	Bern	559	559		10/10/2024
✓	Canaan	1,334	1,334		10/7/2024
✓	Carthage	1,471	1,471		11/4/2024
✓	Dover	2,332	2,332		10/17/2024
✓	Lee	1,921	1,921		10/8/2024
✓	Lodi	1,355	1,355		10/14/2024
✓	Rome	1,226	1,226		10/2/2024
✓	Trimble	1,649	1,649		11/21/2024
✓	Troy	2,006	2,006		9/27/2024
✓	Waterloo	2,318	2,318		11/1/2024
✓	York	1,740	1,740		10/21/2024
		62,706	62,706	-	
	Needed 6	37,623.60	100.00%	Received	12/12/2024

# APPENDIX V INVENTORY OF OPEN DUMPS AND OTHER DISPOSAL FACILITIES

# **Existing Open Dumps and Waste Tire Dumps**

Table V-1 Existing Solid Waste Open Dumps

Site Location (either address or description of site location)	Materials at Site (solid waste and/or scrap tires)
47507.71	
17695 Thompson Road Laurelville	solid waste and/or scrap tires
5872 Saunders Road Logan	solid waste and/or scrap tires

# Ash, Foundry Sand, and Slag Disposal Sites

Table V-2 Existing Ash, Foundry Sand, and Slag Disposal Sites

Table 1 2 Existing 7ton, I Garlary Garla, and Glag Biopodar Greec				
Site Location (Address, description of site location)	Materials at Site (fly ash, bottom ash, foundry sand, and/or slag)			
None.				

# APPENDIX W DISTRICT MAP

Below is a link for a google map showing the facilities in the District and their locations. The map shows:

- All resource recovery facilities.
- All recycling activities within the district.
- Solid waste open dumping sites, including scrap tires.
- Disposal facilities for fly ash and bottom ash, foundry sand, and slag.

Click on the link below and find a map for your review:

https://www.google.com/maps/d/viewer?mid=1s-5VI0Fpx3jUXviySCSX6TjNY-GtKtw&femb=1&II=39.46508338007655%2C-82.1615273989029&z=10

There are also additional maps below by type:

- Material Recycling Center
- Drop off locations
- Landfill Facilities
- Open Dumps
- Composting Facilities\



