

Coshocton-Fairfield-Licking-Perry Solid Waste Management District

Plan Update

Planning Period 2019 to 2028

**Plan Approved by
Ohio EPA**

January 17, 2019

**Coshocton-Fairfield-Licking-Perry
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I SOLID WASTE MANAGEMENT DISTRICT INFORMATION

Table ii-1 Solid Waste Management District Information

SWMD Name	CFLP Solid Waste Management District
Member Counties	Coshocton-Fairfield-Licking-Perry
Director's Name (main contact)	Carol Philipps
Job Title	Executive Director
Street Address	675 Price Rd.
City, State, Zip Code	Newark, OH 43055
Phone	740-349-6308
Fax	740-349-6309
E-mail address	cflpswd@windstream.net
Webpage	cflpswd.org

Table ii-2 Members of the Policy Committee

Member Name	Representing
Coshocton	
Dane Shryock	County Commissioners
Joey Garrett	Municipal Corporations
D. Curtis Lee	Townships
Zach Fanning	Health District
Joe Bulzan	Generators
Glen Hill	Citizens
Jeff Wherley	Public
Fairfield	
Steve Davis	County Commissioners
Paul Martin	Municipal Corporations
Terry Dunlap	Townships
Larry Hanna	Health District
Vacant	Generators
Patty Bratton	Citizens
Tony Vogel	Public
Licking	
Duane Flowers	County Commissioners
Jeff Hall	Municipal Corporations
Dave Lang	Townships
Chad Brown	Health District
Robin Bennett	Generators
Tony Furguiele	Citizens
Seth Ellington	Public

Perry	
Ben Carpenter	County Commissioners
Bo Powell	Municipal Corporations
Dick Fankhauser	Townships
Angela DeRolph	Health District
Kevin Walters	Generators
Lucinda Yinger	Citizens
Matt Reed	Public
Additional Public Representative	
Name	County
Jim Hart	Perry

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

Name	Tony Vogel
Street Address	6670 Lockville Rd.
City, State, Zip Code	Carroll, OH 43112
Phone	740-652-7121
Fax	614-322-5203
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Table ii-4 Board of County Commissioners/Board of Directors

Commissioner Name	County	Chairperson/President
Gary Fischer	Coshocton	
D. Curtis Lee	Coshocton	
Dane Shryock	Coshocton	X
Steve Davis	Fairfield	
Mike Kiger	Fairfield	
Dave Levacy	Fairfield	
Rick Black	Licking	
Tim Bubb	Licking	
Duane Flowers	Licking	
Ben Carpenter	Perry	
Dave Freriks	Perry	
Jim O'Brien	Perry	

This plan was written by District staff with assistance from Policy Committee members and other volunteers who evaluated current programs and developed plans for future programs, with the exception of Chapter 1, Introduction, and the Purpose statement beginning each chapter that were written by Ohio EPA staff. The District does not use a Technical Advisory Committee.

CHAPTER 1 INTRODUCTION

A. Brief Introduction to Solid Waste Planning in Ohio

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

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

B. Requirements of County and Joint Solid Waste Management Districts

1. *Structure*

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

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

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

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

2. Solid Waste Management Plan

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

Solid waste management plans must contain the information and data prescribed in Ohio Revised Code (ORC) 3734.53, Ohio Administrative Code (OAC) Rule 3745-27-90. Ohio EPA prescribes the format that details the information that is provided and the manner in which that information is presented.

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

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

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

C. District Overview

The CFLP Joint Solid Waste Management District, formed in 1988, is comprised of Coshocton, Fairfield, Licking and Perry Counties in central Ohio. It has historically operated under the policy that the private marketplace should continue to be the primary provider of solid waste services, with assistance from, and supplemented by the solid waste district where necessary to meet state mandates. Private haulers and recyclers existed when the district was formed, and it has been the intention of this body not to interfere with or disrupt their businesses. Instead, given the mandates of the state regarding solid waste management and recycling, this body ensures that the mandates

are followed, and that residents and businesses within the solid waste district have access to services that will achieve state recycling goals, making maximum use of existing service providers. The district does not currently own or operate any facilities or directly provide services.

The CFLP Joint Solid Waste Management District maintains an administrative office that oversees the functions of the district. The mandatory recycling and education services are contracted to member counties for implementation. Each county maintains a Recycling Office staffed with at least an administrator, and in some counties, dedicated education and litter collection staff. These offices pre-date the formation of the solid waste district and were historically supported by state funding. Since 2005, the functions of those offices that further solid waste district goals and objectives have been, and will continue to be, primarily funded by the solid waste district as long as funds are available. Counties contribute to the cost of maintaining these offices by providing space, utilities, employee services and other overhead costs.

Since its inception, the CFLP Joint Solid Waste Management District has increased access to recycling services so that all residents and businesses have the opportunity to reduce what they send to landfills. Recycling material collection services now exist District-wide where before they were based solely on the local private recyclers' service areas.

D. Waste Reduction and Recycling Goals

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

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 and at least 66 percent of the solid waste generated by the industrial 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 provide strategies for managing scrap tires, yard waste, lead-acid batteries, household hazardous waste and obsolete/end-of-life electronic devices.

6. The SWMD shall explore how to incorporate economic incentives into source reduction and recycling programs.
7. The SWMD will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of recycling programs on reducing greenhouse gas emissions.
8. The SWMD has the option of providing programs to develop markets for recyclable materials and the use of recycled-content materials.
9. The SWMD shall report annually to Ohio EPA regarding implementation of the SWMD's solid waste management plan.

All nine SWMD goals in this state plan are crucial to furthering solid waste reduction and recycling in Ohio. However, by virtue of the challenges posed by Goals 1 and 2, SWMDs typically have to devote more resources to achieving those two goals than to the remaining goals. Thus, Goals 1 and 2 are considered to be the primary goals of the state plan.

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

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

See Chapter 5 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 a coal burning power plant present challenges, particularly for providing waste reduction and recycling programs.

The policy committee must take into account all of these characteristics when developing its overall waste management strategy.

A. Profile of Political Jurisdictions

1. *Counties in the Solid Waste Management District*

The member counties are Coshocton, Fairfield, Licking and Perry Counties. Small adjustments to populations to exclude Baltic in Coshocton County and include Roseville in Perry County were made. Larger adjustments were made in Licking County to exclude New Albany and Reynoldsburg, and in Fairfield County to exclude Columbus and Canal Winchester, and to include the part of Pickerington that is in Franklin County. Because these are quickly growing

communities, these populations will be adjusted each year with the rest of the county populations in the section of the plan regarding population projections.

2. *County Overview*

Coshocton County - one third of the county's population resides in its county seat - the city of Coshocton. The remainder of the county is rural and sparsely populated. Only 8% of the land is developed, while the remainder is forest, pasture, crops, and water.

Fairfield County - 20% of the county's population resides in its county seat - the city of Lancaster. Violet Township and Pickerington combined (located adjacent to Franklin County) are densely populated and comprise another 20% of the county population. Still, only 13% of the land is developed, while 59% is cultivated crops/pasture and the remainder is forest and water.

Licking County - one third of the county's population resides in its county seat - the city of Newark. Pataskala and Heath comprise another 15%. Still, only 12% of the land is developed, while 50% is pasture and crops, and the remainder is forest, grasslands and water.

Perry County - only 13% of the county's population resides in its county seat - the village of New Lexington. Most of the county population resides in the northern half of the county, while the southern half is sparsely populated. Only 8% of the land is developed, while 57% is forest and 32% is pasture and crops.

(Source: Ohio County Profiles prepared by the Office of Research, Ohio Development Services Agency)

B. Population

1. *Reference Year Population*

In the reference year, 2016, the population of the District was 406,694. After adjusting to exclude communities primarily in another district, and to include populations of communities primarily in our district, the adjusted population of the District was 386,070.

The population of Coshocton County was 36,558, with a subtraction of 10 people in the community of Baltic, which is primarily in the Stark-Tuscarawas-Wayne Solid Waste District. The adjusted population was 36,548.

The population of Fairfield County was 158,146. Portions of Canal Winchester (882), Columbus (10,459), and Reynoldsburg (985) were subtracted because they are primarily in the SWACO jurisdiction. Portions of Pickerington (93) and Lithopolis (35) were added because, although technically living in the SWACO

jurisdiction, the communities are primarily in the CFLP District. The adjusted population was 145,948.

The population of Licking County was 174,988. Portions of Reynoldsburg (9276) and New Albany (24) were subtracted because they are primarily in the SWACO jurisdiction. Portions of Gratiot (92) and Utica (17) were added, because although technically living in other districts, the communities are primarily in the CFLP District. The adjusted population was 165,797.

The population of Perry County was 37,002. A portion of Roseville (775) was added because the community is located primarily in the CFLP District. The adjusted population was 37,777.

(Source: Population Estimates Division, U.S. Census Bureau, prepared by Office of Research, Ohio Development Services Agency)

2. Population Distribution

Table 2-1 Population of District in the Reference Year

County		Largest Political Jurisdiction		
Name	Population	Community Name	Population	Percent of Total County Population
Coshocton	36,548	Coshocton	11,112	30%
Fairfield	145,948	Lancaster	41,961	29%
Licking	165,797	Newark	50,001	30%
Perry	37,777	New Lexington	4,855	13%
Total	386,070			

Table 2-2 Population Distribution

County	Percent of Population in Cities	Percent of Population in Villages	Percent of Population in Unincorporated Township
Coshocton	30%	10%	60%
Fairfield	42%	8%	50%
Licking	46%	13%	41%
Perry	0%	40%	60%

Almost one third of the population of Coshocton County lives in the city of Coshocton. The remainder of the population is spread between 22 townships and 5 small villages covering 564.1 square miles, all of which are considered

rural, using OEPA's definition of a population less than 5000 people being rural. The **average** population density is 65 people per square mile. According to ODSA, the population of Coshocton County will continue to decrease slightly throughout the planning period.

Located adjacent to Franklin County, Fairfield County is experiencing a higher rate of growth in the western portion of the county than the eastern portion. Overall, the population of the county is projected at 1% growth per year. More than half the population lives in the cities of Lancaster and Pickerington, and Violet Township. The remaining population is spread between 12 townships and 13 villages, with none exceeding 7,600 people. The county covers 505.7 square miles. The **average** population density is 299 people per square mile.

Licking County is also located adjacent to Franklin County and is experiencing a higher rate of growth in the western half of the county versus the eastern half. Overall, the population is projected to increase at a rate of .8% per year. Almost half the population lives in the cities of Newark, Pataskala and Heath. The remaining population is spread between 25 townships and 11 villages, with three townships (including municipalities within them) considered urban according to OEPA's definition. The county is the largest geographically, covering 686.5 square miles. The **average** population density is 248 people per square mile.

Perry County population has been slowly increasing since 1970. The southern third of the county is Wayne National Forest and there is a large state forest north of New Lexington. The population is spread between 14 townships and 11 villages, covering 410 square miles. The county seat of New Lexington numbers close to 5,000 people. The **average** population density is 88 people per square mile.

(Source: Ohio County Profiles prepared by the Office of Research, Ohio Development Services Agency)

3. *Population Change*

The population of Coshocton County is gradually decreasing, while Licking and Fairfield are growing rapidly - due to their proximity to Franklin County. Perry County's northern population is gradually increasing as people commuting to Columbus move further and further away from the city. Overall, the district population has increased 30% since it was formed, consistent with the projections made in the original solid waste management plan.

The demographics tracked by the state indicate that the race, age, family structure, educational attainment and income have not varied significantly since 2006. The population in 2016 was 90% or more white, 83-92% graduates of high school or more, 50% couples with one or two in the labor force, median

income of \$41-60,000, 50% between the ages of 25 and 64, 60% with no children in the home, 85-92% above the poverty level, and 88% living in the same house as the previous year.

(Source: Ohio County Profiles prepared by the Office of Research, Ohio Development Services Agency)

4. *Implications for Solid Waste Management*

The biggest challenge facing this district is cost effectively providing recycling services in sparsely populated townships where the lack of density (or the distance from urban hubs) makes it unprofitable for private haulers to offer services. Because it is unprofitable, they do not encourage their customers to request curbside recycling services. This is gradually being addressed by townships and villages in the denser areas contracting for trash services and including curbside recycling in the bid packets. However, since the majority of district residents have historically made individual decisions regarding the management of their trash, it is a slow process to gain acceptance of working together as a community to franchise services.

In all four counties, about 26% of the population lives in rental units. While we do not have statistics indicating the split between rental houses and apartments, we do know that the segment of the rental population living in apartments are not included in municipal curbside programs. Therefore, even in communities that have non-subscription curbside recycling, there is a significant segment of the population that is without recycling services.

There are many small private trash hauling firms in the District, so competition for individual trash subscriptions is high. It is cost-prohibitive for some small haulers to invest in equipment and personnel to offer curbside recycling in order to bid on community franchise contracts. An increase in community franchises will impact the ability of those firms to keep enough business to stay afloat, and companies will close, meaning local residents lose jobs. Even in the largest municipality (Newark), there are multiple local trash haulers in addition to the large companies and residents are served by individual subscription services - some including subscription curbside recycling.

Additionally, the geographic layout of the solid waste district is not conducive to a "hub and spoke" approach to providing services, as the time and distance to travel from one end of the district to the other often exceeds that of using services in adjacent solid waste districts. The large private recyclers have not expressed interest in building material recovery facilities in this solid waste district, knowing that the inflow of materials would inhibit profit. This layout also impacts our ability to contract for

services district-wide, as haulers servicing Coshocton County find it too far to service Fairfield County, and visa-versa. Very few haulers provide services to all four counties, and even those do so with separate company divisions.

There are three operating public landfills in the district, all privately owned and operated. The cost of disposal is relatively low, and residents can haul their own trash to a landfill or transfer station if they so choose. Conversely, there are few multi-material recycling centers, necessitating increased travel for residents and businesses to find outlets for a variety of materials. This combination leads to a mentality that disposing of everything in one container is less costly and less effort than recycling.

C. Profile of Commercial and Institutional Sector

The Ohio County Profiles prepared by the Office of Policy, Research and Strategic Planning indicates that between 2012 and 2016, business starts were outpaced by closures, resulting in a net loss of active businesses. This source indicates a significant drop in the number of active businesses in all four counties in 2016. Services and government play a major role in local employment, accounting for 80% of the district workforce in 2016. Major employers include an insurance company regional office, 3 hospitals, and local government offices.

The only community where commercial trash collection is provided to businesses without individual subscription is Lancaster. There, the city provides mandatory trash collection but not recycling. Therefore, businesses in the city of Lancaster find it difficult to find a private recycler willing to provide just recycling service. In all other communities, businesses are responsible for contracting their own trash and recycling services individually and can potentially use their trash subscription to leverage cost effective recycling services.

County recycling offices encourage public sector agencies and public schools to participate in recycling programs, and where requested, provide on-site pickup of materials, going so far as to go inside of some buildings to retrieve the materials. The cost of providing this service is rising because it is labor intensive to manually handle materials multiple times. While the actual tons diverted from landfills through this program is very small, it serves the purpose of demonstrating that the local government agencies are being environmentally responsible with their waste, using government funding to handle government waste. It is consistent with the education theme of generators taking responsibility for their own waste. Thus, private businesses are encouraged to use their funds to responsibly manage their waste. Recycling centers in the district offer collection services to private businesses at a cost and do have business customers who recognize the benefit of reducing the waste that needs to be collected for landfilling.

D Profile of Industrial Sector

The "goods-producing" sector, including mining and construction, accounts for 20% of the district workforce, however manufacturing itself accounts for only 7.6% of all employed citizens. One employer has 1000 employees (Anchor Hocking). Two manufacturers employ 500-700 employees. Forty eight manufacturers employ 100-499 employees. Thirty manufacturers employ between 50-99 employees. Two hundred ninety four manufacturers employ 10 or fewer employees. The waste stream of half the manufacturing sector is no larger than a household waste stream, and many of those "manufacturers" are home-based businesses with one employee.

(Source: Ohio County Profiles prepared by the Office of Research, Ohio Development Services Agency)

Solid waste from the manufacturing sector is dominated by the American Electric Power utility in Conesville. The flue gas desulphurization (FGD) waste and coal ash generated by this plant dwarfs the entire rest of the district's waste stream. It is managed privately by the utility, both in recycling projects and disposal. Therefore, this plan will show that portion of the waste stream separately throughout the chapters to keep from skewing the numbers. Although AEP has a NAICS (and SIC) code that would place it in the commercial sector, it has historically been categorized with manufacturers.

Other major manufacturers produce waste that is also hard to recycle, such as non-exempt foundry sand, manufactured resins and chemicals, organics (egg farm) and fiberglass and wood fiber that is bound with both resins and chemicals. Their unique waste streams present a challenge in tackling large quantities of material through traditional recycling. Exclusive of AEP, the amount disposed by the industrial sector is half that of the residential/commercial sector.

In all communities, manufacturers are responsible for individually contracting for trash and recycling services. There are many private haulers from which to choose for trash collection, but few offer recycling services. This leads manufacturers to separate their recyclables and market them directly if they have the resources to do so and the volume of material to make it cost effective. Several industries avail themselves of the recycling services offered by the Lancaster-Fairfield Community Action Recycling Center and PerCo, Inc. Recycling Center.

E. Other Characteristics

This district has historically been rural and agricultural. Only recently with the spread of Columbus into Fairfield and Licking Counties has the urban sprawl affected how waste is handled locally. It is still within our lifetime that trash was burned in backyard barrels rather than hauled to landfills - and in many very rural areas, that still occurs. The "out

of sight, out of mind" attitude is reflected in the continued open dumping in very rural areas of all four counties, however this is slowly changing as those sites are cleaned up and perpetrators are held accountable. We would like to believe that the last twenty years of focused education has raised a new generation of environmentally conscious residents who do not subscribe to the old methods of waste disposal, and that increased enforcement has deterred those who refuse to be environmentally responsible.

As stated previously, only about 10% of the land is developed in this solid waste district. Because there is a large portion of the district where population density makes curbside recycling unprofitable for private haulers, townships and municipalities have little incentive to pursue collection franchise contracts. However, in recent years, some communities have initiated such contracts and slowly those services are expanding. Choosing to pursue subscription curbside recycling versus non-subscription is a community's way of compromising between residents who are willing to pay more to have the service and those who oppose paying more for a service they don't value. In these challenging economic times, communities prioritize the services they are able to finance, and recycling is seen more as a luxury item than a necessity.

CHAPTER 3 WASTE GENERATION

Purpose of Chapter 3

This chapter of the solid waste management plan provides a summary of 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. Thus, the policy committee analyzed the amounts and types of waste that were generated within the SWMD in the past and that could be generated in the future.

The SWMD's 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 SWMD's policy committee obtained reduction and recycling data by surveying communities, recycling service providers, collection and processing centers, commercial and industrial businesses, owners and operators of composting facilities, and other entities that recycle. Responding to a survey is voluntary, meaning that the policy committee relies upon an entity's ability and willingness to provide data. 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**Table 3-1 Solid Waste Generated in the Reference Year**

Type of Waste	Quantity Generated (tons)
Residential/ Commercial	362,301
Industrial	1,157,043
Excluded	0
Total	1,519,344

Source(s) of Information: Annual Operating Reports plus surveys of recycling programs

1. Residential/Commercial Waste Generated in Reference Year

In 2016, 99,400 tons of general waste were reported as recycled, and 262,901 tons of general waste were reported as disposed. Added together, that indicates that 362,301 tons of general waste were generated.

One landfill reports all waste accepted as general, rather than breaking out the industrial waste received, so the reported residential disposal is higher than it actually is. Because the Ohio EPA has not required the facility to correct the reports, that is the only data available to us. The residential/commercial generation rate has averaged 6.25 pounds per person per day for the last fifteen years.

2. Industrial Waste Generated in Reference Year

In 2016, 322,060 tons of industrial waste (exclusive of AEP) were reported as recycled, and 155,324 tons of industrial waste (exclusive of AEP) were reported as disposed (including 17,746 tons of fiberglass waste disposed in a captive landfill). Together that indicates that 477,384 tons of industrial waste were generated.

As explained previously, the waste from the American Electric Power plant in Conesville is recorded separate from the rest of the industrial sector to provide a clearer picture, and more accurate projections for future waste generation. In 2016, 206,270 tons of flue gas desulphurization product and gypsum were disposed in AEP's captive landfill, while 473,389 tons were recycled. Adding the two together results in 679,659 tons of FGD and gypsum generated by the coal burning power plant.

Adding the waste generated by mainstream industries (477,384) to the waste generated by AEP (679,659) results in 1,157,043 tons generated by the industrial sector.

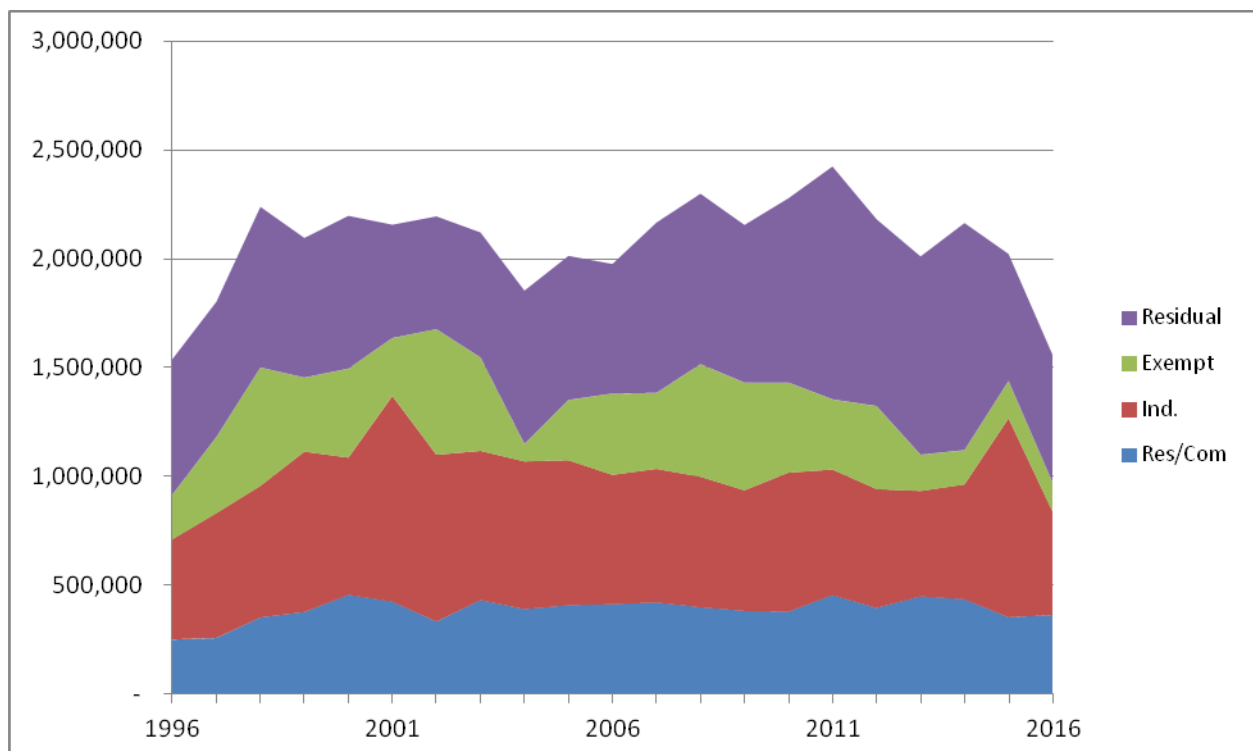
3. Excluded Waste Generated in Reference Year

In 2016, 94,262 tons of excluded waste were reported as recycled, and 40,129 tons of excluded waste were reported as disposed. Together that indicates that 134,391 tons of excluded waste were generated. However, the table above indicates zero excluded waste because the state has indicated that an amount less than 10% of the total waste generation need not be factored in to this table.

The majority of excluded waste (88%) is fly ash and bottom ash from the American Electric Power plant in Conesville that is disposed at AEP's captive landfill or recycled through company projects. The remainder is primarily construction and demolition debris accepted at municipal landfills.

B. Historical Waste Generated

The District has compiled recycling, disposal and generation information since 1993. Based on that data, regardless of the categorization of the waste, the total generated in the district has remained fairly constant since 1996 with annual fluctuations. The table below illustrates the enormity of the residual waste from the AEP power plant, and its impact on our generation rates.



1. Historical Residential/Commercial Waste Generated

The residential and commercial waste generation has remained fairly consistent over the last eighteen years, with fluctuations from year to year based on responses to

surveys and characterization of waste accepted at landfills. As stated previously, some industrial waste disposed was reported as general when disposed at Tunnell Hill Landfill, and artificially inflated this waste stream for a period of several years. The per capita waste generation has fluctuated between 5-7 pounds per person per day, averaging 6.25.

2. *Historical Industrial Waste Generated*

The District uses annual surveys to compile recycling information. Any recycling activity undertaken by non-responding manufacturers that is not otherwise accounted for by processors is excluded from all district data. Waste generated is calculated by adding reported tons recycled to tons disposed. Therefore, survey responses, or lack thereof, dictate the amount of waste shown as generated by industries. Even with annual fluctuations - including the 2008 recession, this waste stream has remained fairly consistent. Both spikes in industrial - 2001 and 2015 - were a result of West Rock paper mill facility clean outs. This plant closed in 2015, so the anomaly will not recur.

Because the flue gas desulphurization (FGD) material from the AEP Conesville power plant is categorized as industrial waste, the disposal and recycling of this material each year can easily skew all other numbers, therefore it is considered separately. It is the purple area in the table above labeled "Residual".

3. *Historical Excluded Waste Generated*

The majority of excluded waste is fly ash and bottom ash from AEP which is disposed in their captive landfill. Other than this specific waste stream, excluded waste is almost entirely construction and demolition debris. The past ten years have seen a 50% decrease in c&dd material generated locally.

C. Waste Generation Projections

Table 3-2 Waste Generation Projections

Year	Residential Commercial Waste	Industrial Waste	Excluded Waste	Total
	Waste (tons)	Waste (tons)	Waste (tons)	Waste (tons)
2019	364,063	1,151,646	0	1,515,709
2020	364,699	1,149,865	0	1,514,564
2021	365,337	1,148,093	0	1,513,430
2022	365,979	1,146,330	0	1,512,309
2023	366,623	1,144,575	0	1,511,198
2024	367,269	1,142,830	0	1,510,099

1. *Residential/Commercial Waste Projections*

Using the extensive history of waste tracking in the district, it is reasonable to project that generation will continue to follow the established pattern. The generation rate per person remains constant, and therefore as the population grows, so does the generation of waste. Recycling is growing, keeping up with generation increases, therefore the overall waste disposed remains fairly constant, with annual fluctuations. Until landfills are required to categorize waste more accurately in their annual operating reports, the amount of general waste will remain inflated artificially.

2. *Industrial Waste Projections*

Both disposal and recycling are dependent on the specific industries in the district. Over time, the number of manufacturing facilities has decreased, while the number of commercial enterprises has grown. This changes the nature of the waste stream. In the past, the operation of two paper mills recycled hundreds of thousands of tons of fiber, but their closure reduces both the generation and recycling of that material. The above table uses an annual decrease of .15% to project the amount of industrial waste generated during the planning period.

The emerging industry of "fracking" whereby millions of gallons of water, sand and chemicals are injected into wells to fracture deep shale and free trapped gas and oil, is expected to impact disposal trends when the process takes hold in Coshocton and Perry Counties. In addition to the fracking waste itself, there is the clear cutting of large areas of land for the construction of concrete well pads and roads for transportation in and out of the sites, the temporary increase in population as workers move to the area, and a rise in services to accommodate that population. As of the end of June 2017, there were 5 permits in Coshocton County with one well drilled, and one other producing, all in Linton, Millcreek and Oxford townships. An increase in this waste stream may be enough impetus for Waste Management to reactivate Coshocton Landfill.

3. *Excluded Waste Projections*

While the coal burning power plant remains operative, this waste stream will remain dominant in the excluded waste category. Because it is either recycled or landfilled in private operations, the solid waste district's role in managing this waste will remain one of monitoring only. The future of this plant is uncertain. In early 2017, AEP purchased Dynegy's share of the Conesville plant, now owning 92% of Conesville's four units. Ohio legislators passed an income guarantee bill that will subsidize profits. In November 2016, the PUCO approved a plan by AEP to either retire or convert the plant to burn natural gas by the end of 2029. More recently, a modified plan was submitted to retire units 5 and 6 before the end of 2022 rather than 2029. The expected result will be a continued decrease in the generation of FGD material for recycling and disposal.

CHAPTER 4 WASTE MANAGEMENT

Purpose of Chapter 4

Chapter 3 provided a summary of how much waste the SWMD generated in the reference year and how much waste the policy committee estimates the SWMD will generate during the planning period. This chapter summarizes the policy committee's strategy for how the SWMD will manage that waste during the planning period.

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

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 of the SWMD's solid waste. The SWMD does not have to own or operate the identified facilities. In fact, most solid waste facilities in Ohio are owned and operated by entities other than the SWMD. Further, identified facilities can be any combination of facilities located within and outside of the SWMD (including facilities located in other states).

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

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

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

A. Waste Management Overview

Waste management continues to be primarily handled by the private sector in the CFLP District. The District did not own or operate any facilities in the reference year, nor did it direct waste to specific facilities. There continues to be sufficient services provided by the private sector for waste collection and waste disposal, while recycling collection and processing remain a challenge to balance cost efficiency with sufficient service to meet state mandates and local needs.

Methods of management will continue to be reduction of waste generated, re-using and recycling what can be salvaged, composting organic waste, and disposing of the remainder in landfills. The majority of services provided to the public will come from the private sector, with the District actively involved in ensuring recycling opportunities exist in all four counties.

Table 4-1 Methods for Managing Waste

Year	Generate	Recycle	Compost	Transfer	Landfill
2019	1,515,709	874,099	22,248	123,872	495,490
2020	1,514,564	874,493	22,359	123,542	494,170
2021	1,513,430	874,888	22,471	123,214	492,858
2022	1,512,309	875,285	22,583	122,888	491,552
2023	1,511,198	875,684	22,696	122,564	490,254
2024	1,510,099	876,085	22,809	122,241	488,963

B. Profile of Waste Management Infrastructure

1. Solid Waste Management Facilities

a. Landfills

In 2016, three in-district privately owned and operated municipal solid waste landfills and two privately owned and operated industrial captive landfills (Owens Corning and American Electric Power) remained active. All three are regional facilities.

Suburban Landfill Inc. is located at 3415 Township Rd 447, near Glenford. It is owned and operated by Waste Management. While the active site is now in Perry County, the property actually runs over into Licking County, where the previous landfill (Suburban North) operated until 1992. In 2016, the landfill accepted 375,437.54 tons of waste, 56% of which came from other districts in Ohio. Very little out of state waste was accepted.

Pine Grove Landfill is located at 5131 Drinkle Rd, near Amanda in Fairfield County. It is owned and operated by Republic Services of Ohio. It is also located on a site where a previous landfill operated - Fairfield Sanitary Landfill. In 2016, 64% of the waste accepted came from other districts in Ohio, and very little out of state waste was accepted.

Tunnell Hill Reclamation, LLC is located at 8822 Tunnel Hill Road, adjacent to New Lexington in Perry County. It is owned and operated by Tunnel Hill Partners based in Jericho, New York. It is located on property that is also being mined for coal, which creates an opportunity for future expansions. In 2016, it accepted 1,011,921 tons of waste, 93% of which were shipped in by rail from out of state, primarily New York and New Jersey. It has had ongoing issues with odors and because of its proximity to residences, it has been the subject of litigation by neighbors.

Coshocton Landfill, owned by Waste Management, ceased operation February 2014 but retains its licensing for potential future use.

The Owens Corning landfill located in Newark is used mainly for off-specification fiberglass insulation. The AEP landfill in Conesville is used for fly ash, bottom ash, FGD and gypsum from the coal burning power plant.

Out of district landfills are used primarily by haulers who are affiliated with those companies and enjoy lower rates by transporting waste a longer distance to their own facilities rather than using their competitors' facilities in district.

b. Transfer Facilities

In 2016, there were three transfer facilities licensed in the District. At this time, Waste Management elects not to operate the Newark Transfer Station due to current business circumstances but reserves the right to do so in the future. The Waste Away Transfer Station in Heath is newly licensed at the end of 2016, and is privately owned and operated. The city of Lancaster maintains an active transfer facility for the use of its waste collection service and for public use, mainly for residents in and around Lancaster.

Out of district transfer facilities serve the purpose of consolidating loads from collection routes prior to transporting to landfills owned by the haulers (mainly Kimble, Waste Management and Rumpke). Some waste (40% of transported total) is transported from this district to transfer facilities out of district before being brought back in district for disposal.

c. Yard Waste Management Facilities

The yard waste management facilities registered with the OEPA as of 2016 are listed in Table 4.4. In the reference year, ten facilities were registered, with six facilities open to the public. The Compost Farm in Licking County attained a

Class II registration to allow expansion into the composting of food waste. Because of the rural nature of most of the district, compost facilities are most useful for landscapers, tree trimmers and other commercial entities as an alternative to landfills. Most residents either bag their yard waste for their hauler or compost at home.

d. Processing Facilities

Facilities that accept materials from the public and process by baling, crushing or grinding are listed in Table 4.5. Almost all such facilities are privately owned and operated. Via contracts with Fairfield and Perry Counties for countywide drop-off services, the direct costs of processing materials from the countywide drop-offs by the Lancaster-Fairfield Community Action Recycling Center and PerCo Recycling Center are reimbursed by the District. Materials collected in Coshocton and Licking County drop-off programs are processed out of district and District contracts with Coshocton and Licking Counties include a service charge for processing those materials.

e. Other Waste Management Facilities

The Fairfield County Animal Shelter continued the use of an incinerator to reduce the tons of animal waste disposed from euthanasia. Licking County discontinued the use of their incinerator in 2015 and removed it from their facility. Licking Memorial Hospital and Fairfield Medical Center discontinued incineration to reduce the tons of medical waste disposed.

2. *Waste Collection*

Waste collection in the District continues to be dominated by private waste haulers. The City of Lancaster is the only municipality that operates a citywide waste collection program using city owned vehicles operated by city employees. Several cities, villages and townships contract with waste haulers to provide waste collection and recycling services, or just waste collection, to the residents of the municipality or township. The majority of the District continues to be served by private haulers who contract directly with property owners on an individual subscription basis. A few haulers provide curbside recycling service on a subscription basis to residential customers in the more densely populated areas of the District. While there are some city ordinances outlining how trash may be set out, there are no district-wide or county-wide mandates that residents contract with a trash hauler, leaving them free to determine for themselves how to get their trash to a landfill or transfer station.

One trend of note in the collection of waste is the increasing restrictions imposed by haulers on what they will accept from residents. In this district, haulers have historically accepted all items placed at the curb with few exceptions or limitations, referred to as unlimited service. With this unlimited service, residents could depend on their hauler to remove almost anything set at the curb and they did not have to put further thought into disposal.

The new restrictions go beyond state or federal regulations (or landfill rules) prohibiting the material, but are based upon concern for the care of haulers' vehicles and employees (according to the verbal explanation from one hauler). This evolution makes it necessary for residents to find alternative means of disposing of certain parts of their waste streams. Examples: The bed bug epidemic has resulted in the requirement that mattresses and upholstered furniture be wrapped in plastic before haulers will pick them up. Heavy materials such as concrete blocks or bricks, dirt and drywall are banned from one community's trash pickup. This is an especially difficult adjustment in communities that have trash franchises because residents do not have the option of changing haulers if they would like to have the unlimited service offered in the past. If this trend continues, alternate methods of getting certain wastes to landfills will be necessary if residents continue to generate such waste.

C. Solid Waste Facilities Used in the Reference Year

1. Landfill Facilities

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

Facility Name	Location		Waste Accepted from SWMD (tons)	Percent of all SWMD Waste Disposed	Remaining Capacity (years)
	County	State			
In-District					
Coshocton Landfill	Coshocton	Ohio	81	0.0%	68.85
Pine Grove Landfill	Fairfield	Ohio	93,129	14.0%	63
Suburban Landfill	Perry	Ohio	181,014	27.2%	53
Tunnell Hill Landfill	Perry	Ohio	54,423	8.2%	18
AEP Conesville	Coshocton	Ohio	230,280	34.6%	18
Owens Corning	Licking	Ohio	17,746	2.7%	111
Out-of-District					
Athens Hocking Reclamation	Hocking	Ohio	9,649	1%	46.9
SWACO Landfill	Franklin	Ohio	695	0%	21
Carbon Limestone Landfill	Mahoning	Ohio	22	0%	59.1
American Landfill	Stark	Ohio	24	0%	85.6
Kimble Sanitary Landfill	Tuscarawas	Ohio	33,704	5%	32.05
Evergreen Landfill	Wood	Ohio	6	0%	42.2
Countywide Landfill	Stark	Ohio	301	0%	77.2
Crawford Co. Landfill	Crawford	Ohio	30	0%	10.8

Beech Hollow Landfill	Jackson	Ohio	43,517	7%	78.3
Noble Rd. Landfill	Richland	Ohio	3	0%	8.5
Out-of-State					
NONE				0%	
Total			664,625	100%	794

In 2016, 87% of waste generated by the CFLP District was disposed at three in-district municipal solid waste landfills and two industrial captive landfills. The remaining 13% was disposed at ten out-of-district landfills in Ohio. Coshocton County currently accepts one load per year, to retain their permit. As previously described, Tunnell Hill Reclamation accepts more out of state waste than this district generates in total.

2. Transfer Facilities

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

Facility Name	Location		Waste Accepted from District (tons)	Percent of all District Waste Transferred	Landfill Where Waste was Taken to be Disposed
	County	State			
In-District					
Lancaster Transfer	Fairfield	Ohio	31,209	24%	Pine Grove
Waste Away	Licking	Ohio	3,717	3%	Suburban
Out-of-District					
Reynolds Avenue Transfer	Franklin	Ohio	10,100	8%	Pine Grove
Mt. Vernon Transfer	Knox	Ohio	3,320	3%	Pine Grove
Johnson Transfer & Recycling	Franklin	Ohio	17,447	13%	Suburban
Kimble Transfer & Recycling Facility	Guernsey	Ohio	2,618	2%	Kimble
WM of Ohio Mound Transfer Facility	Ross	Ohio	281	0%	Pike Co.
Rumpke Mansfield	Richland	Ohio	3	0%	Noble Rd.
Rumpke Circleville Transfer	Pickaway	Ohio	22,063	17%	Beech Hollow
Rumpke Columbus Transfer	Franklin	Ohio	21,454	16%	Beech Hollow
Delaware County Transfer	Delaware	Ohio	30	0%	Crawford
Local Waste Services	Franklin	Ohio	17,895	14%	Tunnell Hill
		Ohio	95,212	73%	
Out-of-State					
none				0%	
Total			130,138	100%	0

There were three transfer facilities licensed in the District. At this time, Waste Management elects not to operate the Newark Transfer Station due to current business circumstances but reserves the right to do so in the future. The Waste Away Transfer Station in Heath is newly licensed at the end of 2016. It is open to the public, including other waste haulers. The Lancaster Transfer facility is owned and operated by the city of Lancaster, and it is primarily a consolidation point for its collection vehicles but also maintains hours open to the general public. Tonnages have remained consistent over time, as these facilities are primarily owned and operated by the same companies to which the waste they accept is hauled.

3. Composting Facilities

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

Facility Name	Location (County)	Material Composted (tons)	Percent of all Material Composted
<i>In District</i>			
Lancaster WPCF	Fairfield	30	0%
Pine Grove	Fairfield	24	0%
Southeastern Correctional	Fairfield	536	5%
Denison University	Licking	-	0%
ELM Recycling	Licking	191	2%
Hope Timber Mulch	Licking	7,500	67%
Kurtz Brothers Brookside	Licking	2,683	24%
McCulloughs Landscaping	Licking	43	0%
The Compost Farm	Licking	60	1%
Utica Compost	Licking	179	2%
			0%
<i>Out-of-District</i>			
NONE			0%
Total		11,246	

In the reference year, ten facilities were registered, with six facilities open to the public. Coshocton and Perry Counties had no public compost facilities. Most of the material accepted at these facilities is generated by commercial entities - landscapers and tree trimmers versus residents, who use backyard composting to handle their yard waste. With 90% of the district land undeveloped, space is only limited in the densely populated portions of the counties. Hope Timber Mulch produces mulch, not compost, but is listed with facilities producing compost because there is no separate permit or tracking of facilities based on product. A more accurate identification of these facilities would be "yard waste management facility".

4. Processing Facilities

Table 4-5 Processing Facilities Used in the Reference Year

Name of Facility	Location		Facility Type	Recyclables Accepted from District (tons)
	County	State		
In-District				
Lancaster-Fairfield Community Action	Fairfield	OH	Recycling Center	3,023
PerCo	Perry	OH	Recycling Center	
SBC Solutions Group	Licking	OH	MRF	26,452
Strategic Materials	Licking	OH	Glass Processing	not reported
		OH		
Out-of-District				
Rumpke -Columbus	Franklin	OH	MRF	3,568
Rumpke-Mount Vernon	Knox	OH	MRF	177
		OH		
Out-of-State				
NONE REPORTED				
Total				33,220

Facilities that accept materials from the public and process by baling, crushing or densifying are listed in Table 4.5. All such facilities are privately owned and operated.

The Lancaster-Fairfield Community Action Recycling Center originally operated in downtown Lancaster, as a public buy-back and drive through. When the district began contracting with counties to provide collection and processing of materials, Community Action won the county bid to be the service provider. They eventually outgrew their space and built a new recycling center on the grounds of their agency headquarters on the edge of the city. With continual state and district funding assistance, they have purchased equipment and improved their recycling center to keep pace with growing services. The current center processes materials from the countywide drop-off, public institutional collections, their own business/industry collection program and paper shred service, as well as a public drive-through drop-off. Limitations that impact its ability to provide future services include the difficulty in expanding its horizontal footprint, equipment for sorting commingled materials, and capacity to process a larger volume on a daily basis.

The PerCo Recycling Center in New Lexington has been a public-private partnership with the county owning the land and building in which PerCo employees operate. The

facility has been expanded from its original building, and equipment has been purchased to keep pace with expanding service. PerCo became the county's subcontractor for collecting and processing materials from the county-wide drop-off program when that program began. They also have maintained a business recycling program and public drive-through drop-off independent of the District contract. Physical limitations of that site that impact its ability to provide future services include the difficulty of expanding its footprint, equipment for sorting commingled materials, weight limit for trucks entering the drive-through, and capacity to process a larger volume on a daily basis. In 2018, administration and operation of the facility will revert to the county and only processing labor will be subcontracted out to non-county employees. Labor costs will increase as the District will be billed for collection labor that was previously covered by the county's Board of Developmental Disabilities.

SBC Solutions Group owns and operates a recycling facility in northwest Licking County where commercial and industrial materials are sorted and baled for shipment to processing facilities around the world. In their early years, they accepted material from public drop-off programs, and still do accept materials from private haulers on an as-needed basis, but their focus is on larger, cleaner streams of material. Analyzing and grinding industrial plastics is a fairly recent expansion of their recycling services. Limitations impacting their ability to provide future services include weight limits on bridges to access the facility, distance from collection points, and non-acceptance of glass.

Strategic Materials owns and operates a glass processing plant in Newark, Licking County. While it is open to the public, the site is not conducive to residential car traffic. Its main business is processing glass collected by recyclers throughout the region. It is one of the few glass processors in the state, but its location in-district does not assure that glass collected here is processed at that facility.

At one time, there were three paper mills in the district. At this time, there is only one operating. It does not report any materials accepted from this district. The two plants which did process a variety of paper products locally were Stone Container in Coshocton (most recently called West Rock), and Sonoco in Lancaster, and both have closed.

5. *Other Waste Management*

Habitat for Humanity has two ReStores in this district, providing an opportunity for residents and businesses to repurpose materials they no longer want, but that have retained a value for others. ReStores are nonprofit home improvement stores and donation centers that sell new and gently used furniture, appliances, home accessories, building materials and more to the public at a fraction of the retail price.

What used to be Abitibi (and are now Royal Oak) Paper Retriever bins are still located throughout Fairfield and Licking Counties to accept a wide variety of paper products from residents, schools, churches and other businesses. These bins increase the district's ability to collect paper without a corresponding cost to the District.

D Use of Solid Waste Facilities During the Planning Period

1. Landfills

All landfills used by the District are privately owned and operated, thus the decisions regarding their operation will remain with those private companies. The District does not intend to impede the free flow of waste to facilities but will focus on ensuring that waste to be disposed ends up in a landfill rather than dumped along roadways. The facilities listed in Table 4.2 have historically taken waste from this District and are expected to be available throughout the planning period. Amounts to each facility will fluctuate with hauling contracts won and lost.

Based on 260 disposal days per year, the average daily need at publicly available landfills in 2016 was 1,502 tons, 23% less than the previous plan. Given that existing landfills in the District are permitted to take up to 18,500 tons per day or more than 4,810,000 tons per year, there is sufficient capacity for District waste within the District.

Since the District does not direct waste and has not entered into contracts with facilities to take specific amounts of waste, the landfills in the District can and do accept out-of-district and out-of-state waste. However, unless there is a drastic change in the flow of waste, the District's needed capacity is secure. There is also considerable capacity within a 70 mile radius of the District. The capacity outside the District provides security for the District in several ways. Facilities outside of the District will be available for district waste if needed. Ample disposal capacity to the east and northeast of the District provide buffers between this District and waste exporting counties in northern Ohio and east coast states. Substantial capacity in southeast Ohio offers an out-of-district alternative to the southeast sector of the District. Table VI-4B illustrates that if Suburban and Pine Grove continue to accept waste at the current rate, there is ample capacity left at Tunnell Hill for the remainder.

2. Transfer Facilities

Some waste from the District goes through transfer facilities as part of the process of staging the waste to be transported to a landfill. It may be advantageous and cost effective for municipalities and private waste haulers to use existing transfer facilities. However, since there is available landfill space very close to the District, transfer stations are not considered by the District to be absolutely necessary to the management of District waste.

One advantage to having local publicly-accessible transfer facilities is that it gives people who do not contract with a waste hauler a place to take their trash for legal disposal. It is not mandatory in much of the district to have a waste hauler, and some residents - and many small businesses still drive their waste directly to local landfills. Having a transfer facility reduces their transportation costs.

Also, as previously noted, some waste haulers are beginning to limit what materials they will collect at the curb. Residents can either switch to a hauler that will pick up more items, or in communities with a franchise, find an alternative to their curb. Transfer facilities offer that alternative.

3. *Composting Facilities*

There are presently registered publicly-available yard waste management facilities in two counties in the District. In addition, some communities collect leaves in the fall and spread the leaves on local farm fields. With the rural nature of the counties, the predominate method of yard waste management is at-home mulching, therefore additional composting capacity is not a required component of this plan. The current facilities demonstrated their ability in 2016 to handle triple the current volumes. It is anticipated that a Class 4 facility will open in 2018 for Perry County, operated by Hope Timber, as a satellite to its Licking County facility, to fill the service void left when the Perry County Engineer's Office closed its facility.

4. *Processing Facilities*

At the present time commercial and industrial recycling is managed by non-profit and for profit recycling facilities, private material recovery facilities, scrap yards, scrap brokers, and end market industrial users of recycled materials. Although the recyclers did not report the amount of available capacity, the District is confident that there is and will continue to be sufficient capacity to process and market the expected commercial and industrial output as long as there are available end markets.

Residential recyclables are being sorted, processed, and marketed by non-profit and private recyclers. Several of the major waste hauling companies that serve the District have their own material recovery facilities within the state (Columbus, Dayton, Dover).

Provisions for processing and marketing of the recyclable material collected should be an integral part of any new curbside collection contracts communities initiate with private haulers, with the responsibility for that provision falling on the parties to the contract.

The recycling programs in the District will continue to use all available facilities to collect, sort, process, and market the materials from the drop-off programs as needed and as affordable. The Rumpke MRF alone can process 208,000 tons per year, which exceeds the residential/commercial needs of this District. Until such a time that the cost of using these facilities exceeds the benefits provided, processing capacity is assured.

This plan addresses one processing issue that affects our collection program. Currently, there are no multi-material processing facilities in-district that could handle the materials from the Licking County and Coshocton County drop-off programs if the Rumpke facility becomes unavailable or unaffordable. Small trash haulers who would like to expand their services into curbside recycling find it difficult to make the equipment and personnel investment while still paying a competitor (mainly Rumpke) to

accept the materials for processing. Neither PerCo nor Community Action can currently accept materials from local curbside collection programs. These limits impede our ability to expand recycling beyond the existing levels without a significant expenditure of dollars. The trade-off for the convenience of using the services of private providers is a lack of control over costs, an issue also faced by other solid waste districts throughout the state.

5. *Other Waste Management*

The District will continue to promote and publicize all re-use and recycling opportunities available to the general public, businesses and industries that properly and legally return materials to valuable products.

E Siting Strategy

Purpose of the Siting Strategy

As explained earlier, the solid waste management plan must demonstrate that the SWMD will have access to enough capacity at landfill facilities to accept all of the waste the SWMD will need to dispose of during the planning period. 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 conclude that 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 [Ohio Revised Code Section 3734.53\(A\)\(8\)](#). 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 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 transfer or solid waste disposal facilities to serve District needs.

If a private owner decides to site a waste disposal facility or transfer facility in Coshocton, Fairfield, Licking or Perry 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.

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.

Even though a SWMD has the legal right to designate, it cannot do so until the policy committee specifically conveys that authority to the board of directors. The policy committee does this through a solid waste management plan. If it wants the SWMD to have the ability to designate facilities, then the policy committee includes a clear statement in the solid waste management plan giving the designation authority to the board of directors. The policy committee can also prevent the board of directors from designating facilities by withholding that authority in the solid waste management plan.

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

Once the board of directors designates facilities, only designated facilities can take the SWMD's waste. That means, no one can legally take waste from the SWMD to undesignated facilities and undesignated facilities cannot legally accept waste from the SWMD. The only exception is in a situation where, the board of directors grants a waiver to allow an undesignated facility to take the SWMD's waste. Ohio law prescribes the criteria that the board must consider when deciding whether to grant a waiver and how long the board has to make a decision on a waiver request.

1 Description of the SWMD's Designation Process

At the present time the District has not designated facilities to which District waste must be taken. Unless at some time during the planning period, the District designates a disposal facility or facilities, in accordance with the right to designate reserved herein, waste generated in the District may be taken to any licensed solid waste disposal facility selected by the waste generator or waste hauler.

Source separated recyclable materials may be taken to any legitimate recycling facility. Yard waste may be taken to any registered yard waste management facility.

Lists of landfills, recycling facilities and composting facilities presented in this plan are included to identify the facilities that have been or are known to be available to accept

materials generated in the District. These lists are not intended to be an endorsement of these facilities or to preclude placement of materials at facilities that are not listed.

The District reserves the right to designate a facility or facilities. The Board of Directors of the Coshocton-Fairfield-Licking-Perry Solid Waste Management District is hereby authorized to establish facility designations in accordance with Section 343.014 of the ORC after this plan has been approved by the Director of the Ohio Environmental Protection Agency.

2 *List of Designated Facilities*

Table 4-6 Facilities Currently Designated

At the present time the District has not designated facilities to which District waste must be taken. Therefore, table 4-6 has been omitted.

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

- Minimize dumping at recycling drop-off sites and along public roadways
- Increase enforcement of tire regulations to minimize tire dumping throughout District
- Upgrade recycling collection equipment to increase cost efficiency
- Increase access to recycling services for multi-family dwellings
- Ensure that public drop-off sites have sufficient capacity to handle commercial as well as residential materials
- Ensure that all public schools in the District have the opportunity to recycle - whether through a private hauler or the county recycling program
- Undertake feasibility study to evaluate processing capacity improvements and implement recommendations.
- Increase communication with/between municipalities and townships regarding recycling and increase technical assistance in contracting for services

This list of priorities is incorporated into existing recycling, outreach and enforcement programs with the exception of the feasibility study. County recycling offices, health departments and sheriff offices will be responsible for carrying out these priorities under their annual contracts for services with the District.

The feasibility study will be contracted at the District level and administered by the District Office. The contractor chosen to do the study will have experience in processing center operation, strategic planning and cost analysis.

B. Program Descriptions

Residential Recycling Infrastructure

Curbside Recycling Services

Table 5-1 Curbside Recycling Services

ID#	Name of Curbside Service/Community Served	Service Provider	When Service Was/Will be Available
NCS1	Coshocton City	Private Hauler	2017-2030
NCS2	Lithopolis	Private Hauler	2017-2030
NCS3	Pleasantville	Private Hauler	2017-2030
NCS4	Carroll Village	Private Hauler	2017-2030
NCS5	Johnstown Village	Private Hauler	2017-2030
NCS6	Pataskala City	Private Hauler	2017-2030
NCS7	Granville Village	Private Hauler	2017-2030
NCS8	Somerset Village	Private Hauler	2017-2030

SC1	Baltimore Village	Private Hauler	2017-2030
SC2	Millersport Village	Private Hauler	2017-2030
SC3	Pickerington Village	Private Hauler	2017-2030
SC4	Sugar Grove Village	Private Hauler	2017-2030
SC5	Bowling Green Township	Private Hauler	2017-2030
SC6	Etna Township	Private Hauler	2017-2030
SC7	Granville Township	Private Hauler	2017-2030
SC8	Harrison Township	Private Hauler	2017-2030
SC9	Hebron Village	Private Hauler	2017-2030
SC10	Madison Township	Private Hauler	2017-2030
SC11	McKean Township	Private Hauler	2017-2030
SC12	Monroe Township	Private Hauler	2017-2030
SC13	Newark	Private Hauler	2017-2030
SC14	St. Albans Township	Private Hauler	2017-2030
SC15	Union Township	Private Hauler	2017-2030

Curbside recycling in the District is implemented by municipalities and townships via franchise with a specific hauler, and by individual residents contracting for services with their chosen hauler. The number of programs has increased significantly over the course of 20 years. These programs have been most successful when desired and supported by the residents of those communities. Contracts are renewed every few years, and the specific hauler may change, therefore this table does not identify the haulers by name. In most cases, once a curbside program has been initiated, residents are supportive of its continuation long term and the district anticipates that all the programs listed above will continue throughout the planning period.

In 2016, each county within the district hosted a curbside workshop, inviting all township and municipal officials to learn about contracting for curbside recycling services. Although much effort was put into workshop agendas, timing, and speakers, attendance was practically nil. The curbside toolkit created to provide resources for communities wishing to start a curbside program was mailed to all communities without curbside services. Each county also participated in the state-hosted recycling workshop aimed at learning how to market recycling programs to public officials. The lack of attendance at these local workshops, and the lack of follow-up requests for assistance in setting up curbside programs reinforces our belief that communities will undertake curbside at their own pace and when their residents deem it a priority.

The District will continue to be supportive of communities wishing to initiate curbside recycling programs, and may, if funds are available, offer financial assistance in program start up, but actual planning and implementation will remain the responsibility of individual municipalities and townships at such a time their residents request that service be provided. Based on historical data, it is estimated that new curbside programs will be implemented at an average of one every other year. Communities are

encouraged to work together, as the villages of Carroll and Pleasantville did, to seek proposals together and find better pricing than they would individually.

The District, in cooperation with county recycling offices, will provide technical assistance in setting up programs and/or bidding out contracts to private haulers for recycling in conjunction with waste collections as requested. Through county recycling offices, the District will encourage residents living in areas served by curbside recycling to make maximum use of the service and recycle as much as possible. District and county outreach websites will highlight community curbside programs and information will be provided to the local media for inclusion in newspapers - giving recognition to the community beginning the service and making other communities aware of the opportunities available.

Drop-off Recycling Locations

Table 5-2 Drop-off Recycling Locations

ID#	Name of Drop-off/Community Served	Service Provider	When Service was/will be Available
FTU1	Coshocton City	County	2017-2030
FTU2	Berne Twp - Sugar Grove	County subcontract to LFCA	2017-2030
FTU3	Bloom Twp - Collegeview	County subcontract to LFCA	2017-2030
FTU4	Greenfield Twp - Havensport Rd.	County subcontract to LFCA	2017-2030
FTU5	Lancaster - E. Main	County subcontract to LFCA	2017-2030
FTU6	Lancaster - Park	County subcontract to LFCA	2017-2030
FTU7	Lancaster - Hubert Ave	County subcontract to LFCA	2017-2030
FTU8	Lancaster - Liberty Dr.	County subcontract to LFCA	2017-2030
FTU9	Lancaster - Hunter Trace moved to Hocking Twp Moss Trucking in 2017	County subcontract to LFCA	2017-2030
FTU10	Lancaster - Granville Pike	County subcontract to LFCA	2017-2030
FTU11	Lancaster - Gay St.	County subcontract to LFCA	2017-2030
FTU12	Lancaster - W. Fair Ave	County subcontract to LFCA	2017-2030
FTU13	Lancaster - Sugar Grove Rd.	County subcontract to LFCA	2017-2030
FTU14	Liberty Twp. - Baltimore	County subcontract to LFCA	2017-2030
FTU15	Pleasant Twp - Tiki Lane	County subcontract to LFCA	2017-2030
FTU16	Pleasant Twp - Lancaster-Thornville Rd.	County subcontract to LFCA	2017-2030
FTU17	Violet Twp-Benadum Rd.	County subcontract to LFCA	2017-2030
FTU18	Violet Twp - Stonecreek Dr.	County subcontract to LFCA	2017-2030
FTU19	Violet Twp - Blacklick Eastern Rd	County subcontract to LFCA	2017-2030
FTU20	Violet Twp - Center St.	County subcontract to LFCA	2017-2030
FTU21	Walnut Twp - Millersport	County subcontract to LFCA	2017-2030
FTU22	Etna Twp - South St	County subcontract to Rumpke	2017-2030
FTU23	Granville Twp	County subcontract to Rumpke	2017-2030

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FTU24	Granville Twp - Denison Red Barn	Denison University	2017-2030
FTU25	Harrison Twp - Outville Rd.	County subcontract to Rumpke	2017-2030
FTU26	Heath - Rt. 79	County subcontract to Rumpke	2017-2030
FTU27	Heath - Hoback Park	County subcontract to Rumpke	2017-2030
FTU28	Monroe Twp - S. Main St.	County subcontract to Rumpke	2017-2030
FTU29	Newark - East Main	County subcontract to Rumpke	2017-2030
FTU30	Newark - Flory Park	County subcontract to Rumpke	2017-2030
FTU31	Newark - Cherry Valley	County subcontract to Rumpke	2017-2030
FTU32	Newark - Granville Rd.	County subcontract to Rumpke	2017-2030
FTU33	Newark - Easy St.	County subcontract to Rumpke	2017-2030
FTU34	Newark - Myrtle Ave	County subcontract to Rumpke	2017-2030
FTU35	Newark - W. Main	County subcontract to Rumpke	2017-2030
FTU36	Union Twp - Hebron	County subcontract to Rumpke	2017-2030
FTU37	Union Twp - Buckeye Lake	County subcontract to Rumpke	2017-2030
FTU38	Harrison Twp - Crooksville	County	2017-2030
FTU39	Harrison Twp - Roseville	County	2017-2030
FTU40	Pike Township - N. State St.	County	2017-2030
FTU41	Pike Township - N. Main St	County	2017-2030
FTU42	Pike Township - First St.	County	2017-2030
FTU43	Pike Township - SR 13 NE	County	2017-2030
FTR1	Adams Twp	County	2017-2030
FTR2	Franklin Twp	County	2017-2030
FTR3	Jefferson Twp-Nellie	County	2017-2030
FTR4	Jefferson Twp-Warsaw	County	2017-2030
FTR5	White Eyes Twp - Fresno	County	2017-2030
FTR6	Lafayette Twp	County	2017-2030
FTR7	Linton Twp	County	2017-2030
FTR8	Perry Twp	County	2017-2030
FTR9	Pike Twp	County	2017-2030
FTR10	Tiverton Twp	County	2017-2030
FTR11	Tuscarawas Twp	County	2017-2030
FTR12	Amanda Twp - Amanda	County subcontract to LFCA	2017-2030
FTR13	Clearcreek Twp - Oakland	County subcontract to LFCA	2017-2030
FTR14	Clearcreek Twp - Stoutsville	County subcontract to LFCA	2017-2030
FTR15	Richland Twp - Rushville	County subcontract to LFCA	2017-2030
FTR16	Richland Twp - West Rushville	County subcontract to LFCA	2017-2030
FTR17	Rushcreek Twp - Bremen	County subcontract to LFCA	2017-2030
FTR18	Bennington Twp - SBC	SBC	2017-2030
FTR19	Fallsbury Twp. - Fallsburg	County subcontract to Rumpke	2017-2030
FTR20	Franklin Twp - Flint Ridge Rd.	County subcontract to Rumpke	2017-2030
FTR21	Hanover Twp - W. High St	County subcontract to Rumpke	2017-2030
FTR22	Hartford Twp - Croton	County subcontract to Rumpke	2017-2030
FTR23	Jersey Twp - Mink St.	County subcontract to Rumpke	2017-2030

FTR24	Liberty Twp - Northridge Rd.	County subcontract to Rumpke	2017-2030
FTR25	Licking Twp - Jacksontown Rd	County subcontract to Rumpke	2017-2030
FTR26	Mary Ann Twp - Wilkins Run Rd.	County subcontract to Rumpke	2017-2030
FTR27	McKean Twp - Fredonia	County subcontract to Rumpke	2017-2030
FTR28	Newton Twp - St. Louisville	County subcontract to Rumpke	2017-2030
FTR29	St. Albans Twp - Alexandria	County subcontract to Rumpke	2017-2030
FTR30	Washington Twp - Utica	County	2017-2030
FTR31	Bearfield Twp - Six Mile Turn	County	2017-2030
FTR32	Clayton Twp - Saltillo	County	2017-2030
FTR33	Coal Twp - New Straitsville	County	2017-2030
FTR34	Hopewell Twp - Glenford	County	2017-2030
FTR35	Jackson Twp - Junction City	County	2017-2030
FTR36	Monroe Twp - Corning	County	2017-2030
FTR37	Reading Twp - Somerset	County	2017-2030
FTR38	Salt Lick Twp - Hemlock	County	2017-2030
FTR39	Salt Lick Twp - Shawnee	County	2017-2030
FTR40	Thorn Twp - Thornville	County	2017-2030
FTR41	Thorn Twp - Thornport	County	2017-2030

While private recyclers continue to operate within the District, they limit the materials they accept to those with a market value that will support their successful operation or that complement their primary business, or limit the area to which they offer service. The District has supplemented those recycling opportunities with drop-off sites that accept at least five commonly recycled materials (cardboard, newspaper, aluminum cans, steel cans and plastic #1 and #2), ensuring that more than 90% of district residents have a place to recycle within five miles of their homes. All District-funded drop-off locations are full time, accept at least the five designated materials (more are encouraged where markets are available), and meet the minimum state requirements for visibility and capacity. Directional signage will be maintained where containers are not visible from the closest public roadway. This service will continue to be provided via contracts between the solid waste district and member counties. Counties may choose to operate the drop-off program with county employees, use subcontracts to operate the program, or a combination of the two. The current contract arrangement is listed in Table 5-2, however counties may change their subcontracts within the planning period if it becomes more economical to do so. Additional drop-off sites will be added as needed to fill voids in service area or to keep pace with growing populations. Counties will continue to report on the drop-off program with costs and tons recycled. District staff will continue to compile the information for annual reports. The Board of Directors and the Policy Committee will annually review the report and recommend changes if needed to maximize the cost efficiency and effectiveness of this program. Prior to removing poorly performing sites (either lack of participation or excess trash), the District and County Recycling Office staff will meet with the site host to discuss ways to improve public participation and a concerted effort will be made to improve performance with removal as a last resort. Contracts will continue to require annual surveys of residents,

and a comparison against previous surveys will measure the effectiveness of the marketing and outreach by each county.

Evaluation of the current drop-off program concluded that continuing to use and maintain obsolete equipment (alleycat trailers pulled by pickup trucks) is not efficient, and depending on the method of unloading, can result in employee injuries. The use of this equipment must be phased out, and more efficient equipment purchased. This evolution should begin to bring the individual county programs into a more compatible, cohesive program where counties can support each other with staff and equipment. Equipment replacement is beginning in 2018.

Multi-Family Unit Recycling

Where curbside recycling programs exist, they include only single family residences, leaving those in multi-family units unserved. Even though adding drop-off sites to those areas cannot currently count toward providing access, the District recognizes that it is the only way to ensure those residents have the same opportunity to recycle as their neighbors. Where there are large numbers of multi-family dwellings, counties will add to the existing drop-off sites to increase the number of residents served as funding is available to operate those sites. The cost will be borne by the District-County recycling contract.

Other Programs - Private Recyclers

One example of private recycling opportunities is Royal Oak Recycling, based in Michigan. They assumed responsibility for the Abitibi Paper Retriever Program that has provided fiber recycling throughout Fairfield and Licking Counties for many years. The District has benefited from this recycling service at no cost and site hosts benefitted from the past practice of being paid for what they collected. Since the reference year, service to these containers has been increasingly infrequent and payment for materials has ceased. The company opened a plant in Dayton mid-2017 that is intended to service our area with the intent to revitalize this service. To accommodate the volume of fiber that could possibly transition to county drop-off sites if the company is unsuccessful in reviving the program, counties will plan for the cost of additional containers and possibly additional locations to continue to meet the needs of the general public.

Commercial/Institutional Sector Reduction and Recycling Programs

School and Government Office Recycling

Each of the four counties offers recycling collection to all state, county, and municipal government facilities and public schools within their jurisdictions. The government programs reinforce the importance of recycling by setting an example in the community. Public school recycling programs complement and reinforce waste reduction and recycling education. Both sectors are top employers in all four counties. These programs existed prior to this plan update and are expected to continue throughout the

planning period. To increase the tons recycled through this program, each county will continue to encourage more government offices to participate and increase education to that sector to encourage participation.

In all four counties, the programs are coordinated and operated by the County Recycling Offices, and funded by the District. Each office is responsible for contacting all public schools and government agencies to offer technical assistance and collection. In some cases, the government agency or school manages its own recycling program or contracts with a private waste hauler or recycler for service. The offices will continue to work with schools to ensure that their waste hauling contracts do not create barriers for initiating or expanding recycling activities.

No specific materials are designated, although office paper is the primary material collected. Many recycle corrugated cardboard and beverage containers, but other materials may be included. In 2016, 393 tons were estimated to be collected, a 50% increase over 2012. This program is designed to meet special needs, not necessarily bring in large amounts of material.

Collection Services

To complement the residential drop-off sites for multi-materials, Perry County has created "cardboard only" drop-off sites that are publicly accessible in areas where it is convenient for businesses to use. Businesses are encouraged to make use of those sites, however, they are not limited to any one business and therefore serve a public purpose. Fairfield County has taken a similar approach by adding "cardboard only" containers to residential drop-off sites that are in areas with eager business recyclers. This increases the amount of recycling that can take place without overwhelming the multi-material containers with cardboard. Coshocton and Licking Counties are exploring similar public services to ensure all sectors in their counties have opportunities to divert at least fiber.

Independent of the solid waste district, the Lancaster-Fairfield Community Action Recycling Center has initiated agreements with private businesses to collect materials at their door for a price. The price is expected to at least cover the cost of providing the service. Other private recyclers such as Rumpke, Republic Waste Services, Waste Management and Royal Oak offer similar services for their commercial customers. When recycling costs less than disposal, the private sector generators have an internal incentive to recycle and improve their bottom line.

Large Venue Recycling

Each county recycling office has purchased containers for recycling and loans them to groups for special event recycling. The bags are offered for festivals, parties, and other social and business functions. Borrowers pick up the containers and return them clean (along with bags of recyclables) following the event. In Fairfield and Perry Counties, the Recycling Offices are physically located at recycling centers which makes follow up a

one step process. This program emphasizes the responsibility that generators have for recycling their waste by including them in the process, and it allows the counties to offer more services than they could if their limited staff was responsible for delivery and pickup of containers and materials. It should be noted that this is event-oriented, not facility oriented. The District has no large-venue facilities such as stadiums or theme parks.

Technical Assistance

County Recycling Offices offer waste audits to assist the commercial and institutional sectors reduce their waste disposed. In addition, each office maintains a resource guide to assist those sectors in finding service providers to meet their recycling needs. Businesses are made aware of the availability of the waste audits via newsletters, websites, Facebook posts and other social media venues.

A new initiative will be an internet-based database containing results of research done by county recycling offices in order to maximize the ability to find recycling opportunities. By putting their research results online, offices can instantly share information with other counties, keep it updated in a timely manner and increase their ability to help businesses.

Industrial Sector Reduction and Recycling Programs

Technical Assistance

The above described database and waste audits are provided to the industrial sector as well.

Waste exchanges will be promoted as they are available. Because these services are provided by others, their continuation throughout the planning period cannot be guaranteed. However, when they are successful, they can remove a large amount of material from landfills.

Collection Services

The cardboard recycling services described in the commercial sector are also available for the use of industries. Larger industries usually bale and market their materials independently, but because most district manufacturers are very small, this service covers more than half the manufacturing sector.

Independent of the solid waste district, the Lancaster-Fairfield Community Action Recycling Center has initiated agreements with private businesses to collect materials at their door for a price. The price is expected to at least cover the cost of providing the service. Other private recyclers such as Rumpke, Republic Waste Services, and Waste Management offer similar services for their industrial customers. When recycling costs

less than disposal, the private sector generators have an internal incentive to recycle and improve their bottom line.

Economic Incentives

The State Solid Waste Management Plan requires that SWMDs evaluate the feasibility of providing financial incentives to increase participation in the recycling programs which are used to demonstrate access to recycling (see Appendix H for analysis). Since virtually all of the waste collection in the District is accomplished by private haulers, some by contracts with local governments, most by subscription, the District has no direct control of or authority to mandate financial incentives related to residential waste collection. However, the District will provide information and technical assistance upon request to municipalities, townships or private haulers who voluntarily initiate studies of implementation of alternate fee structures like volume based rates.

The grant program for initiation of curbside recycling may provide an economic incentive for communities that are ready to make the commitment to the program but lack the funds necessary to purchase containers for residents. District funds are limited to assist in the first year of service in return for a commitment by the community to support the program in future years. No funds are budgeted for this program but it may be implemented if funds are available after mandatory programs have been funded.

The grant program for improvements to material recovery facilities may provide an economic incentive for those facilities to upgrade equipment, expand services, and increase the total tons of material they process. Funds are budgeted for this program in 2020, but it may be implemented in any plan year if funds are available after mandatory programs have been funded.

Additional financial incentive to recycle is provided with countywide drop-off sites that are free to the public, and located so that all residents have a site within five miles of their residence. Outreach programs periodically hold widely publicized contests with prizes to give residents an incentive to recycle.

Incentive Based Grants

The goal of education and promotion of local businesses is to create a network of recycling opportunities that are self-sustaining and independent of District subsidy, so that they continue to be available for District residents and businesses beyond the planning period. Following the example of lead-acid batteries, the recycling of yard waste, electronics, tires and appliances need not be subsidized or operated by government, but can be profitably integrated into private business if given time to develop. Just as the District provided funding to purchase equipment to burn used motor oil to create a recycling outlet for the general public, so may the District use grant funds when available to assist private businesses create or expand infrastructure to

provide recycling of the aforementioned materials to the residents and businesses in the District where such infrastructure does not already exist.

Waste reduction special projects: Recycling programs to enhance the district-wide drop-off recycling program may be considered for funding. Programs include feasibility studies, waste minimization, curbside recycling, food and yard waste composting, expansion or creation of material processing centers, special collection events, market development activities and the buying of recycled content items for public use. In order to use district funds, applicants must demonstrate a reduction in the amount of **district** waste landfilled as a result of the funded project and provide a cash match. Funding is provided via contracts following an application for financial assistance. This is an economic incentive in that it offers entities an opportunity to provide additional services and expand their profitability in partnership with the District.

Restricted/Difficult to Manage Wastes

Restricted waste are defined as scrap tires, yard waste, lead acid batteries, household hazardous waste and end-of-life electronic devices, and potentially appliances, pharmaceuticals, household batteries and bulky items. There are now year-round recycling opportunities for each of these items either within the District, or in the case of HHW, nearby in Columbus. The District's primary role in addressing these materials is to promote the private sector companies that accept them from residents. The promotion is done via websites, Facebook posts and printed recycling guides.

County health departments are responsible for monitoring and enforcing the legal transportation, storage, processing and disposal of solid waste, including the items listed below. They will report violations to the District if/when they occur. As part of the District's outreach plan, the District Office and Recycling Offices in each county promote private businesses that recycle the listed materials responsibly, and encourage the general public and businesses to use them.

In the case of materials like tires and other difficult to manage materials, legitimate disposal or recycling opportunities may not be locally available to all residents at an affordable cost. The District may provide financial support to collection events for these items if they are needed and as funds are available once mandated programs have been funded, provided that competitive fees are charged to participants at all collection events to cover the disposal portion of the events.

Yard Waste

Yard waste recycling is available in limited areas in the District, however, there is not a big demand for such services. The majority of the District is too rural for yard waste to be an issue. Even where yard waste facilities exist, few residents are willing to bag yard waste and transport it in their cars to the facilities. The facilities are used more by landscapers, tree trimmers and other commercial businesses. The District will continue

to support the creation and expansion of public yard waste management facilities and may provide financial assistance when funds are available to applicants who have demonstrated an ability to remain self-sustaining beyond the initial period of assistance.

Household Hazardous Waste

In the past, collection events were held in all four counties at great expense. They served the purpose of clearing many garages and basements of old chemicals and other dangerous substances. Each year, the materials collected grew less hazardous, with latex paint comprising 75% of the weight. By 2011, participation had dropped to a level that made the events very inefficient and they were discontinued. The last event collected 12 tons of material at a cost of \$2213 per ton. In 2013, the District initiated an agreement with Environmental Enterprises, Inc. in Columbus to accept materials from our residents at a cost. The District and County Recycling Offices promote this option to all residents and businesses, and it will be continued through the planning period. This strategy places the responsibility for properly disposing of HHW on the individuals who have the need without burdening the remainder of the population with the cost. Additionally, residents and businesses are connected to their closest Habitat for Humanity ReStore, which accepts full gallons of usable paint for resale.

The District is committed to continually providing a public education program to educate residents about the problems associated with HHW disposal and encouraging residents to find alternatives to using or disposing of products considered to be hazardous. Household hazardous waste education has been incorporated into the ongoing outreach programs in each of the four counties. Each County Recycling Office will continue to be responsible for education within their county, and while the program will deliver a consistent message and theme, actual presentations and materials may differ locally.

The minimum requirements will be availability and delivery in an appropriate manner of:

- a. A brochure or flyer targeted to residential waste generators with consumer information about ways to reduce the amount of hazardous household material requiring disposal and about safe disposal alternatives.
- b. At least one newspaper, newsletter or other public article on reducing household hazardous waste and using safer alternatives in each county each year.

CFL Light Bulbs

Within the District, there is at least one place per county where residents can take CFL Bulbs and tube florescent bulbs for proper disposal. The District provides pre-paid boxes to package the bulbs and they are sent to Lamp Master for proper disposal/recycling. Businesses seeking a recycling option to comply with universal waste rules are given the information for Lamp Master or EEI in Columbus so they can get a certificate of recycling for their records. The number of bulbs recycled through this

program is not high, but it serves as an opportunity for those residents willing to drive them to a collection point. The program will continue through the planning period.

Mercury

Within the District, there is at least one place per county where residents can take mercury for proper disposal. Health Departments accept mercury and mercury containing devices from residents and funnel it to the District office for storage until a full bucket can be taken to Environmental Enterprises Inc. in Columbus. While this does not generate even one five gallon bucket per year, it provides an outlet for residents who are willing to drive the material to a collection point. This program will continue through the planning period. Businesses seeking a recycling option to comply with universal waste rules are given the information for EEI in Columbus so they can get a certificate of recycling for their records.

Household Batteries

Within the District, there are multiple recycling opportunities for rechargeable batteries and those are promoted by the District and County Recycling Offices. In 2017, the District sponsored the purchase of 50 pre-paid alkaline battery recycling boxes and distributed them to County Recycling Offices. The boxes were placed strategically throughout the counties as a pilot to see how well they were received. The boxes filled quickly, indicating that there is a desire amongst residents to recycle alkaline batteries. The cost for this pilot was \$1.00 per pound, or \$2000 per ton. The District will make this program permanent, with a budget of \$5000 per year to purchase boxes. Having the processing facility in our district makes it possible for county recycling offices to pick up empty boxes and deliver full boxes, saving the cost of shipping, thus earning us a discounted rate for the boxes. Where/when private businesses accept alkaline batteries, those businesses will be promoted by the District and County Recycling Offices as well.

Scrap Tires

While opportunities for residents to recycle tires through legal channels do exist in the District, the mentality of saving them for public collection events where the cost is either reduced or eliminated still persists, creating stockpiles of scrap tires throughout the District. Also, a secondary "market" for cherry picking used tires for those that can be resold while dumping the rest has continued to be an enforcement issue locally. The large undeveloped land area lends itself to overnight dumping with little fear of being caught. This is the issue that health departments and sheriff offices have identified as their priority in this plan, strengthening the enforcement aspect of waste tire management.

The District will continue to implement four waste tire management strategies:

- a. Through the county health departments, monitor compliance with the requirements of Ohio's tire management regulations regarding the collection, transportation, storage, and disposal of tires. If funding is available after mandatory programs have been funded, the District may support the cleanup of tires on private property through local health departments where a commitment has been made to attach a lien on the property to recover the funds invested.
- b. Promote to the public, particularly to individuals who may generate waste tires, year-round opportunities to use licensed tire haulers/recyclers and legal disposal options.
- c. Where year-round recycling/disposal opportunities do not exist, provide opportunities for residents to dispose of tires through special tire collection events where fees are charged to participants to cover disposal costs.
- d. If funding is available after mandatory programs have been funded, the District may financially support litter collection programs on public property (roadways, parks, waterways) to include the removal of illegally dumped tires.

In addition to these strategies which have been in place for some years, the health departments and sheriff offices will be stepping up their efforts to educate tire retailers about the regulations for disposing of tires properly, ensuring that they have a disposal/recycling program in place at all times, and follow up with the haulers to ensure that they take the used tires to a legal, appropriate destination. The county health departments will pursue OEPA assistance with clean up efforts when possible to reduce the number of tires in open dumps.

Electronic Equipment

The District will continue to include recycling opportunities for electronics in all recycling guides and brochures. There are many opportunities throughout the district to recycle electronics year round. Several groups hold collection events using a local electronics recycler to collect those items. The Licking County Computer Society has held periodic events, collecting and refurbishing computers for distribution to the public.

Lead-Acid Batteries

There are many opportunities throughout the district to recycle lead acid batteries year round. The District will continue to include recycling opportunities for lead acid batteries in all recycling guides and brochures.

Appliances

Once freon is removed from appliances, the remaining scrap metal has value to scrapyards. Residents are directed to private companies that will remove freon from appliances, give them a sticker certifying that the freon has been removed, allowing the appliances to enter the recycling stream easily. Perry County continues to hold

collection events periodically to ensure that residents use proper disposal versus dumping along county roads.

Pharmaceuticals

Within the district, ten law enforcement agencies have containers for unwanted solid pharmaceuticals. While the US Food and Drug Administration sponsors occasional collection events promoted by the District and County Recycling Offices, these local containers are available year round and provide a secure, safe means for disposing of potentially dangerous substances in a responsible manner.

Market Development Programs

The District understands that strong markets pull recyclables through the system. Without markets recycling collection efforts are futile. Therefore, the District will be involved in promoting market growth. The following strategies will be implemented:

- a. The District will identify sources of information regarding recycled products and vendors of recycled products and will disseminate this information in answer to inquiries.
- b. The District will purchase and use recycled content products whenever suitable products are available at competitive prices and will encourage county agencies, local governments and private businesses to “buy recycled.”
- c. The District will require all of the recycling offices to continue including “buy-recycled” in public education programs.
- d. “Buy recycled” will be integrated into business and industry waste reduction and recycling programs and education materials whenever appropriate.
- e. Purchase recycled content products to be used by the general public for the purpose of demonstrating the performance of products in practical applications. This is an optional strategy to be implemented if there is a need. No funds have been budgeted but this may be implemented if funds are available after mandatory programs have been funded.

Facilities

Materials Recovery Facilities/Recycling Centers

Currently, the District does not own or operate any MRF's, however, it has made a significant investment over time in the Lancaster-Fairfield Community Action Recycling Center and PerCo, Inc. Recycling Center. The current physical limitations facing those centers preclude their use as the sole provider of processing services for the entire

District. The existence of a District-wide MRF that could be used by both the public sector (county recycling programs) and the private sector would be a beneficial addition to District resources, and would provide a more stable environment for processing materials and internal control over costs. Combining a new center with improvement of the existing centers could potentially benefit all four counties. It is the intent of this plan that the District conduct a feasibility study that will analyze equipment, staffing, construction costs, compatibility with collection methods, and other details while upgrading recycling collection equipment (that is more efficient in material delivery to processing facilities) over the next two years. If a private company builds a MRF before the feasibility study is complete, it is possible that processing could be enhanced without the need for District involvement.

Landfills

Landfills will remain a function of the private sector, and haulers will continue to use facilities that meet their needs throughout the planning period. The District does not intend to build or operate landfills.

Transfer Facilities

Transfer facilities will remain a function of the private sector, and haulers will continue to use facilities that meet their needs throughout the planning period. The District does not intend to build or operate transfer facilities.

Yard Waste Management Facilities

Yard waste management facilities will remain a function of the private sector, and the District will continue to encourage their use by all sectors throughout the planning period. The District does not intend to build or operate yard waste management facilities. The District has a contract program to assist the private sector in establishing and operating publicly available yard waste management facilities and may provide financial assistance within the planning period when funds are available.

Data Collection

Annual surveys are sent to all municipalities and townships, recyclers, waste haulers, and industries to gather data on their recycling programs. Survey questions are tailored to the recipients, and may change to improve the quality of the responses. Email is used for those who respond better to that form of communication, and hard copies are sent to the rest, with postage paid return envelopes to increase the chance that surveys will be mailed back. By continuing to survey each year, the District has "trained" recipients to look for the mailing and to complete the survey when it arrives. The District also uses data provided by Ohio EPA where they have surveyed tire recyclers, food waste recyclers and some commercial entities. Every effort is made by District staff to eliminate double counting by asking where materials are delivered to, but that has been very challenging as sources of recycling information increase.

Outreach, Education, Awareness, and Technical Assistance

Outreach and Marketing Plan

Within the District, each member county maintains a County Recycling Office responsible for creating a County Outreach Plan that conforms to the District Outreach Plan but is tailored for the audiences in each county. In order to keep the funds advanced by the District, each County Recycling Office is mandated to complete at least one activity for each of the strategies, however most accomplish multiple activities. The strategies in the previous plan were evaluated and found to still be valid, and so were kept as they were in the previous plan:

1. To focus marketing of the recycling programs to **residents**, the Offices will increase the visibility of recycling opportunities and of recycling in general. Positive reinforcement of desired behavior is an effective tool in maintaining and increasing participation. Offices will increase and upgrade the use of electronic and other communication methods, using technology that is current and widely popular to reach the largest population possible. Because this sector also includes the individuals that are targeted in all other groups, these strategies will reach the largest audience.
2. The Offices will continue to market recycling to youth through **schools and youth organizations** with programs similar to those presently implemented, continuing to keep them updated and relevant. Offices will update their programs to meet instructional standards, link classroom education with actual school and residential recycling opportunities, and engage youth (no longer targeting only the older youth) through hands-on opportunities like assisting with school recycling and waste reduction programs and with community volunteer opportunities. School age youth comprise 19% of the district population, according to the 2010 census. This demographic group will also be reached through strategies targeting the general residential population.
3. The Offices will improve communication with **commercial businesses** to engage their assistance in reporting recycling. This will include recognition for business recycling efforts, serving as an information source regarding recycling service providers and recycling opportunities, and maintaining relationships with local business and trade organizations. This sector includes all non-manufacturing companies, government agencies and schools. The audience is strictly adult and the focus is on how recycling can impact "the bottom line" for the business.
4. The Offices will increase their involvement with communities and maintain contact with **local officials**. They will provide technical support and encouragement to communities that are providing or may in the future provide recycling opportunities – publicly recognizing their contribution to meeting the access goals. Additionally, community support will continue to include participation in and promotion of local collection or clean up events, periodic

presentations to township trustees or village councils and displays at local community events. In many cases, this audience contains the hosts of drop-off locations, and continual encouragement throughout the year will increase the success of each site by engaging the host in the operation and use of those sites.

5. The Offices will support recycling and waste reduction of **industries** by serving as an information source regarding recycling service providers and recycling opportunities, and giving public recognition to their efforts. Outreach to industries on the district level will increase communication with industries through local trade associations, website information, and annual recycling reports.

In addition, all county recycling offices and the District office maintain a website with valuable information for all sectors, disseminate resource guides including recycling infrastructure and services at all events, and provide a speaker for civic, social and educational events.

Outreach Priority

Contamination of recycling materials through disposal of trash at drop-off sites and continued litter along roadways was identified as a top priority to address. County recycling offices will either initiate, or expand a "report a dumper" program that encourages the general public to turn in people they see dumping anywhere in the district. Surveillance of recycling drop-off sites through the use of cameras, volunteer monitoring, and increased site host intervention are some of the methods to be used. The local sheriff offices will pursue and prosecute individuals found to be dumping trash and the County Recycling Offices will publicize successful prosecutions to reduce the number of incidents and the cost of disposal.

Other Programs

Enforcement Priority

In the past, funding to enforce solid waste laws and regulations has been granted to local health departments and sheriff offices as a permissive contract - giving those offices sole discretion to determine what is most needed in their counties. Beginning with this plan, the District is adding a district-wide enforcement priority to ensure that issues affecting all counties will be properly addressed.

The enforcement priority for this plan update is tire recycling and disposal. Working within existing laws and regulations for the proper collection, storage, processing and disposal of tires, health departments and sheriff offices will place a high priority on inspecting tire facilities, educating operators about proper handling of tires, monitoring the flow of tires through the system, inspecting tire haulers, and prosecuting violators. Sanitarians and deputies will receive training as available to increase their knowledge and share ideas about better enforcing existing laws and regulations, and such training

may also involve tire retailers. Literature will be developed as a tool for educating the private sector about their responsibilities regarding tire handling, with a push toward increasing awareness throughout the District. Success will be measured by comparing the number of tires removed from roadways and drop-off sites in 2017 to the numbers one year after the program begins, and annually thereafter.

Health Department Support

The Solid Waste Management District relies upon local health departments to ensure that federal, state, and local solid waste laws and regulations are followed. While OEPA-approved Health Departments are required to have solid waste enforcement programs meeting certain minimum standards, district contracts require each Health Department go beyond the minimum requirements. Therefore, to **supplement** (not replace) the existing revenues for solid waste programs, the District may provide contracts to health departments to inspect facilities, investigate complaints, and prosecute violators. This contract may also cover time spent by the solid waste sanitarian assisting in the management of debris following a declared disaster, as specified in the jurisdiction's emergency plan for Disaster Debris Management. Costs covered may include salary and fringes, vehicle expenses, equipment, supplies, and training to maintain the sanitarian's registration requirements until OEPA training is created. Approximately 90% of the funding is salary and fringes. Funding is provided via contracts following an application from the Health Department for financial assistance.

Open Dumping/Litter Enforcement

Local law enforcement agencies may receive funding from the Solid Waste District to assign personnel to enforce litter laws and issue citations for violations. Litter law enforcement officers work closely with local Recycling offices and local health departments to ensure coordinated efforts to deter littering. The deputy's role in handling debris from declared disasters, as written in the county's emergency plan may be covered under this contract. Costs may include salary and fringes, supplies, vehicle expenses, training and equipment. Approximately 93% of funding covers salary and fringes. Funding is provided via contracts following an application from the Sheriff Office for financial assistance.

Open dump cleanup on public property

Property maintenance is the responsibility of the landowner, which in the case of public property is the local government or state. Therefore, local agencies are eligible to apply for funds to clean up dumps on public land and along roadways and public easements. Applications that request funds for specific dump site cleanup must include a list of the specific dump sites to be cleaned, a timeline for cleanup, and the method by which collected materials will be disposed or recycled. Adopt-an-Area Programs are included in this activity. If a declared disaster occurs within the contractor's jurisdiction and assistance in cleanup is required, this program may assist where debris is located on public property. Approximately 40% of funding covers salary and fringes with the

remainder covering bags, gloves, vehicle maintenance, fuel and disposal of collected waste.

Dump Cleanup on Private Property

Local agencies are responsible for ensuring that open dump sites do not persist, and that responsible parties are held accountable for clean-up costs. Only local health departments are eligible to apply for funds to clean up open dumps on private land through their enforcement process. Private land **cannot** be cleaned up with District contract funds without health department enforcement to recover cleanup costs through property liens or assessments, and any other means available to the department. If a disaster is declared in the contractor's jurisdiction, contract funds may be used to assist in the cleanup of disaster debris where other funding is not available. Funding is provided via contracts following an application from the Health Department for financial assistance. Historically these projects are very expensive and liens have not recovered funds from property owners, therefore it is unlikely that funding will be available for this purpose.

County Assistance

Ohio Revised Code allows solid waste districts to use funding derived from disposal fees to assist counties to defray **added** costs of maintaining roads and other public facilities, and providing emergency and other public services resulting from the location and operation of a solid waste facility within the county under the district's approved solid waste management plan. Solid waste facilities are defined in statute as any site used for incineration, composting, sanitary landfilling, or other methods of disposal of solid waste, or for the collection, storage or processing of scrap tires; for the transfer of solid wastes, or for the storage, treatment or disposal of hazardous waste. District funds may not replace funding for activities that would be occurring if the solid waste facility were not there. It is the responsibility of the applicant to demonstrate that but for the location and operation of the solid waste facility, the requested expenses would not be incurred. Funding is provided via contracts following an application from the County for financial assistance. This assistance has been budgeted at \$50,000 per year, and the unused amount will be reserved within this line item for future years.

Municipal Corporation/Township Assistance

Ohio Revised Code allows solid waste districts to use funding derived from disposal fees to assist townships and individual municipalities to defray **added** costs of maintaining roads and other public facilities, and providing emergency and other public services resulting from the operation of a composting, energy or resource recovery, incineration, or recycling facility that either is owned by the district or is furnishing solid waste management facility or recycling services to the district pursuant to a contract or agreement with the board of directors of the district. District funds may not replace funding for activities that would be occurring if the listed facility were not there. It is the responsibility of the applicant to demonstrate that but for the location and operation of the facility, the requested expenses would not be incurred. Funding is provided via contracts following an application from the Municipality or Township for financial assistance. This assistance has not been budgeted with an amount of money because,

at this time, the District has no contracts with township or municipal facilities for the provision of services. However, in the event that there are changes in facilities or agreements during the planning period, the Board of Directors may elect to include funding for this during the planning period if funds are available.

Out of State Waste Inspection

Districts have the authority under ORC 3734.57(G)(6) to develop and implement a program for the inspection of solid wastes generated outside the boundaries of this state that are disposed of at solid waste facilities included in the District's approved solid waste management plan. The District may pursue this authorized use when the acceptance of out of state waste impacts local communities, available capacity for the disposal of District waste, or the revenue received by the District for out of state waste. Because the local health department would be responsible for monitoring and tracking, thus impacting their cost of operation, implementation of an out-of-state waste inspection program will include increased dollars to the affected health department.

Well Testing

To identify possible health risks to district residents living near solid waste disposal facilities (for any site contained within the District's solid waste management plan), Health Departments may test water wells for contamination. Local Health Departments have developed criteria by which to determine if a request for testing is within their parameters. Solid Waste District funds may be used for testing near closed or currently operating facilities, and also background testing adjacent to newly permitted, unconstructed sites. Funding is provided via contracts following an application from the Health Department for financial assistance. No funds have been specifically budgeted for this program but may be added if funds are available.

C. Waste Reduction and Recycling Rates

The 2009 State Plan encourages districts to implement programs which will lead to compliance with Goal #1 and Goal #2 of the State Plan, but compliance with only one of the goals is required. Goal #2 in the 2009 State Plan is: a) 25 percent reduction rate for residential/commercial sector, and b) 66 percent waste reduction for the industrial sector. As of the reference year, the District was in compliance with both components of Goal #2, as shown in the charts below, however, the fact that these percentages rely so heavily on survey responses and recycling projects undertaken by the AEP Conesville Power Plant make relying on compliance with Goal #2 uncertain.

1. Residential/Commercial Recycling in the District

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

Year	Projected Quantity Collected (tons)	Residential/Commercial WRR ¹ (%)
2019	101,485	28%
2020	102,018	28%
2021	102,555	28%
2022	103,095	28%
2023	103,638	28%
2024	104,183	28%

¹WRR = Waste Reduction and Recycling Rate

This table reflects additional tons being recycled as more tons are being generated by an expanding population. An increase in the reduction percentage will only happen if the recycled tons outpace population growth.

2. Industrial Recycling in the District

Table 5-4 Industrial Waste Reduction and Recycling Rate

Year	Projected Quantity Collected (tons)	Industrial WRR ¹ (%)
2019	795,449	69%
2020	795,449	69%
2021	795,449	69%
2022	795,449	69%
2023	795,449	69%
2024	795,449	70%

¹WRR = Waste Reduction and Recycling Rate

If the AEP Power Plant in Conesville closes, both the generation and the recycling of industrial waste will be significantly changed. This table reflects projections with the plant remaining operational.

CHAPTER 6 BUDGET

Purpose of Chapter 6

Ohio Revised Code Section 3734.53(B) requires a solid waste management plan to present a budget. This budget accounts for how the SWMD will obtain money to pay for operating the SWMD 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 be 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 budget of this plan begins with a historical perspective in 2014, through the current year, and ends with the year 2030. Revenue is achieved through continuation of disposal and generation fees at current rates on the disposal of solid waste in municipal solid waste landfills. Expenditures are prioritized by first ensuring that state-mandated programs can be fully implemented, then if additional funds are available, optional programs may be implemented at the discretion of the Board of Directors. An effort is made to ensure that the carryover balance each year exceeds one year's worth of expenditures to maintain operations even if revenue ceased completely, until an alternate source of funding could be established.

B. Revenue

Overview of How Solid Waste Management Districts Earn Revenue

There are a number of mechanisms SWMDs can use to raise the revenue necessary to

finance their solid waste management plans. Two of the most commonly used mechanisms are disposal fees and generation fees.

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

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

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

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

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

Generation fees (see Ohio Revised Code Section 3734.573)

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

Rates and Charges (see Ohio Revised Code Section 343.08)

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

Contracts (see Ohio Revised Code Sections 343.02 and 343.03)

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

Other Sources of Revenue

There are a variety of other sources that SWMDs can use to earn revenue. Some of these sources include revenue from the sale of recyclable materials; user fees (such as fees charged to participate in scrap tire and appliance collections); county contributions (such as from the general revenue fund or revenues from publicly-operated solid waste facilities (i.e. landfills, transfer facilities)); interest earned on cash balances; grants; debt; and bonds.

1. *Disposal Fees*

The District has used disposal fees as its main source of revenue since it was formed in 1988. The District imposes a disposal fee that is currently \$2.00 per ton for in-district waste, \$4.00 per ton for out of district waste, and \$2.00 per ton for out of state waste. This fee is not anticipated to be changed within this planning period. While this revenue stream has garnered the majority of District revenue, it is solely dependent on the decisions made by private landfill owners for their in-district facilities. As was demonstrated in 2014 with the "mothballing" of Coshocton Landfill, facilities can close without notice, and without consideration of the impact on the solid waste district. If this was our sole income source, we could be left with no revenue at all should all the in-district landfills close.

The acceptance of out-of-state waste is also a decision made by the private landfill owners, and the fluctuating amount directed to Tunnell Hill Reclamation has resulted in revenue above previous expectations. Tunnel Hill Partners includes information on their website about recent acquisitions in New York, New Jersey and Massachusetts that indicate they intend to continue shipping waste from the east coast to Tunnell Hill Reclamation at increasing rates. The facilities sending this waste are primarily subsidiaries of Tunnel Hill Partners, and hold licenses including construction and demolition debris. As more of the material sent to Ohio is classified as c&dd waste, the District receives less solid waste revenue from a growing volume of material.

2. *Generation Fees*

The District began imposing generation fees in 2011 as a means of replacing revenue lost when the Solid Waste Authority of Central Ohio imposed flow control which prevented their waste from being disposed in this District. The District imposes a generation fee that is currently \$1.25 per ton on waste generated within this district and is collected by receiving landfills in Ohio. Having a generation fee ensures that the District will continue to have revenue regardless of the status of individual in-district landfills because residents and businesses will continue to generate trash and dispose of it in a landfill somewhere. Waste generation has not fluctuated significantly through the years, therefore this revenue stream is fairly consistent and easily projected.

3. *Other Funding Mechanisms*

Throughout the history of the CFLP Joint Solid Waste Management District, finances have been managed by the Licking County Auditor and Treasurer. Although an opinion from the Ohio Attorney General stated that interest on the solid waste account should go to the general fund of the county managing the fund, the Licking County Commissioners have contributed all interest earned on that account to the solid waste district. This action has contributed close to \$3.3 million to the District since 1991. It should be noted that interest rates have plummeted since 2002 and interest income is now a very small portion of District revenue.

4. *Summary of Revenue*

By using two different fee mechanisms, the District is able to maintain a baseline revenue level while capturing fees for waste that is disposed in our counties that is not within our control. The income that is above and beyond the minimum needed to meet state mandates allows counties to implement solid waste programs that partially offset the impacts of hosting disposal facilities, such as litter law enforcement, solid waste enforcement through health departments, and litter collection along roadways.

Table 6-1 Summary of Revenue

Year	Disposal Fees	Generation Fees	Designation Fees	Other Revenue		Total Revenue
				Interest	Reimbursements	
Reference Year						
2016	\$2,238,198	\$540,384	\$0	\$26,239	\$171,919	\$2,976,739
Planning Period						
2019	\$2,660,534	\$464,907	\$0	\$20,000	\$0	\$3,145,441
2020	\$2,673,816	\$467,232	\$0	\$20,000	\$0	\$3,161,048
2021	\$2,687,165	\$469,568	\$0	\$20,000	\$0	\$3,176,733
2022	\$2,700,581	\$471,916	\$0	\$20,000	\$0	\$3,192,497
2023	\$2,714,064	\$474,275	\$0	\$20,000	\$0	\$3,208,339
2024	\$2,727,615	\$476,647	\$0	\$20,000	\$0	\$3,224,261

To project future revenue, it is first necessary to project future acceptance of waste by in-district landfills, and to project future generation of waste from all sectors of the District. Revenue projections assume that disposal and generation fees will remain at current rates throughout the planning period.

The above listed disposal and generation fees are the funding mechanisms to be used by the District. Other income received will include interest on the solid waste account and income from miscellaneous sources like reimbursement of contracts given but not spent, or reimbursement for District funded equipment as it is retired from use. The miscellaneous income is usually minimal and cannot be predicted so, with the exception of 2016 and 2017, it is not included in the revenue projections. Projections for disposal and generation fees were made using historical data for waste disposed, assuming the three in-district landfills will continue operations as they have been throughout the planning period.

Historically, waste acceptance has fluctuated up and down annually, but for sake of this plan, an annual increase in waste acceptance of .5% was used. This projection anticipates that landfill owners will continue to pursue waste contracts aggressively and maximize the use of their facilities.

C. Expenses

Overview of How Solid Waste Management Districts Spend Money

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

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 anti-littering 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 or do not host the landfill.

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

- salaries and benefits;
- purchasing and operating equipment (such as collection vehicles and drop-off containers);
- operating facilities (such as recycling centers, solid waste transfer facilities, and composting facilities);
- offering collection programs (such as for yard waste and scrap tires);
- providing outreach and education;
- providing services (such as curbside recycling services); and
- paying for community clean-up programs.

Table 6-2 Summary of Expenses

	Year						
Expense Category	Reference	Planning Period					
	2016	2019	2020	2021	2022	2023	2024
Recycling	\$1,023,783	\$2,309,105	\$1,566,889	\$1,692,121	\$1,550,601	\$1,577,644	\$1,626,797
Outreach and Marketing	\$512,844	\$615,827	\$644,764	\$676,564	\$693,098	\$712,973	\$727,788
Administration	\$181,501	\$212,454	\$202,457	\$206,330	\$217,409	\$220,115	\$233,022
Solid Waste Enforcement	\$135,785	\$219,071	\$193,894	\$221,188	\$208,190	\$223,700	\$234,427
Litter Law Enforcement	\$166,237	\$252,107	\$297,368	\$262,846	\$268,551	\$274,493	\$280,669
Litter Collection	\$56,481	\$62,324	\$64,744	\$106,458	\$67,905	\$68,564	\$98,176
Special Collections	\$241	\$7,000	\$5,000	\$7,000	\$5,000	\$7,000	\$5,000
County Assistance	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Feasibility Studies	\$0	\$25,000	\$3,000,000				
Special Projects	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Total Expenses	\$2,076,872	\$3,852,888	\$6,125,116	\$3,322,507	\$3,160,755	\$3,234,489	\$3,355,880

The expense budget was created by projecting necessary dollars to accomplish the goals and objectives of the solid waste plan as fully described in Chapter 5. Table 6-2 is a planning tool. More than 20 years of history provides a sound basis for developing the annual costs of maintaining or expanding the mandatory programs. The District is committed to implementing the mandatory programs in a cost-effective manner. Failure to expend the full amount included in this plan for a facility, activity or service should not be considered as evidence that the Plan is not being fully or appropriately implemented. In addition, nothing contained in these cost projections should be construed as a binding commitment by the District to provide a specified amount of money for a particular program, activity or service. The District Board of Directors, with the advice and assistance of District staff and the Policy Committee, will review and revise the annual District budget as needed to implement planned programs and activities as effectively as possible with the funds that are available.

It has long been the policy of the District that if a member county realizes a savings within its programming, they may use the savings to expand their programs within the solid waste plan. This gives each county the incentive to be fiscally conservative for the benefit of its constituents. Therefore, if a county spends less than the projected amount in Table 6-2 on a specific program, the savings will be realized for that county's use rather than reallocated to another county.

D. Budget Summary

Table 6-3 Budget Summary

Year	Revenue	Expenses	Net Difference	Ending Balance
Reference Year				
2016	\$2,976,739	\$2,242,193	\$734,545	\$7,207,147
Planning Period				
2019	\$3,129,911	\$3,852,888	(\$722,977)	\$7,518,789
2020	\$3,145,441	\$6,125,116	(\$2,979,676)	\$4,539,114
2021	\$3,161,048	\$3,322,507	(\$161,459)	\$4,377,654
2022	\$3,176,733	\$3,160,755	\$15,978	\$4,393,632
2023	\$3,192,497	\$3,234,489	(\$41,993)	\$4,351,640
2024	\$3,208,339	\$3,355,880	(\$147,541)	\$4,204,099

Combining the beginning balance, the projected annual revenue, and the projected annual expenses, Table 6-3 provides a fiscal overview of the District through the first five years of the planning period. Because there are years when expenses will exceed revenue, the carryover balance allows the District to maintain contracts and services without interruption.

E. Major Facility Project

Purpose of a Budget for a Major Facility Project

SWMDs can own and operate solid waste management facilities, and a number already do. Other SWMDs include feasibility studies or strategies to build new or make renovations to existing facilities in their solid waste management plans.

The types of facilities solid waste management districts own and operate 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. For this reason, 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.

In 2019, the Solid Waste District will contract for professional expert assistance in reviewing District processing infrastructure for improvements and additions. The budget contains \$25,000 for that study. It will include evaluating the existing processing centers, the need for renovations to better serve the District needs, and whether or not an additional facility is needed.

In 2020, \$3,000,000 has been budgeted for the renovations to existing infrastructure as well as any additional facilities needed. It is possible that additional facilities would be built in partnership with adjacent solid waste districts and/or private businesses. It is not anticipated that the solid waste district would directly operate a facility, so ongoing operational costs have not been included. Should the private sector provide a processing facility by the time the study is completed, the result may be that the only need is renovations to existing facilities.

A separate project budget that would contain detailed facility costs has not been included in this plan. The purpose of the feasibility study is to create recommendations that will drive such a project budget, so including one before the study is undertaken would be premature.

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 2016.

B. Planning Period (first and last years)

The planning period for this solid waste management plan is: 2019 to 2028. Tables include 2029 and 2030 in case there are delays in the ratification process.

C. Goal Statement

The SWMD will achieve the following Goal(s): Goal #1, Access.

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.

Data used in the 2016 annual report is also used in this solid waste plan. Any differences in numbers are a direct result of information gained after the annual report was submitted to the Ohio EPA on June 1, 2016.

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

The District disburses program funding via annual contracts with county agencies. In most cases, the entire contract amount is advanced during the year, and reconciled after the year has concluded. Funds advanced but not spent on approved activities are reimbursed to the District in the following calendar year. Quarterly fee reports show actual disbursements from the District fund. This solid waste management plan shows actual expenditures for programs, with a line used in "service contracts" in the budget to show funds that were advanced but not used. That amount becomes the "reimbursement" revenue in the following calendar year.

E. Material Change in Circumstances/Contingencies

The District will use its normal operational procedures to monitor plan implementation and determine whether and when a material change in circumstances has occurred in the District which requires a plan amendment. The District's Board of Directors meets three times per year, and the Policy Committee reviews the implementation of the District Plan annually and meets as needed to monitor implementation.

1. Circumstances which may result in a material change include, but are not limited to, the following:

- Reduction in the available capacity of the publicly-available landfills used for disposal of solid waste generated in the district such that total available daily disposal capacity of those landfills is less than 150% of the average daily amount of solid waste generated in the District that is disposed of in landfills.
- Changes in strategies for waste reduction or recycling that result in the District failing to provide the mandatory waste reduction or recycling programs and activities that are required by the implementation schedule that is included in this plan (except additions to or expansions of existing programs or a decision to reduce the frequency or scope of programs upon review by the Policy Committee).
- Inadequate funding to maintain District programs that are required by this plan. The District will examine whether or not there is a material change if either of the following occurs: two consecutive years in which annual revenues total less than 90% of the revenue projected in this plan or annual expenditures are more than 110% of the expenditures projected in the plan. If there are offsetting changes in revenues or expenditures so that the District can continue to fully implement all of the programs required by this plan, the District may find that there has not been a material change.
- Delay of more than one year in the implementation of programs and/or activities that are required parts of this plan's implementation schedule (unless the programs have been reduced in frequency or eliminated upon review by the Policy Committee).
- Changes in waste generation could trigger a material change in circumstances if the change is such that additional disposal results in a reduction in available landfill capacity or unanticipated decreased disposal results in revenue reductions. Both of these situations are specifically addressed above.

2. Procedure and timetable to address a material change.

The Policy Committee, District Staff or member of the District Board of Directors will notify the Chairperson of the Board of Directors of any reliable information that is likely to establish that a material change in circumstances addressed in the District's approved Plan may have occurred. The Board will place an item on the agenda of the next regularly scheduled meeting or schedule a special meeting as appropriate. The

District Board of Directors will make a determination on whether to request a plan amendment be prepared by the Policy Committee within 120 days after the matter is first placed on its agenda. If a recommendation for a plan amendment is adopted, the Board of Directors will notify the Director of the Ohio Environmental Protection Agency. The Policy Committee, with the assistance of any standing or special committees, as appropriate, will prepare the plan amendment to address the material change of circumstances. The schedule for development of the plan amendment, approval, ratification, and implementation, will be established by the Policy Committee, depending upon the extent of the amendment required to address the change in circumstances. For example, an amendment which only affects elements of the plan required by Section 3734.5 (B) or (E) of the Revised Code will not require approval of the Director of Ohio EPA, and may be processed in a much shorter time than other types of plan amendments.

APPENDIX B RECYCLING INFRASTRUCTURE INVENTORY

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

1. *Curbside Recycling Services*

Curbside recycling in the District is implemented by municipalities and townships via franchise with a specific hauler, and by individual residents contracting for services with their chosen hauler. The number of programs has increased significantly over the course of 20 years. These programs have been most successful when desired and supported by the residents of those communities. Contracts are renewed every few years, and the specific hauler may change. In most cases, once a curbside program has been initiated, residents are supportive of its continuation long term and the district anticipates that all the programs listed above will continue throughout the planning period. The District does not, however, control whether or not individual communities continue to provide the curbside recycling program. If the discontinuation of a program occurs, the District will ensure that access continues to be met by adding drop-off locations in that service area if necessary.

County demographics limit the growth of curbside recycling. Where the number of homes does not have the density to cost effectively support the service, it is not likely to succeed long term. For example, the population density of the city of Coshocton is approximately 1384 people per square mile, and curbside recycling has successfully diverted waste for many years. The population density of the remainder of the county is approximately 46 people per square mile, and curbside recycling for most of this population would be cost-prohibitive. While there are pockets of higher population densities in the county, the total number of homes to be serviced raises the cost per household to a level few communities are willing to bear.

Tables B-1a and B-1B list the communities that had curbside recycling programs in 2016. Very few responded to the annual survey with tonnage information, with the explanation that their haulers could not (would not) give them the information.

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

ID #	Name of Curbside Service	Service Provider	County	How Service is Provided	Collection Frequency	Materials Collected ⁽¹⁾	Type of Collection	PAYT (Y/N)	Weight of Materials Collected from SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
NCS1	Coshocton City	Kimble	Coshocton	Contract between city and hauler	weekly	alc, BrG, ClG, GrG, onp, occ, p1-7, stc	single, manual	N	368	Y
NCS2	Lithopolis	Rumpke	Fairfield	Contract between Village and hauler	weekly	alc, brg, clg, mag, np, occ, p1, p2, stc, phb	single, manual	N		Y
NCS3	Pleasantville	Local Waste Services	Fairfield	Contract between Village and hauler	weekly	alc, brg, clg, mag, np, occ, p1, p2, stc, phb	single, manual	N		Y
NCS4	Carroll Village	Local Waste Services	Fairfield	Contract between Village and hauler	weekly	alc, brg, clg, mag, np, occ, p1, p2, stc, phb	single, manual	N	17	Y
NCS5	Johnstown Village	Local Waste Services	Licking	Contract between Village and hauler	weekly	alc, brg, clg, mag, np, occ, p1, p2, stc, phb	single, manual	N		Y
NCS6	Pataskala City	Waste Management	Licking	Contract between city and hauler	weekly	alc, brg, clg, mag, np, occ, p1, p2, stc, phb	single, manual	N		Y
NCS7	Granville Village	Republic Services	Licking	Contract between Village and hauler	weekly	alc, brg, clg, grg, occ, onp, ofp, p1, p2, stc	single, manual	N	465	Y
NCS8	Somerset Village	Waste Management	Perry	village contract w/hauler	weekly	alc, mag, onp, occ, ofp, p1-5, P7, stc, phb, ClG, BrG, GrG	single, manual	N	29	Y
Total									880	

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 Frequency	Materials Collected ⁽¹⁾	Type of Collection	PAYT (Y/N)	Weight of Materials Collected from SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
SC1	Baltimore Village	Fairfield	village contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N	62	Y
SC2	Millersport Village	Fairfield	village contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N		Y
SC3	Pickerington Village	Fairfield	village contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N		Y
SC4	Sugar Grove Village	Fairfield	village contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N		Y
SC5	Bowling Green Township	Licking	township contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N		Y
SC6	Etna Township	Licking	township contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N		Y
SC7	Granville Township	Licking	township contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N	291	Y
SC8	Harrison Township	Licking	township contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N	not reported	Y
SC9	Hebron Village	Licking	village contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N	17	Y
SC10	Madison Township	Licking	township contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N		Y

Appendix B Recycling Infrastructure Inventory

SC11	McKean Township	Licking	township contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N		Y
SC12	Monroe Township	Licking	township contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N		Y
SC13	Newark	Licking	residents contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N	not reported	Y
SC14	St. Albans Township	Licking	township contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N		Y
SC15	Union Township	Licking	township contract w/hauler	weekly	alc, brg, clg, mag, onp, occ, p1, p2, stc, phb	single, manual	N	91	Y
Total								461	

2. Drop-Off Recycling Locations

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

ID#	Name of Drop-off Site	Service Provider	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected	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	Coshocton City	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	1	Y
FTU2	Berne Twp - Sugar Grove	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	45	Y
FTU3	Bloom Twp - Collegeview	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	36	Y
FTU4	Greenfield Twp - Havensport Rd.	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	51	Y
FTU5	Lancaster - E. Main	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	70	Y
FTU6	Lancaster - Park	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	63	Y
FTU7	Lancaster - Hubert Ave	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	24	Y
FTU8	Lancaster - Liberty Dr.	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	189	Y
FTU9	Lancaster - Hunter Trace	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	128	N

Appendix B Recycling Infrastructure Inventory

FTU10	Lancaster - Granville Pike	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	46	Y
FTU11	Lancaster - Gay St.	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	18	Y
FTU12	Lancaster - W. Fair Ave	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	23	Y
FTU13	Lancaster - Sugar Grove Rd.	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	5	Y
FTU14	Liberty Twp. - Baltimore	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	35	Y
FTU15	Pleasant Twp - Tiki Lane	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	168	Y
FTU16	Pleasant Twp - Lancaster-Thornville Rd.	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	134	Y
FTU17	Violet Twp- Benadum Rd.	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	16	Y
FTU18	Violet Twp - Stonecreek Dr.	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	186	Y
FTU19	Violet Twp - Blacklick Eastern Rd	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	20	Y
FTU20	Violet Twp - Center St.	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	306	Y
FTU21	Walnut Twp - Millersport	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	41	Y

Appendix B Recycling Infrastructure Inventory

FTU22	Etna Twp - South St	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	105	Y
FTU23	Granville Twp	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	43	Y
FTU24	Granville Twp - Denison Red Barn	Denison University	Licking	School contracts with Kimble	24/7	Occ, OFF, MxP, Mag, P1-2, AIC, StC	Y	not reported	Y
FTU25	Harrison Twp - Outville Rd.	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	138	Y
FTU26	Heath - Rt. 79	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	275	Y
FTU27	Heath - Hoback Park	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	32	Y
FTU28	Monroe Twp - S. Main St.	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	82	Y
FTU29	Newark - East Main	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	103	Y
FTU30	Newark - Flory Park	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	422	Y
FTU31	Newark - Cherry Valley	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	337	Y
FTU32	Newark - Granville Rd.	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	161	Y

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FTU33	Newark - Easy St.	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	33	Y
FTU34	Newark - Myrtle Ave	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	219	Y
FTU35	Newark - W. Main	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	16	Y
FTU36	Union Twp - Hebron	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	129	Y
FTU37	Union Twp - Buckeye Lake	County subcontract to Rumpke	Licking	District/County contract	24/7	AIC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC		0	
FTU38	Harrison Twp - Crooksville	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	35	Y
FTU39	Harrison Twp - Roseville	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	33	Y
FTU40	Pike Township - N. State St.	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	38	Y
FTU41	Pike Township - N. Main St	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	18	Y
FTU42	Pike Township - First St.	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	21	Y
FTU43	Pike Township - SR 13 NE	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	26	Y
Total								3,870	

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

There are no part time urban drop-off sites in the District, therefore, this table has been omitted.

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

ID#	Name of Drop-off Site	Service Provider	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected ⁽¹⁾	Drop-off Meets All Minimum Standards? (Y/N)	Weight of Materials Collected from the SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
FTR1	Adams Twp	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	4	Y
FTR2	Franklin Twp	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	16	Y
FTR3	Jefferson Twp-Nellie	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	7	Y
FTR4	Jefferson Twp-Warsaw	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	41	Y
FTR5	White Eyes Twp - Fresno	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	1	Y
FTR6	Lafayette Twp	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	59	Y
FTR7	Linton Twp	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	11	Y
FTR8	Perry Twp	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	5	Y
FTR9	Pike Twp	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	4	Y
FTR10	Tiverton Twp	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	4	Y
FTR11	Tuscarawas Twp	County	Coshocton	District/County contract	24/7	alc,mag, onp, occ, pbd, p1-7, stc, offp	Y	26	Y
FTR12	Amanda Twp - Amanda	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	47	Y
FTR13	Clearcreek Twp - Oakland	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	21	Y
FTR14	Clearcreek Twp - Stoutsville	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	27	Y

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FTR15	Richland Twp - Rushville	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	18	Y
FTR16	Richland Twp - West Rushville	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	11	Y
FTR17	Rushcreek Twp - Bremen	County subcontract to Lancaster/Fairfield Community Action	Fairfield	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, glass	Y	21	Y
FTR18	Bennington Twp - SBC	SBC	Licking	Private Owner/operator	24/7	AlC, StC, P1-2, Mag, Ofp, Occ, Onp	Y		Y
FTR19	Fallsbury Twp. - Fallsburg	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	13	Y
FTR20	Franklin Twp - Flint Ridge Rd.	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	34	Y
FTR21	Hanover Twp - W. High St	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	135	Y
FTR22	Hartford Twp - Croton	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	31	Y
FTR23	Jersey Twp - Mink St.	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	110	Y
FTR24	Liberty Twp - Northridge Rd.	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	37	Y
FTR25	Licking Twp - Jacksontown Rd	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	27	Y
FTR26	Mary Ann Twp - Wilkins Run Rd.	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	41	Y
FTR27	McKean Twp - Fredonia	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	50	Y

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FTR28	Newton Twp - St. Louisville	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	26	Y
FTR29	St. Albans Twp - Alexandria	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	97	Y
FTR30	Washington Twp - Utica	County subcontract to Rumpke	Licking	District/County contract	24/7	AlC,mag, onp, MxP, occ, PBd, p1-7, StC, OffP, glass, ArC	Y	68	Y
FTR31	Bearfield Twp - Six Mile Turn	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	20	Y
FTR32	Clayton Twp - Saltillo	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	22	Y
FTR33	Coal Twp - New Straitsville	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	17	Y
FTR34	Hopewell Twp - Glenford	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	19	Y
FTR35	Jackson Twp - Junction City	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	33	Y
FTR36	Monroe Twp - Corning	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	18	Y
FTR37	Reading Twp - Somerset	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	38	Y
FTR38	Salt Lick Twp - Hemlock	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	12	Y
FTR39	Salt Lick Twp - Shawnee	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, ClG, BrG	Y	18	Y

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FTR40	Thorn Twp - Thornville	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, CIG, BrG	Y	18	Y
FTR41	Thorn Twp - Thornport	County	Perry	District/County contract	24/7	alc,mag, onp, occ, pbd, p1, p2, stc, offp, CIG, BrG	Y	65	Y
Total								1,274	

Specific addresses of drop-off sites may change as needed, but the net service will remain at or above this level. One change that took place beginning 2018 is the manner in which the Perry County Recycling Contract is administered. It had been subcontracted entirely to PerCo, Inc., a nonprofit organization closely aligned with the Perry County Board of Developmental Disabilities. In 2017, the county and PerCo changed their relationship status and the county assumed all managerial responsibility for the recycling center. From 2018 forward, county employees will manage the recycling collection and processing as well as manage the recycling center, but subcontract processing labor only to another entity. As they evaluate the cost effectiveness of this arrangement, it is possible that there will be many operational changes made to the program.

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

There are no part time rural drop-off sites in the District, therefore, this table has been omitted.

3. Mixed Solid Waste Material Recovery Facilities

Table B-3 Mixed Solid Waste Material Recovery Facility

There are no facilities in the District that sort recyclables from general trash, therefore, this table has been omitted.

B. Curbside Recycling and Trash Collection Service Providers

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

		Trash Collection Services				Curbside Recycling Services		
Name of Provider	Counties Served	PAYT (Y/N)	Residential	Commercial	Industrial	Residential2	Commercial2	Industrial 2
1-800-Got Junk?	L	N	✓			✓		
AAA Affordable Services	L	N	✓					
Adkins Disposal	L, P	N	✓	✓			✓	
AJW Sanitation	F	N	✓	✓	✓			
All J Hauling	C, L	N	✓					
BA Disposal	P	N	✓	✓	✓			
Boren Bros	L	N	✓	✓		✓	✓	
Boyd's Sanitation	P	N	✓	✓	✓			
BSS Waste Disposal	F, L, P	N	✓	✓	✓			
Buckeye Hauling & Disposal	F	N						
Capitol Waste & Recycling	L	N	✓	✓	✓	✓	✓	✓
Central Ohio Contractors	F, L	N		✓	✓		✓	✓
CMI Waste Removal	F	N	✓	✓	✓			
D & D Refuse	F	N	✓					
Falcon Sanitation	P	N	✓	✓	✓			
Farmer's Refuse & Trucking	F, L	N			✓			✓
Kimble Recycling & Disposal	C, L, P	N	✓	✓	✓	✓	✓	
JNR Services	F	N	✓	✓	✓			
Junk 2B	L	N	✓			✓		
Lancaster City Sanitation	F	N	✓	✓	✓			
Leckrone Sanitation	P	N	✓	✓	✓			
Local Waste Services	F, L	N	✓	✓	✓	✓	✓	✓
Michel's Refuse	P	N	✓	✓	✓			
Micro Construction	F	N	✓	✓	✓			
Mid Ohio Sanitation & Recycling	L	N	✓	✓				
Myers Refuse	C	N	✓	✓	✓			

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Old Mill Sanitation	F, P	N	✓	✓				
Premier Sanitation	P	N	✓	✓	✓			
Professional Trash Service	C	N	✓	✓	✓			
Republic Waste	C, F, L, P	N	✓	✓	✓	✓	✓	✓
Rumpke Recycling	C, F, L, P	N	✓	✓	✓	✓	✓	✓
Russell Refuse Service	C	N	✓	✓	✓			
Shackleford's Disposal	L, P	N	✓	✓		✓		
Skip's Refuse	C	N	✓	✓				
Trace's Sanitation	F, L	N		✓				
Waste Away Systems	C, F, L, P	N	✓	✓	✓	✓	✓	✓
Waste Management	C, F, L, P	N	✓	✓	✓	✓	✓	✓
Whetstone Hauling	C	N	✓	✓	✓			

Source: This information was compiled from responses to annual surveys and from registrations with local health departments.

C. Composting Facilities

Table 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
Hope Timber Mulch	4	Y	Newark, Licking		7,500	7,500
Denison University	2	N	Granville, Licking		0	0
Pine Grove Landfill	4	Y	Amanda, Fairfield		24	24
ELM Recycling	4	Y	Newark, Licking		191	191
The Compost Farm	2	Y	Alexandria, Licking	1	59	60
Southeastern Correctional Institute	2	N	Lancaster, Fairfield	216	320	536
Utica Compost	4	Y	Utica, Licking		179	179
Kurtz Bros. Brookside	4	Y	Alexandria, Licking		2,683	2,683
Lancaster WPCF	4	N	Lancaster, Fairfield		30	30
McCullough's Landscaping	4	N	Johnstown, Licking		43	43
Total				217.23	11,029	11,246.6

Coshocton and Perry Counties did not have publicly accessible yard waste management facilities in 2016. In Fairfield County, the only public option was Pine Grove Landfill, which is not located convenient to the communities most likely to want to use it. In Licking County, both Newark and Alexandria offered public access to yard waste management, as well as a small site in Utica created for the use of Utica residents only. Due to the rural nature of the majority of the District, backyard composting prevails.

D. Other Food Waste and Yard Waste Management Programs

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)
The Compost Farm	ag waste	Licking		390
Southeastern Correctional Institute	ag waste	Fairfield		84
ELM Recycling	wood waste	Licking		10,197
Total			0	10,671

The agricultural waste accepted at The Compost Farm is mainly manure from area homes where owners keep one or two horses. The agricultural waste composted at the Southeastern Correctional Institute is from their own facility where they kept cattle as a food source. The wood waste accepted by ELM Recycling is brush and tree limbs accepted from both commercial landscaping companies and the general public.

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

Facility Name	County	State	Type of Facility	Weight of Material Accepted from SWMD (tons)
Coshocton Recycling	Coshocton	Ohio	recycling center	
Skip's Refuse and Recycling	Coshocton	Ohio	recycling center	96.1
Lity Scrapyard	Coshocton	Ohio	scrapyard	
Salvation Army	Coshocton	Ohio	reuse center	
Mullett Tire Service	Coshocton	Ohio	tire collection	
Goodwill Industries	Coshocton	Ohio	reuse center	
Coshocton Co. Health Dept	Coshocton	Ohio	govt. agency	
HFH Restore	Coshocton	Ohio	reuse center	
Riverview Schools	Coshocton	Ohio	school	
Coshocton Tire	Coshocton	Ohio	tire collection	
Advance Auto Parts	Coshocton	Ohio	retail store	
541 Auto Repair	Coshocton	Ohio	retail store	
Auto Zone	Coshocton	Ohio	retail store	
Prince's Wrecking Service	Coshocton	Ohio	oil collection	1.75
Coshocton Fire Dept	Coshocton	Ohio	govt. agency	
Walhonding Fire Dept	Coshocton	Ohio	govt. agency	
Walhonding Recycling	Coshocton	Ohio		
Waste Parchment	Coshocton	Ohio	end use industry	
Community Action Recycling Center	Fairfield	Ohio	recycling center	765.379
Royal Oak Paper Retriever	Fairfield	Ohio	end use industry	375.32
Menards	Fairfield	Ohio	retail store	
Lowe's	Fairfield	Ohio	retail store	
Best Buy	Fairfield	Ohio	retail store	
Fairfield County Health Dept.	Fairfield	Ohio	govt. agency	
Kroger	Fairfield	Ohio	retail store	
Giant Eagle	Fairfield	Ohio	retail store	
Goodwill Industries	Fairfield	Ohio	reuse center	
Salvation Army	Fairfield	Ohio	reuse center	
HFH Restore	Fairfield	Ohio	reuse center	
UPS Store	Fairfield	Ohio	retail store	

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UPS Store	Fairfield	Ohio	retail store	
Lancaster Transfer Station	Fairfield	Ohio	govt. agency	7.4
Bloom Elementary	Fairfield	Ohio	school	
Ohio Gas of Lancaster	Fairfield	Ohio	reuse center	
All Star Auto Care	Fairfield	Ohio	retail store	
Scott's Marathon	Fairfield	Ohio	retail store	
Madison Twp - oil collection	Fairfield	Ohio	govt. agency	
Milby Automotive	Fairfield	Ohio	retail store	
Battery Giant	Fairfield	Ohio	retail store	
Toxco	Fairfield	Ohio	end use industry	
Walnut Twp - oil collection	Fairfield	Ohio	govt. agency	
Smetzer Tire	Fairfield	Ohio	tire collection	
Fairfield Core and Recycling	Fairfield	Ohio	recycling center	
Hines Scrap Iron	Fairfield	Ohio	recycling center	
Lancaster Metals Recycling	Fairfield	Ohio	recycling center	
Ohio Paperboard Corp	Fairfield	Ohio	end use industry	
Sierra Metals	Fairfield	Ohio	recycling center	
Denison University Red Barn	Licking	Ohio	recycling center	
SBC Recycling	Licking	Ohio	recycling center/MRF	26452
Royal Oak Paper Retriever	Licking	Ohio	end use industry	410.849
Licking County Computer Society	Licking	Ohio	reuse center	
Home Depot	Licking	Ohio	retail store	
Lowe's	Licking	Ohio	retail store	
CFLP Joint Solid Waste Management District - cfl collection	Licking	Ohio	govt. agency	
Licking County Health Dept - mercury	Licking	Ohio	govt. agency	
Ohio Gas	Licking	Ohio	reuse center	
Ferrellgas	Licking	Ohio	reuse center	
The Energy Cooperative	Licking	Ohio	reuse center	
Express Pack n Ship	Licking	Ohio	retail store	
Boxes and Bows	Licking	Ohio	retail store	
Goodyear Tire Center	Licking	Ohio	tire collection	
TCI	Licking	Ohio	tire collection	
Mr. Tire	Licking	Ohio	tire collection	
Mr. Tire	Licking	Ohio	tire collection	
Staples	Licking	Ohio	retail store	
Best Buy	Licking	Ohio	retail store	
Recharge It	Licking	Ohio	retail store	
Hope Timber	Licking	Ohio	recycling center	
Advance Auto Parts	Licking	Ohio	retail store	
Advance Auto Parts	Licking	Ohio	retail store	
Advance Auto Parts	Licking	Ohio	retail store	
Auto Zone	Licking	Ohio	retail store	

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Auto Zone	Licking	Ohio	retail store	
Batteries Unlimited	Licking	Ohio	retail store	
Salvation Army	Licking	Ohio	reuse center	
Goodwill Industries	Licking	Ohio	reuse center	
Green's Radiator & Air Conditioning	Licking	Ohio	retail store	
Jiffy Lube	Licking	Ohio	retail store	
TDR LLC	Licking	Ohio	recycling center	
TSC Farm Store	Licking	Ohio	retail store	
Washington Auto Parts	Licking	Ohio	retail store	
Hebron Core & Recycling	Licking	Ohio	recycling center	
Crispin Auto Wrecking	Licking	Ohio	scrapyard	
Sherman Iron and Metal	Licking	Ohio	recycling center	
Johnson Appliance Sales & Service	Licking	Ohio	retail store	
Mr B's Appliance & Repair	Licking	Ohio	retail store	
Legend Metals	Licking	Ohio	recycling center	
Strategic Materials	Licking	Ohio	recycling center	
Perco, Inc.	Perry	Ohio	recycling center	included in dropoff
Goodwill Industries	Perry	Ohio	reuse center	
Perry Co Health Dept - mercury	Perry	Ohio	govt. agency	
Perry Co. Engineer - oil collection	Perry	Ohio	govt. agency	7.4
Perry Scrapyard	Perry	Ohio	scrapyard	
Newlon Tires	Perry	Ohio	tire collection	
Northern Local School Garage - oil collection	Perry	Ohio	school	
Total				28,116

APPENDIX C POPULATION DATA

A. Reference Year Population

Table C-1a Reference Year Population Adjustments

	Coshocton
Before Adjustment	36,558
Additions	
Subtractions	
Baltic	10
After Adjustment	36,548

	Fairfield
Before Adjustment	158,146
Additions	
Pickerington	93
Lithopolis	35
Subtractions	
Canal Winchester	882
Columbus	10,459
Reynoldsburg	985
After Adjustment	145,948

	Licking
Before Adjustment	174,988
Additions	
Gratiot	92
Utica	17
Subtractions	
Reynoldsburg	9,276
New Albany	24
After Adjustment	165,797

	Perry
Before Adjustment	37,002
Additions	
Roseville	775
Subtractions	
After Adjustment	37,777

Source(s) of Information: 2010 Federal Census, Ohio Development Services Agency 5 year incremental projections

Table C-1b Total Reference Year Population

Unadjusted Population	Adjusted Population
406,694	386,070

B. Population Projections

As seen in Table C-1, Fairfield and Licking County populations are significantly affected by communities that are shared with Franklin County. Because this is a dynamic population, using the same number of people to adjust populations over 20 years, as instructed in the Format, would result in an inaccurate picture of these counties. Therefore, population projections for this district adjust the population of the shared communities each year, just as the rest of the counties' populations are adjusted.

For example, in the reference year, Fairfield County's population of Columbus residents is 10,459. In 2030, this population has risen to 12,421. The following tables reflect the fluctuating adjustments to the populations of each county instead of the recommended stagnant number.

The population projections created by Ohio Development Services are available in the last census year (2010) and then in five year increments. Straight line projections were used to calculate populations for the years in between. For example, if a population increased from 2020 to 2025 by 100 people, then that community is projected to increase each year by 20 people. Populations were projected for each township and municipality instead of using one number per county, because growth varies from community to community.

Table C-2 Population Projections

Year	Coshocton	Fairfield	Licking	Perry	Total District Population
2016	36,548	145,948	165,797	37,777	386,070
2017	36,456	147,726	167,188	37,932	389,301
2018	36,364	149,503	168,579	38,087	392,533
2019	36,272	151,281	169,969	38,242	395,764
2020	36,180	153,058	171,360	38,397	398,996
2021	36,074	155,088	172,867	38,622	402,651
2022	35,968	157,119	174,373	38,847	406,307
2023	35,862	159,149	175,880	39,071	409,962
2024	35,756	161,179	177,386	39,296	413,618
2025	35,650	163,210	178,893	39,520	417,273
2026	35,302	165,234	180,363	39,720	420,620
2027	35,302	167,259	181,834	39,921	424,316
2028	35,128	169,284	183,304	40,121	427,837
2029	34,955	171,309	184,775	40,321	431,359
2030	34,781	173,333	186,245	40,521	434,880
2031	34,637	175,480	187,695	40,741	438,553
2032	34,493	177,627	189,144	40,962	442,226
2033	34,349	179,773	190,594	41,182	445,898
2034	34,205	181,920	192,044	41,403	449,571

Source(s) of Information: 2010 Federal Census, Ohio Development Services 5 year incremental projections

Table C-3-

Year	Annual Change persons/year	Coshocton	Annual Change persons/year	Fairfield	Annual Change persons/year	Licking	Annual Change persons/year	Perry
2015	36,640	36,640	144,171	144,171	164,406	164,406	37,622	37,622
2016	-92	36,548	1777	145,948	1391	165,797	155	37,777
2017	-92	36,456	1777	147,726	1391	167,188	155	37,932
2018	-92	36,364	1777	149,503	1391	168,579	155	38,087
2019	-92	36,272	1777	151,281	1391	169,969	155	38,242
2020	36,180	36,180	153,058	153,058	171,360	171,360	38,397	38,397
2021	-106	36,074	2030	155,088	1507	172,867	225	38,622
2022	-106	35,968	2030	157,119	1507	174,373	225	38,847
2023	-106	35,862	2030	159,149	1507	175,880	225	39,071
2024	-106	35,756	2030	161,179	1507	177,386	225	39,296
2025	35,650	35,650	163,210	163,210	178,893	178,893	39,520	39,520
2026	-174	35,476	2025	165,234	1470	180,363	200	39,720
2027	-174	35,302	2025	167,259	1470	181,834	200	39,921
2028	-174	35,128	2025	169,284	1470	183,304	200	40,121
2029	-174	34,955	2025	171,309	1470	184,775	200	40,321
2030	34,781	34,781	173,333	173,333	186,245	186,245	40,521	40,521
2031	-144	34,637	2147	175,480	1450	187,695	50	40,741
2032	-144	34,493	2147	177,627	1450	189,144	50	40,962
2033	-144	34,349	2147	179,773	1450	190,594	50	41,182
2034	-144	34,205	2147	181,920	1450	192,044	50	41,403
2035	34,061	34,061	184,066	184,066	193,493	193,493	40,770	40,770

APPENDIX D DISPOSAL DATA

A. Reference Year Waste Disposed

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

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

Facility Name	Location		Waste Accepted from the SWMD			
	County	State	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Coshocton Landfill	Coshocton	OH	-	-	81.00	81
Pine Grove Landfill	Fairfield	OH	4,602.31	42,508.45	1,388.63	48,499
Suburban Landfill	Perry	OH	68,678.80	83,325.77	7,845.16	159,850
Tunnell Hill Reclamation	Perry	OH	34,731.21		1,797.24	36,528
Kimble Sanitary Landfill	Tuscarawas	OH	22,544.16	7,576.51	965.17	31,086
Athens Hocking Reclamation Center	Hocking	OH	5,499.92	4,149.10		9,649
SWACO Landfill	Franklin	OH	695.08			695
Countywide Landfill	Stark	OH	16.06		285.12	301
Carbon Limestone Landfill	Mahoning	OH	21.88			22
American Landfill	Stark	OH		10.83	13.35	24
Evergreen Landfill	Wood	OH		5.84		6
Total			136,789	137,577	12,376	286,742

¹ 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: Annual Operating Reports submitted to Ohio EPA by landfills

As noted previously, Tunnell Hill Reclamation has accepted industrial waste but has not reported it as such on their Annual Operating Reports.

Table D-1b Waste Disposed in Reference Year – Captive Landfills¹

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

Facility Name	Location		Waste Accepted from the District		
	County	State	Industrial (tons)	Excluded (tons)	Total (tons)
Owens Corning	Licking	OH	17,746.00	-	17,746
AEP Conesville	Coshocton	OH	206,270.00	24,010.00	230,280
Total			224,016	24,010	248,026

¹ 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).

Source(s) of Information: Annual Operating Reports submitted to Ohio EPA by landfills

Of the industrial waste disposed at the AEP facility, the majority is FGD, with a small amount of gypsum. The excluded waste is fly ash and bottom ash.

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

Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total
136,789	361,593	36,386	534,768

Table D-2: Waste Transferred in Reference Year¹

Facility Name	Location		Waste Received from the SWMD			
	County	State	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Waste Away Newark (Suburban)	Licking	OH	3,434		284	3,717
Lancaster Transfer Station (Pine Grove)	Fairfield	OH	31,209			31,209
Rumpke Circleville Transfer (Beech Hollow)	Pickaway	OH	22,012		51	22,063
Rumpke Columbus Transfer (Beech Hollow)	Franklin	OH	21,454			21,454
Local Waste Services (Tunnell Hill)	Franklin	OH	17,478		417	17,895
Waste Management Transfer & Recycling (Suburban)	Franklin	OH	17,446	1		17,447
Reynolds Avenue Transfer (Pine Grove)	Franklin	OH	7,335		2,766	10,100
Mt. Vernon Transfer (Pine Grove)	Knox	OH	3,148		173	3,320
Kimble Transfer & Recycling Facility (Kimble)	Guernsey	OH	2,564		53	2,618
WM of Ohio Chillicothe Transfer Facility (Suburban)	Ross	OH	281			281
Delaware County Transfer (Crawford)	Delaware	OH	30			30
Richland Transfer (Noble Rd)	Richland	OH	3			3
Total			126,393	1	3,743	130,138

¹ The facilities listed in Table D-2 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: Annual Operating Reports submitted to Ohio EPA by landfills and transfer stations

Where data submitted by a transfer station as to tons taken to a landfill differed from the tons reported as accepted by that landfill, landfill numbers were used.

Table D-3: Waste Incinerated/Burned for Energy Recovery in Reference Year

No waste was reported as incinerated, therefore this table has been omitted.

Table D-4: Total Waste Disposed in Reference Year

	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)	% of Total Waste Disposed
Direct Hauled	136,789	361,593	0	498,382	80%
Transferred	126,393	1	0	126,395	20%
Incinerated	0	0	0	0	0%
Total	263,183	361,594	0	624,777	100%

Percent of Total	42%	58%	0%	100%
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Supplement to Table D-4 (Incinerated and Excluded Wastes as Percentages of Total Waste Disposed)

	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)	% of Total Waste Disposed
Direct Hauled	136,789	361,593	36,386	534,768	80%
Transferred	126,393	1	3,743	130,138	20%
Incinerated	0	0	0	0	0%
Total	263,183	361,594	40,129	664,906	100%

Percent of Total	40%	54%	6%	100%
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These tables are self-explanatory and are a compilation of data from previous tables. As indicated in the supplemental table above, excluded waste accounts for only 6% of all waste disposed in the reference year, and will therefore be omitted from consideration.

B. Historical Waste Analysis

Table D-5: Historical Disposal Data including captive landfills

Year	Population	Residential/ Commercial Solid Waste		Industrial Solid Waste	Total Waste
		Rate (ppd)	Weight (tons)	Weight (tons) ²	Weight (tons) ⁴
2012	372,936	4.11	279,867	767,418	1,047,285
2013	376,237	4.20	288,238	835,461	1,123,699
2014	379,537	4.19	290,273	643,370	933,643
2015	382,838	3.75	262,138	338,075	600,213
2016	386,070	3.73	262,902	361,594	624,496

Source(s) of Information: Annual Operating Reports submitted by facilities to Ohio EPA

Table D-5a Historical Disposal Data exclusive of AEP

Year	Population	Residential/ Commercial Solid Waste		Industrial Solid Waste	Total Waste
		Rate (ppd)	Weight (tons)	Weight (tons) ²	Weight (tons) ⁴
2012	372,936	4.11	279,867	121,876	401,743
2013	376,237	4.20	288,238	120,547	408,785
2014	379,537	4.19	290,273	127,935	418,208
2015	382,838	3.75	262,138	157,816	419,954
2016	386,070	3.73	262,902	155,324	418,226

Table D-5a is included to give a comparison between the District's disposal totals with and without the material from the AEP coal burning power plant in Conesville. FGD material is the majority of the industrial waste stream, and removing it from consideration gives a more accurate picture of the remainder of the industrial waste disposal in the District.

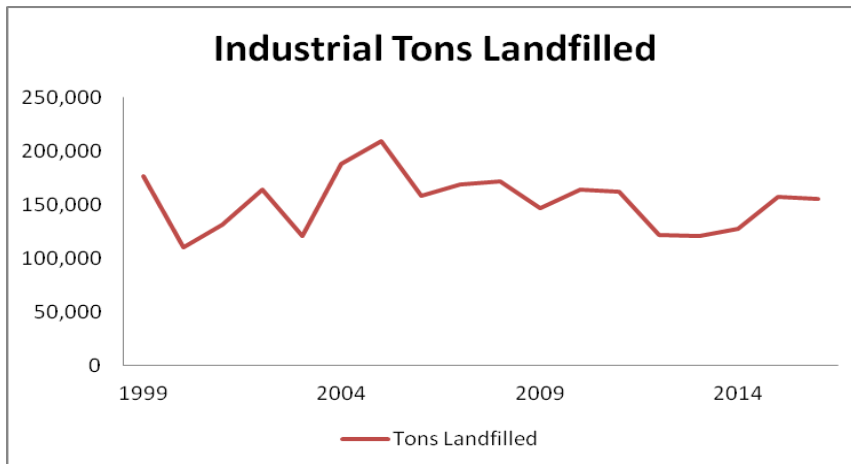
The total waste disposed did not fluctuate as much as individual categories over the last five years. We are at the mercy of annual operating reports submitted by landfills and transfer stations for our data, and when waste is incorrectly characterized, we do not have the ability to correct it at the District level. Tunnell Hill Reclamation reported receiving no industrial waste, even though they were receiving waste from a Coshocton industry for several years. Therefore, fluctuations between residential/commercial and industrial waste are more a reflection of reporting than disposal activity (see the switch between residential and industrial in Table D-5a between 2014 and 2015).

1. Residential/Commercial Waste

General waste disposed fluctuates annually but has consistently held between 258,000 and 299,000 tons per year for the last ten years. The population of the district has continued to increase slowly and recycling increases have kept disposal from increasing through the years. As stated above, the apparent decrease in 2015 is merely a correction by landfills in characterizing an industrial waste stream, not an actual decrease. The District used a projection of .05% increase per year based on the slowly increasing population slightly outpacing recycling efforts.

2. Industrial Waste

Industrial waste disposed is a direct reflection on manufacturing activity in the district. There have been closures of large industries through the years without corresponding new starts. Tons per year have ranged from 120,000 to 171,000 in the last ten years, exclusive of the material disposed by AEP in their captive landfill. As stated above, the apparent increase in 2015 is merely a correction in the reporting of a waste stream when it moved from Tunnel Hill to Suburban. Whether disposal of industrial waste has increased over the years or decreased depends solely upon the base year chosen. Projecting that industrial waste disposal will continue to decrease .5% annually follows the current overall decrease in the number of industries in the district.



3. Excluded Waste

Excluded waste is less than 10% of the total waste disposed, and therefore has been omitted from this table. It consists of fly ash and bottom ash from AEP, and construction/demolition debris. The amount of construction/demolition material disposed has remained fairly consistent over the last ten years. The fly ash and bottom ash disposed by AEP has diminished significantly in the last three years.

Table D-5b Inventory of Open Dump Sites

Site Description and Location	Description of Material Dumped on Site	Approximate Size in Acres	Time Period Site has Existed
Coshocton County			
Keene Twp Rd. 47	Large accumulation of solid waste	>1 acre	Unknown
Fairfield County			
3330 Hamburg Road, Lancaster	Large accumulation of solid waste and tires	1 acre	BOH sent matter to prosecution, OEPA sent orders to remove tires as well
3734 Cedar Hill Rd., Canal Winchester	Large accumulation of solid waste	<1 acre	Prosecuted twice, may be sent a third time
3449 Lancaster-Kirkersville Rd., Lanc.	Large accumulation of solid waste	3 acres	BOH sent matter to prosecution, warrant sworn out for owner
12610 Heimberger Rd., Baltimore	Large accumulation of solid waste dumped in yard by tenant	1.5 acres	BOH sent matter to prosecution
Licking County			
32 Central Ave.	Misc. solid waste	Not reported	Referred to prosecutor's office
1325 County Line Rd.	Building materials	20 acres	Referred to prosecutor's office
3427 Ridgley Tract Rd.	300 tires, abandoned recyclables	9.34 acres	Referred to prosecutor's office
Perry County			
Township Road 319 in Pleasant Township Section 20, on the east side of the road	Reoccurring dumpsite where general trash is dumped	> 1 acre	Unknown
Township Road 239 in Bearfield Township, Section 27, about 1/4 mile from public road on the east side of the road	Tires	300 to 400 tires	Unknown
Wayne National Forest, Monroe TR 11 at Irish Ridge Rd.	Not identified	> 500	Unknown

This table is included because the legislative requirement to do so still exists in Ohio Revised Code.

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
	Weight (tons)	Weight (tons)	Weight (tons)	Weight (tons)
2016	262,902	361,594	0	624,496
2017	262,902	359,786	0	622,688
2018	263,033	357,987	0	621,020
2019	263,165	356,197	0	619,362
2020	263,296	354,416	0	617,712
2021	263,428	352,644	0	616,072
2022	263,560	350,881	0	614,441
2023	263,691	349,126	0	612,818
2024	263,823	347,381	0	611,204
2025	263,955	345,644	0	609,599
2026	264,087	343,916	0	608,003
2027	264,219	342,196	0	606,415
2028	264,351	340,485	0	604,836
2029	264,484	338,783	0	603,266
2030	264,616	337,089	0	601,705

Waste Transferred (as part of Total Disposal)	Waste Transferred (as part of Total Disposal)
Weight (tons)	Percent 20%
126,395	20%
126,395	20%
126,395	20%
126,395	20%
126,395	20%
126,395	21%
126,395	21%
126,395	21%
126,395	21%
126,395	21%
126,395	21%
126,395	21%
126,395	21%
126,395	21%

Projections for waste transferred and disposed are based on historical data 1989-2017. Continued decrease in the industrial sector is based on fewer industries, and gradual increase in commercial sector is based on growth in that sector, they will offset each other. As in the past, there will be annual anomalies that cause fluctuations beyond the projected numbers.

APPENDIX E RESIDENTIAL/COMMERCIAL REDUCTION AND RECYCLING DATA

A. Reference Year Recovery Data

As illustrated in the following tables, recycling in the CFLP Joint Solid Waste Management District is accomplished through a variety of programs. Where practical, curbside recycling has been initiated by municipalities and townships. Drop-off sites managed by county recycling offices have been placed throughout the four counties to ensure that at least 90% of the residents have access to a recycling opportunity. Privately owned and operated recycling businesses, usually for a select list of materials, give residents and businesses further opportunities to recycle additional materials. Many commercial establishments have taken the initiative to establish corporate-wide recycling programs, giving a broader recycling incentive to local stores than they would have individually.

For government offices and public schools, the county recycling offices offer pickup of materials, including going inside buildings to where materials are stored. This is offered at no cost to the office or school, and leads by example - government being responsible for the waste it generates. In 2016, this program collected 393 tons of material, primarily paper and cardboard.

As instructed by the prescribed format, the following tables do not include train boxcars, construction and demolition debris, vehicle salvage materials, manure, agricultural waste, alternative daily cover or municipal sewage sludge. The data is from 2014-2016 responses to surveys and from businesses that are still operational. Because much of the data provided did not identify the destination of the recyclables, eliminating double counting cannot be guaranteed, however, when generators did identify where they sent materials, those were subtracted from the tons reported by the processors.

Table E-1 Commercial Survey Results

NAICS	Appliances/ "White Goods"	Lead- Acid Batteries	Glass	Ferrous Metals	Non- Ferrous Metals	Corrugated Cardboard	All Other Paper	Plastics	Textiles	Wood	Commingle d Recyclables (Mixed)	Used Oil	Other	Electronics	totals
44			0.01	1.01	1.05			0.01		10.00					12.08
56				300.00	5.00	30.00	1.00	300.00		200.00					836.00
61															0.00
62					0.50	21.00	10.00								31.50
Other: 21		0.50		13.90								3.90	0.80		19.10
Other: Collected by Community Action											508.21				508.21
Other: Collected by J&J						116.79									116.79
Other: Collected by SCI	10.40		1.20	104.90		392.40	231.20	78.50	48.30					14.80	881.70
Other: Collected by Capitol Waste											196.34				196.34
Other:															0.00
Unadjusted Total	10.40	0.50	1.21	419.81	6.55	563.19	242.20	378.51	48.30	210.00	704.55	3.90	0.80	14.80	2,604.72
Adjustment s															0.00
Adjusted Total	10.40	0.50	1.21	419.81	6.55	563.19	242.20	378.51	48.30	210.00	704.55	3.90	0.80	14.80	2,604.72

Source(s) of Information: Annual Surveys sent to Recyclers 2014-2016

Note: Under "Other" Rows, several entities report taking commercial recyclables, but did not identify the companies of origin. Therefore, we cannot assign these tonnages to a specific NAICS code.

Table E-2 Data from Other Recycling Facilities

Program and/or Source of Materials/Data	Appliances/ "White Goods"	Lead-Acid Batteries	Glass	Ferrous Metals	Non-Ferrous Metals	Corrugated Cardboard	All Other Paper	Plastics	Textiles	Wood	Oil	Electronics	Other	
														totals
Buybacks														
Skip's Recycling	14		13		55			14						96
Community Action Recycling Station			11	1	148	31	26	5						222
Fairfield Core & Recycling		30		3,300	420								4	3,754
Hess Brothers		39		161	127									327
														0
Scrap Yards														0
Coshocton Recycling				5,303	616									5,919
Lity Scrapyard	1,500	28		2,500										4,028
Crispin Iron & Metal	13	18		1,420	70				15		16	0		1,553
Hebron Iron & Metal	5	2		75	32									114
Brokers														0
														0
Processors/MRF's														0
SBC				74	218	8,330	7,645	10,185						26,452
Strategic Materials			373											373
Polk Iron & Metal	50	10		500	150									710
Muskingum Iron & Metal	650			1,950	850									3,450
Community Action Recycling Station		6	1	50	21	4	117	0		5	13	7		224
														0
Unadjusted Totals	2,232	134	399	15,334	2,707	8,365	7,788	10,204	15	5	29	7	4	47,221
Adjustments														0
Adjusted Totals	2,232	134	399	15,334	2,707	8,365	7,788	10,204	15	5	29	7	4	47,221

Source(s) of Information: Annual Recycling Surveys

Appendix E Residential/Commercial Waste
Reduction and Recycling Data

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

Ohio EPA Data Source	Glass	Plastic	Newspaper	Cardboard	Mixed Paper	Nonferrous	Ferrous	Wood	Food: Compost	Food: Other	Commingled	Other	Total
Walmart-Coshocton		18.86		549.22	5.15	0.09	1.50					100.80	675.620
Dollar General-Coshocton				93.53	0.12								93.650
Aldi-Coshocton		0.99		113.02						6.54			120.550
Buehler's-Coshocton		0.28		100.37	1.00						0.19		101.840
Big Lots-Coshocton				18.72									18.720
Rumpke-Coshocton	0.85	0.32	0.73	0.68	1.46	0.05	0.08						4.170
Food Waste Haulers-Coshocton									169.39				
Walmart-Fairfield		13.00		501.30	3.00	0.04	1.50					134.24	653.080
Lowes-Fairfield		0.30		71.10			32.40	79.70					183.500
Meijer-Fairfield		0.60		873.11	2.48							0.25	876.440
Target-Fairfield		9.16		517.52	6.07		10.96				2.68		546.390
Dollar General-Fairfield				270.19	0.32								270.510
Big Lots-Fairfield				88.37									88.370
Kohls-Fairfield		20.00		201.18							0.08		221.260
Kroger-Fairfield												2.80	2.800
Rumpke-Fairfield		37.92		48.21				0.95					87.080
Giant Eagle-Fairfield		3.15		2.60	2.70							3.88	12.325
Waste Mgmt-Fairfield				406.88	108.91	13.61							529.400
Food Waste Haulers-Fairfield									231.53				
Walmart-Licking		31.19		1,289.38	8.67	0.14	1.88					282.35	1,613.610
Lowes-Licking		0.32		87.85			27.33	88.88					204.380
Home Depot-Licking		0.45		64.75			9.02	167.03					241.250
Target-Licking		4.58		258.76	5.20		5.48				1.34		275.360
Dollar General-Licking				170.60	0.32								170.920

Appendix E Residential/Commercial Waste Reduction and Recycling Data

Big Lots-Licking				40.51									40.510
Kohls-Licking		10.00		44.24						0.04			54.280
Aldi-Licking		3.02		171.54									174.560
Kroger-Licking											4.06		4.060
Rumpke-Licking	490.11	184.53	423.27	425.26	842.61	29.54	46.19	0.40					2,441.910
Waste Mgmt-Licking				3,233.50	284.80								3,518.300
Giant Eagle-Licking		0.74		3.41	3.54						7.09		14.775
Food Waste Haulers-Licking									429.14				
Dollar General-Perry				114.31	0.16								114.470
Kroger-Perry											0.21		0.210
Food Waste Haulers-Perry									20.08				
Waste Mgmt-Perry				5.27	7.89								13.160
Unadjusted Total	490.96	339.41	424.00	9,765.38	1,284.40	43.47	136.34	336.96	850.14	6.54	4.33	535.68	14,218
Adjustments													0
Adjusted Total	490.96	339.41	424.00	9,765.38	1,284.40	43.47	136.34	336.96	850.14	6.54	4.33	535.68	14,218

Source(s) of Information: Ohio EPA

Note: An amount of 217 tons of food waste reported to OEPA is contained in table E-4 because they also reported this on the district survey. Putting it here as well would have double counted it.

Assumptions: No data was provided regarding the destination of this material, so there cannot be adjustments made to avoid double counting. Our assumption must therefore be that none of this material went to facilities that reported to the District.

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

Other Programs or Sources of Data	Appliances/ "White Goods"	Used Motor Oil	Electronics	Scrap Tires	Lead-Acid Batteries	Food	Ferrous Metals	Non-Ferrous Metals	Corrugated Cardboard	All Other Paper	Plastics	Textiles	Wood	Commingled Recyclables (Mixed)	Yard Waste	Ag Waste	Unadjusted Total	Adjustments	Adjusted Total
Curbside Recycling Services														3,137			3,137		3,137
District Drop-off Recycling Locations														5,143			5,143		5,143
Composting Facilities						217							10,197		11,029	474	21,917		21,917
Ohio EPA Scrap Tire Data				3,680													3,680		3,680
Institutional Recycling Collection														393			393		393
County Litter Cleanups, Collection events	7	4	44	57			6		4	11	0						134		134
Paper Retriever Bins										786							786		786
Small Private Drop-off Programs	33	20	30	7	1		11	1	2		1	50	5	1		3	165		165
																	0		0
Unadjusted Total	40	24	74	3,744	1	217	16	1	6	797	1	50	10,202	8,675	11,029	476	35,356	0	35,356
Adjustments																	0		
Adjusted Total	40	24	74	3,744	1	217	16	1	6	797	1	50	10,202	8,675	11,029	476	35,356		

The information in this table is submitted by a variety of sources, most through District or OEPA annual surveys. Double counting was eliminated by subtracting what the litter collection programs gathered from the tons reported to the OEPA by tire processors.

Table E-5 Residential/Commercial Material Recovered in Reference Year

Material	Quantity (tons)
Appliances/ "White Goods"	2,282
Household Hazardous Waste	0
Used Motor Oil	57
Electronics	96
Scrap Tires	3,744
Dry Cell Batteries	0
Lead-Acid Batteries	135
Food	1,074
Glass	891
Ferrous Metals	15,906
Non-Ferrous Metals	2,758
Corrugated Cardboard	18,700
All Other Paper	10,536
Plastics	10,923
Textiles	113
Wood	10,755
Rubber	0
Commingled Recyclables (Mixed)	9,384
Yard Waste	11,029
Other (Aggregated)	1,017
Total	99,400

Source(s) of Information: This table summarizes the information in Tables E-1 through E-4 by material.

While the amount of ferrous metal recycled may seem out of proportion to some, this district has long had a strong recycling effort on the part of individuals who "scavenge" trash set at curbs for metal that can be sold, increasing the amount of ferrous metal that is diverted from landfills. This is their livelihood. The amount reported would have been even higher had older surveys been allowable.

Table E-6 Quantities Recovered by Program/Source

Program/Source of R/C Recycling Data	Quantities (Tons)
Commercial Survey	2,605
Data from Other Recycling Facilities	47,221
Ohio EPA Commercial Retail Data	14,218
Curbside Recycling Services	3,137
District Drop-off Recycling Locations	5,143
Composting Facilities	21,917
Ohio EPA Scrap Tire Data	3,680
Institutional Recycling Collection	393
County Litter Cleanups, Collection events	134
Paper Retriever Bins	786
Small Private Drop-off Programs	165
Total	99,400

Source(s) of Information: This table summarizes Tables E-1 through E-4 by program.

B. Historical Recovery

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	District Drop-off Recycling Locations	Composting Facilities	Other Food and Yard Waste Management Activities	Ohio EPA Scrap Tire Data	Institutional Recycling Collection	County Litter Cleanups, Collection events	Paper Retriever Bins	Small Private Drop-off Programs	Totals
2012	14,706	51,392	10,361	2,488	4,633	30,506	1,705	3,979	264	88	3,166		123,289
2013	6,237	123,862	5,564	2,132	4,576	9,584	1,228	4,000	249	138	2,633		160,203
2014	3,807	92,974	13,275	3,371	4,207	18,890	1,422	3,227	263	139	1,563		143,138
2015	3,019	48,932	13,636	2,747	4,332	10,390	1,601	3,670	246	318	1,169		90,060
2016	2,605	47,221	14,218	3,137	5,143	21,917	0	3,680	393	134	786	165	99,400

Source(s) of Information: previous annual reports prepared by District

Numbers above reflect responses to annual surveys by District and Ohio EPA, annual operating reports from facilities, and monthly reports from recycling programs to the District. District drop-off programs do not use scales, and therefore, those numbers are estimates of what is collected. An effort has been made since 2014 to subtract the amount of contamination that is also collected but separated for disposal instead of being processed for recycling. As company responses to annual survey requests decline, so does the recycling tons that may be claimed by the District. The District has been compiling recycling data since its formation. Variables in amounts recycled are due primarily to reporting, although weather disasters play a part in the amounts of material to be recycled or composted.

C. Residential/Commercial Recovery Projections

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

Year	Commercial Survey	Data from Other Recycling Facilities	Ohio EPA Commercial Retail Data	Curbside Recycling Services	District Drop-off Recycling Locations	Composting Facilities	Ohio EPA Scrap Tire Data	Institutional Recycling Collection	County Litter Cleanups, Collection events	Paper Retriever Bins	Small Private Drop-off Programs	Totals
2016	2,605	47,221	14,218	3,137	5,143	21,917	3,680	393	134	786	165	99,400
2017	2,618	47,458	14,289	3,153	5,876	22,027	3,698	422	119	601	166	100,426
2018	2,631	47,695	14,360	3,169	5,935	22,137	3,717	424	119	601	167	100,954
2019	2,644	47,933	14,432	3,184	5,994	22,248	3,735	426	119	601	168	101,485
2020	2,657	48,173	14,504	3,200	6,054	22,359	3,754	428	119	601	168	102,018
2021	2,670	48,414	14,577	3,216	6,115	22,471	3,773	431	119	601	169	102,555
2022	2,684	48,656	14,649	3,232	6,176	22,583	3,792	433	119	601	170	103,095
2023	2,697	48,899	14,723	3,249	6,237	22,696	3,811	435	119	601	171	103,638
2024	2,711	49,144	14,796	3,265	6,300	22,809	3,830	437	119	601	172	104,183
2025	2,724	49,389	14,870	3,281	6,363	22,923	3,849	439	119	601	173	104,732
2026	2,738	49,636	14,945	3,298	6,426	23,038	3,868	441	119	601	174	105,284
2027	2,752	49,884	15,019	3,314	6,491	23,153	3,887	444	119	601	174	105,839
2028	2,765	50,134	15,095	3,331	6,556	23,269	3,907	446	119	601	175	106,397
2029	2,779	50,385	15,170	3,347	6,621	23,385	3,926	448	119	601	176	106,958
2030	2,793	50,637	15,246	3,364	6,687	23,502	3,946	450	119	601	177	107,522

This table assumes that programs will remain operational throughout the planning period, and that operators will continue to provide useful data to the District. Where tonnages were available for 2017, they were used instead of estimates. Projections are specific to each type of program. The restriction of using only survey responses from the most recent 2-3 years excludes recycling that is not being reported on an annual basis, so historical data showing decreases merely show a decrease in what we can claim, not what is happening. Projections of increases for programs in decline (paper retriever) are based on increased efforts to improve those programs and get better data so the surveys can be counted.

APPENDIX F INDUSTRIAL WASTE REDUCTION AND RECYCLING DATA

A. Reference Year Recovery Data

Each year, the District distributes a recycling survey to all industries and a few commercial enterprises that are closely aligned with industries. Responses are generally consistent, with the same industries responding year after year. Those responses form the basis of District data tabulation. The following tables list the responses to the 2016 survey in various ways - by source, by material, by NAICS codes.

Past plans have used survey responses from industries that was more than three years old if the industry was still operational at the same or higher level than the year in which they responded. Format 4.0 prohibits the use of this data, therefore it appears as if recycling has declined more than it likely has. It is more a function of reporting than actual decline in activity.

Table F-1 Industrial Survey Results

<u>NAICS</u>	Food	Glass	Ferrous Metals	Non-Ferrous Metals	Corrugated Cardboard	All Other Paper	Plastics	Textiles	Wood	Rubber	Commingled Recyclables (Mixed)	Ash	Non-Excluded Foundry Sand	Flue Gas Disulfurization	Other:	Other: Organics	Other
22																	
31	38,107	7	132	52	7,764	277	378	1	805	1	4					2	
32		67,115	3,801	44	11,887	5,793	12,298	34	34,440	7	16,165						
33	1	2	30,132	32,216	548	3,373		71	778	7	954		13				3,181
Other: 11																9,794	
Other: 51						38					97						
Other:																	
Other:																	
Other:																	
Unadjusted Total	38,108	67,123	34,065	32,311	20,199	9,482	12,676	105	36,023	14	17,219	0	13	0	0	9,796	280,314
Adjustments																	0
Adjusted Total	38,108	67,123	34,065	32,311	20,199	9,482	12,676	105	36,023	14	17,219	0	13	0	0	9,796	280,314

Data for this table was provided via responses to the annual survey of all manufacturers. The amount in "other" was not specified by the manufacturers and includes materials not enumerated in the remaining columns.

Table F-2 Data from Other Recycling Facilities

Program and/or Source of Materials/Data	Glass	Ferrous Metals	Wood	
Buybacks				
Scrap Yards				
Lity Scrapyard		2,200		
Hebron Iron and Metal		85		
Princes'		7		
Brokers				
Processors/MRF's				
Hope Timber Mulch			36,000	
Strategic Materials	196			
Unadjusted Totals	196	2,292	36,000	38,488
Adjustments				0
Adjusted Totals	196	2,292	36,000	38,488

Data for this table was provided via responses to the annual survey of all recyclers in the District. Recyclers are asked to separate residential, commercial and industrial materials on their responses.

Table: F-3 Other Recycling Programs/Other Sources of Data

Other Recycling Programs or Other Sources of Data	Commingled Recyclables (Mixed)	Ash	Non- Excluded Foundry Sand	Flue Gas Disulfurization Waste	Other:gypsum	<i>Unadjusted Total</i>	<i>Adjustments</i>	<i>Adjusted Total</i>
Haulers	3,258					3,258		3,258
AEP		15,009		379,127	79,253	473,389		473,389
						0		0
<i>Unadjusted Total</i>	3,258	15,009	0	379,127	79,253	476,647	0	476,647
<i>Adjustments</i>						0		
<i>Adjusted Total</i>	3,258	15,009	0	379,127	79,253	476,647		

This table lists materials reported as recycled from specific sources. Haulers do not divulge their markets, therefore it is not possible to ensure that double counting has not occurred.

Table F-4 Industrial Material Recovered in Reference Year

Material	Quantity (tons)
Food	38,108
Glass	67,319
Ferrous Metals	36,357
Non-Ferrous Metals	32,311
Corrugated Cardboard	20,199
All Other Paper	9,482
Plastics	12,676
Textiles	105
Wood	72,023
Rubber	14
Commingled Recyclables (Mixed)	20,477
Ash	15,009
Non-Excluded Foundry Sand	13
Flue Gas Disulfurization	379,127
Other (Aggregated)	92,229
Total	795,449

Table F-5 Quantities Recovered by Program/Source

Program/Source of Industrial Recycling Data	Quantity (Tons)
Industrial survey	280,314
Data from other recycling facilities	38,488
Haulers	3,258
AEP	473,389
0	0
Total	795,449

B. Historical Recovery**Table F-6 Historical Industrial Recovery by Program/Source**

Year	Industrial survey	Data from other recycling facilities	Haulers	AEP	Totals
2012	591,412	45,286	811	211,588	849,097
2013	317,895	45,912	2,794	195,027	561,628
2014	348,149	31,529	3,378	646,069	1,029,126

2015	699,782	36,634	3,002	526,016	1,265,434
2016	280,314	38,488	3,258	473,389	795,449

The spikes in 2012 and 2015 were due to clean-outs of the West Rock paper mill. It closed in 2015 and those anomalies will not repeat. Recycling at AEP is project driven and primarily specific to FGD waste.

C. Industrial Recovery Projections

Table: F-7 Industrial Recovery Projections by Program/Source

Year	Industrial survey	Data from other recycling facilities	Haulers	AEP	Totals
2016	280,314	38,488	3,258	473,389	795,449
2017	280,314	38,488	3,258	473,389	795,449
2018	280,314	38,488	3,258	473,389	795,449
2019	280,314	38,488	3,258	473,389	795,449
2020	280,314	38,488	3,258	473,389	795,449
2021	280,314	38,488	3,258	473,389	795,449
2022	280,314	38,488	3,258	473,389	795,449
2023	280,314	38,488	3,258	473,389	795,449
2024	280,314	38,488	3,258	473,389	795,449
2025	280,314	38,488	3,258	473,389	795,449
2026	280,314	38,488	3,258	473,389	795,449
2027	280,314	38,488	3,258	473,389	795,449
2028	280,314	38,488	3,258	473,389	795,449
2029	280,314	38,488	3,258	473,389	795,449
2030	280,314	38,488	3,258	473,389	795,449

This table assumes AEP will continue operations as they have in the past. There is a possibility that the plant will convert its operations to natural gas or close completely, at which time, the recovery of FGD material will cease.

Tons recycled has been held steady throughout the planning period, expecting that there will be annual fluctuations both above and below these numbers. Even as the number of manufacturers decreases, the efforts to gain usable data from nonresponding manufacturers will increase.

APPENDIX G WASTE GENERATION

A. Historical Year Waste Generated

Table G-1 Reference Year and Historical Waste Generated

Year	Population	Residential/ Commercial				Industrial			Total (tons)
		Disposed (tons)	Recycled (tons)	Generated (tons)	Per Capita Generated (ppd)	Disposed (tons)	Recycled (tons)	Generated (tons)	
2012	372,936	279,867	123,289	403,156	5.92	767,418	849,097	1,616,515	2,019,670
2013	376,237	288,238	160,203	448,441	6.53	835,461	561,628	1,397,089	1,845,529
2014	379,537	290,273	143,138	433,411	6.26	643,370	1,029,126	1,672,496	2,105,907
2015	382,838	262,138	90,060	352,198	5.04	338,075	1,265,434	1,603,509	1,955,708
2016	386,070	262,902	99,400	362,301	5.14	361,594	795,449	1,157,043	1,519,345

Regardless of the categorization of the waste, the total generated in the district has remained fairly constant since 1996 with annual fluctuations. Only with the recent stipulation that previous survey responses had to be excluded does it **appear** that waste generation has decreased.

1. Historical Residential/Commercial Waste Generated

The residential and commercial waste generation has remained fairly consistent over the last eighteen years, with fluctuations from year to year based on responses to surveys and characterization of waste accepted at landfills. As stated previously, some industrial waste disposed is reported as general, and artificially inflates this waste stream. The per capita waste generation has fluctuated between 5-7 pounds per person per day, averaging 6.25.

2. *Historical Industrial Waste Generated*

The District uses annual surveys to compile recycling information. Any recycling activity undertaken by non-responding manufacturers that is not otherwise accounted for by processors is excluded from all district data. Waste generated is calculated by adding reported tons recycled to tons disposed. Therefore, survey responses, or lack thereof, dictate the amount of waste shown as generated by industries. Even with annual fluctuations - including the 2008 recession, this waste stream has remained fairly consistent. Both spikes in industrial - 2001 and 2015 - were a result of West Rock paper mill facility clean outs. This plant closed in 2015, so the anomaly will not recur.

3. *Historical Excluded Waste Generated*

The majority of excluded waste is fly ash and bottom ash from AEP which is disposed in their captive landfill. Other than this specific waste stream, excluded waste is almost entirely construction and demolition debris. The past ten years have seen a 50% decrease in c&dd material generated locally. It is not included in the above table as it is less than 10% of the total waste generation and the Format instructs us to exclude it.

B. Generation Projections

Table G-2 Generation Projections

Year	Population	Residential/ Commercial				Industrial			Excluded Waste (tons)	Total (tons)
		Disposal (tons)	Recycle (tons)	Generation (tons)	Per Capita Generation (ppd)	Disposal (tons)	Recycle (tons)	Generation (tons)		
2016	386,070	262,902	99,400	362,301	5.14	361,594	795,449	1,157,043	0	1,519,344
2017	389,301	262,902	100,426	363,328	5.11	359,786	795,449	1,155,235	0	1,518,562
2018	392,533	263,033	100,954	363,987	5.08	357,987	795,449	1,153,436	0	1,517,423
2019	395,764	263,165	101,485	364,649	5.05	356,197	795,449	1,151,646	0	1,516,295
2020	398,996	263,296	102,018	365,315	5.02	354,416	795,449	1,149,865	0	1,515,180
2021	402,651	263,428	102,555	365,983	4.98	352,644	795,449	1,148,093	0	1,514,076
2022	406,307	263,560	103,095	366,654	4.94	350,881	795,449	1,146,330	0	1,512,984
2023	409,962	263,691	103,638	367,329	4.91	349,126	795,449	1,144,575	0	1,511,904
2024	413,618	263,823	104,183	368,007	4.88	347,381	795,449	1,142,830	0	1,510,836
2025	417,273	263,955	104,732	368,687	4.84	345,644	795,449	1,141,093	0	1,509,780
2026	420,620	264,087	105,284	369,371	4.81	343,916	795,449	1,139,365	0	1,508,736
2027	424,316	264,219	105,839	370,058	4.78	342,196	795,449	1,137,645	0	1,507,703
2028	427,837	264,351	106,397	370,748	4.75	340,485	795,449	1,135,934	0	1,506,682
2029	431,359	264,484	106,958	371,442	4.72	338,783	795,449	1,134,232	0	1,505,673
2030	434,880	264,616	107,522	372,138	4.69	337,089	795,449	1,132,538	0	1,504,676

It is expected that waste generation will continue to follow historical trends. Annual fluctuations have been removed as they cannot be predicted. Should the AEP Conesville Power Plant actually close, it will be addressed in the next plan update, as it will have a significant impact on generation, disposal and recycling tables.

APPENDIX H STRATEGIC EVALUATION

1. Residential Recycling Infrastructure Analysis

Curbside Recycling Services

Curbside recycling in the District is implemented by municipalities and townships via franchise with a specific hauler, and by individual residents contracting for services with their chosen hauler. The number of community programs has increased significantly over the course of 20 years. These programs have been most successful when desired and supported by the residents of those communities and where the density of population gives haulers incentive to offer the services. Contracts are renewed every few years, and the specific hauler may change. In most cases, once a curbside program has been initiated, residents are supportive of its continuation long term and the district anticipates that all the programs listed in Table B1a and B1b will continue throughout the planning period.

As was discussed in Chapter 2, the very low population density in much of the district makes curbside recycling prohibitively expensive in a large portion of the district, and it is not likely to spread to the more rural areas. Those areas do not even franchise trash, and residents feel very strongly about making their own choice for trash hauling.

The previous plan update committed the District to amplify its encouragement to communities to explore the feasibility of initiating curbside programs. In 2016, each county within the district hosted a curbside workshop, inviting all township and municipal officials to learn about contracting for curbside recycling services. Although much effort was put into workshop agendas, timing, and speakers, attendance was practically nil. The curbside toolkit created to provide resources for communities wishing to start a curbside program was mailed to all communities without curbside services. Each county also participated in the state-hosted recycling workshop aimed at learning how to market recycling programs to public officials. The lack of response (or any follow up communication) to this effort confirmed that communities will succeed at implementing such a program only when their residents demand the service of their elected officials. The fact that it is growing confirms that, given the time and space to make their own decisions, residents and their elected officials will do what's best for their communities.

Drop-off Locations

Tables B2a and B2c list both urban and rural drop-off locations managed by county recycling offices and funded by the District. Because of the current method used to measure access, locations were not chosen by where they would draw the most materials or serve the greatest number of residents, but by where they would contribute toward maintaining the access goal. For example, placing a drop-off location in the city of Coshocton would serve residents in multi-family dwellings and commercial businesses who are not included in the non-subscription curbside recycling program, but it would not be allowed to contribute toward the access goal. However, a drop-off

location in a township of 560 people with no municipalities and no major roadways would contribute a value of 2500 people. Therefore, locations of the existing drop-off containers are not the most cost efficient or effective, but they do fulfill the access requirement established by the state.

Equipment currently being used for the drop-off program includes Dempster Alleycat trailers (Coshocton and Fairfield), rolloff containers (Fairfield, Perry), and front load containers (Licking). Coshocton, Fairfield and Perry Counties use pickup trucks to pull the Alleycat and rolloff containers one at a time for emptying. In Licking County, Rumpke uses a front load compactor truck to empty the recycling containers. Rumpke's method results in a cost of \$72 per ton to the county, while the cost for Coshocton and Perry for 2016 was \$500 per ton and Fairfield's was in the middle at \$205 per ton. The District recognizes that equipment purchased 17 years ago may have been the best available at the time, but it now makes collection more labor intensive, thus driving up the cost to operate the program.

Contamination continues to be an issue with unmanned drop-off sites. In 2016, almost \$16,000 was spent to dispose of unacceptable items left in or around drop-off bins (exclusive of the labor cost to move the materials). While the highly visible and heavily trafficked sites attract less open dumping, they are not immune. The nature of the contamination and the timing of its appearance (middle of the night) indicates that it is primarily material that people knew was unacceptable.

The District will continue to designate corrugated cardboard, newspaper, steel containers, aluminum containers and plastic containers as the core items to be included in drop-off locations. Counties are encouraged to include as many materials as is feasible and affordable. The District recognizes that, while adding materials increases the tons recycled, it also increases the frequency of collection and increases the cost of labor and transportation. The District will address contamination through better signage, stepped-up enforcement and prosecution of dumping, and engagement of site hosts to monitor sites more closely. Security cameras will be piloted in 2018 for their impact on dumping at recycling drop-off sites. If effective, they will be placed at all sites with dumping issues. Efficiency of collection will be addressed through replacement of equipment with compactor trucks and containers wherever feasible and elimination of Alleycat trailers. Serving residents who live in multi-family units will be addressed by the addition of drop-off sites even in villages with curbside recycling.

Multi Family Unit Recycling

In the few cities that have curbside recycling, the service is provided only to residents in single family dwellings. It does not extend to apartment buildings or small businesses. While adding drop-off locations to those places cannot count toward access, given current formulas for calculating access, it would increase overall recycling, and give true access to those entities excluded from the curbside service. There is a good chance that having a free drop-off recycling location will negatively impact subscription recycling programs because residents could use the free drop-off instead of signing up for

subscription curbside, but the alternative is that people living in apartments would have no opportunity at all.

Other Programs - Private Recyclers

Table B-7 lists many opportunities for residents to recycle one or more materials. These recycling opportunities are owned and operated by entities other than the District or counties. Both the District and the County outreach offices promote these opportunities in their brochures disseminated throughout the year. As evidenced by Table B-7, very few of the entities share data about tons collected with the District.

A long running program is the Paper Retriever Program. An analysis of past performance shows that, since the sale by Abitibi to Royal Oak Recycling, the program has suffered greatly. Payment for materials, which used to be an incentive to host a container, ended years ago. The company's tracking of where the containers are, and servicing them, has been sporadic or non-existent. Site hosts have become fed up with the poor service and requested containers be removed. However, in the last year, Royal Oak opened a new service facility in Dayton and is committed to improving service and being more diligent about communicating with site hosts. The District is no longer in a position where the demise of the program is imminent, however planning must continue to be prepared to handle that material through county drop-offs if needed in the future.

2. Commercial/Institutional Sector Analysis

The commercial sector is growing over time as a waste generating sector, with services and government being the largest categories. As stated previously, only the city of Lancaster provides mandatory trash collection to businesses without the option of curbside recycling. Some have taken advantage of the services offered by the Lancaster/Fairfield Community Action Recycling Center and Perco, Inc. Recycling Center and some work with Royal Oak for fiber recycling. In all other communities, businesses contract individually for trash service and may negotiate to receive recycling as well.

Much of the material generated by commercial businesses is amenable to recycling, especially fiber, steel cans, and aluminum cans. This requires their staff to make a conscious effort to separate recyclables from trash and store it for a period of time. Businesses can contract with a private hauler (most often the same company they pay for trash service) for picking up the recyclables. Those that are unwilling to pay for the service have the option of using the publicly accessible residential drop-off sites if the amount of material they leave at any one time will not overwhelm the bins, however this requires them to transport the materials to the nearest site. County recycling offices have placed additional publicly accessible cardboard recycling containers in areas convenient to businesses to increase their ability to participate in recycling programs and will continue to do so as is affordable. Because the use of public funds to provide

direct recycling service is limited to that which serves a public purpose without discrimination, counties are unable to offer containers to selected members of the private sector (whether for profit or not for profit) for their sole use, or pick up their recyclables using District funded labor and equipment.

School and Government Office Recycling

Currently, county recycling offices offer pickup of recyclables to all government offices and public schools. They have been increasing the number of agencies served each year. Although the tons collected is small (393 tons in 2016), and the cost is high relative to disposal, it serves as a model to the communities that public agencies are being responsible stewards of their own waste and being fiscally responsible with tax dollars by minimizing disposal costs. The materials collected are relatively free of contamination and are of high quality. This is a finite target audience, and only so much increase can occur before coverage is 100% - which Perry County has achieved.

Large Venue Recycling

Each county recycling office has purchased containers for recycling and loans them to groups for special event recycling. The bags are offered for festivals, parties, and other social and business functions. Borrowers pick up the containers and return them clean (along with bags of recyclables) following the event. It should be noted that this is event-oriented, not facility oriented. The District has no large-venue facilities such as stadiums or theme parks.

The challenge for this program is defining the limits of who can borrow the containers. Currently, the four county programs are creating criteria and limits so that the program is consistent throughout the District. Because the containers were purchased with public tax dollars, it should follow the theme of providing a public benefit when used. It should also serve the purpose of diverting more materials to recycling than would have been diverted if the entity did not use the containers.

Technical Assistance - Waste Audits and information

County Recycling Offices offer waste audits to assist the commercial and institutional sectors reduce their waste disposed. In addition, each office maintains a resource guide to assist those sectors in finding service providers to meet their recycling needs. Businesses are made aware of the availability of the waste audits via newsletters, websites, Facebook posts and other social media venues.

According to quarterly reports provided by the outreach offices, very few (less than 5) audits are performed each year. Waste audits identify what and perhaps how much of a material could be recycled, and where the closest market for each material is located. It is up to the business to pursue getting the materials to market, a step few are willing to take. The incentive in terms of saving disposal dollars must outweigh the cost of

separation, storage, transportation and tracking to be an attractive alternative to small businesses. Because there are few local end markets, transportation and the staff time to transport is a big deterrent. Unless private waste haulers begin offering recycling to their customers at a price lower than disposal, businesses must determine if the investment in doing it themselves is worthwhile.

Award/Recognition

This program targets schools and businesses that contribute to recycling efforts in each county, and serves to encourage their peers to follow their example. By calling attention to desired behavior, it gives others a role model. County recycling offices use awards programs, Facebook posts, newsletter and newspaper articles and other social media outlets to get this information to the general public.

The success or failure of this program as an effective means of increasing recycling is impossible to measure. The best the programs can do is to track future requests by schools for programming, and

3 Industrial Sector Analysis

The industrial sector continues to shrink. As manufacturers close their doors, new manufacturers do not take their place. This sector has continued to be dominated by the AEP utility plant in Conesville, however there is indication that it will either change its operation greatly or close during this planning period.

For the most part, large industries have staff assigned to handle waste management, including recycling. That staff finds markets and arranges transportation and payment for the services/materials. Only 15 manufacturers employ 200 or more employees. Another 29 industries employ 100-199 employees. These industries contributed 91% of the industrial recycling in the reference year. It is a small, finite audience, and their expertise in handling their waste precludes the need for our assistance.

Smaller industries recycle common materials that are relatively easy to segregate such as cardboard, paper and wood (pallets). Eighty-three industries employ 20-99 employees. These industries are likely to have a staff person who arranges the recycling of easily segregated materials. This group contributed 4% of the industrial recycling in the reference year. This group could benefit from assistance in finding markets for easily sorted materials.

The remaining industries, those with fewer than 20 employees, make up the bulk of our industrial sector. More than 300 companies, 242 with fewer than 10 employees, do not have the resources to devote significant effort to recycling. There is some recycling activity in this group (5% of the industrial recycling in the reference year), where materials are easily segregated and marketed such as metals and cardboard. These industries are most likely to use the countywide drop-off bins if they are nearby.

The most commonly recycled materials are food, glass, metals, fiber and wood. Specialty materials, such as glass or wood fibers mixed with resin continue to pose a recycling challenge to our industries.

The county recycling offices will continue to educate the smaller industries and lend technical assistance through waste audits with the goal of increasing their participation in recycling programs. Because the use of public funds to provide direct recycling service is limited to that which serves a public purpose without discrimination, counties are unable to offer containers to selected members of the private sector (whether for profit or not for profit) for their sole use, or pick up their recyclables using District funded labor and equipment. However industries will be encouraged to use their private hauler to increase recycling or use the countywide drop-off locations.

4. Residential/Commercial Waste Composition Analysis

The District did not perform a waste sort to determine what waste is being generated and landfilled. Looking at the materials most commonly recycled, fiber makes up one-third of all residential/commercial material recycled. Yard waste and wood make up 20%, and metals comprise 18%.

There are ample opportunities to recycle metal, with some private recyclers paying for metals. The scrap value of metals, while fluctuating, provides incentive for residents to keep metals in the recycling system. This is the reason the District's metal recycling is higher than other districts - it is a source of primary income for many residents.

Opportunities to recycle fiber are still abundant in Fairfield and Licking Counties, thanks to the Paper Retriever bins, county drop-off bins, and private recyclers that accept cardboard and newspaper. However, several paper mills that used to provide easy access to fiber recycling have closed permanently. Government offices and public schools are offered on-site pickup of both, as well as other items, and the only limitation is their willingness to collect the material and store it until pick-up. Commercial businesses may also use county bins, and the only limitation to their ability to recycle is their willingness to transport the material from their door to the nearest bin - never more than five miles away. Commercial businesses in Licking and Fairfield Counties may also request Paper Retriever bins if they generate large amounts of fiber. Large businesses with more material than a bin could hold generally have their own recycling compactor and storage area, and a corporate recycling program for collection and processing (ex: Walmart).

There are several compost facilities available in Fairfield and Licking Counties available to the public, but the primary method of dealing with yard waste is on site mulching and backyard composting. As has been mentioned previously, only about 10% of all land area in the District is developed, leaving 90% already covered by vegetation. The yard waste that is accepted at compost facilities is mostly brush from landscaping and tree

trimming companies, and brush from residents with pickup trucks who do not have a place to pile it and let it compost naturally.

The demand for food waste recycling comes from the commercial sector. Those entities have enough volume to make a recycling program cost effective, but not as much as a manufacturer that has an established program and the means to implement it. Currently there are no food waste composting facilities operating in the District, but one facility in Licking County has been permitted to accept food waste, and is experimenting with accepting small loads to learn what process would be most cost effective to expand the program to more customers. It is important to note that the one entity most concerned with having an outside company handle their food waste changed their mind and reverted to hauling it to their own compost pile instead of using the newly licensed facility.

In Coshocton County, residents cannot easily recycle glass. While the county drop-off programs in Fairfield, Licking and Perry accept glass, Coshocton's does not. While adding glass to the recycling program would increase tons recycled, it would also add to the cost of operating the program. Currently, the one private recycler in Coshocton accepts clear and brown glass, which gives residents an opportunity to recycle a portion of their glass if they are willing to travel to the city of Coshocton.

The Paper Retriever program, which began and grew under Abitibi in Columbus, has experienced a downward spiral in service since its sale to Royal Oak Recycling in Michigan. With service out of Cleveland, bins were not being emptied and customers experienced a high level of frustration. In 2017, the company opened a plant in Dayton to serve our area and it has invested in new trucks and new employees to provide better collection service than has been experienced in the last several years. Their goal is service at least every two weeks, more as needed, and continued growth in customers. If successful, this program will continue to provide much needed fiber recycling at no cost to the District, allowing our funds to cover material not otherwise recycled.

5. Economic Incentive Analysis

Typical Pay-As-You-Throw programs do not exist in this District. Most trash service is provided via individual subscription to residents and businesses, and having a trash service provider is not mandatory. Historically, trash haulers charged fixed rates regardless of the amount of trash set out on a given day. However, as trash haulers become less accommodating of volume and type of material they will accept, customers are forced to look for alternatives in handling some parts of their waste. It is a type of negative economic incentive - it costs extra to throw away bulky items or furniture, or have multiple containers. Diverting materials to recycling saves money. Unfortunately, without businesses that accept those materials, they end up at countywide drop-off sites as contamination and the District ends up paying to dispose of it in landfills.

The District grant program includes a component for assisting in the start up of curbside recycling programs. In 25 years, this has been requested twice. In both cases, the communities eliminated their curbside programs within 1-2 years in favor of using countywide drop-off because it does not require their residents pay extra to recycle. The costs were just too high to justify in light of other community priorities. District funds were essentially wasted purchasing equipment that ended up rusting in a parking lot. This is the reason why the District is not dedicating funds to this program in our budget.

The grant program for improving material recovery facilities is discussed in more depth in its own analysis, however, its relation to economic incentive is that District investment will give private entities the incentive to participate in changes to their facilities to broaden the amount or type of materials they handle. The past 25 years has focused on encouraging private recyclers to make the investment on their own, with limited success.

The countywide drop-off program provides an alternative to disposal for many materials, and there is no direct cost to use that program other than labor and transportation to move materials to the bins. Both residents and businesses are welcome to use the bins year round. The annual increase in tons recovered through these bins is testament to the success of the programs - whether it is the same people recycling more materials, or more participants, the results are that more materials are being diverted from landfills.

Outreach programs hold contests with prizes, give recognition to those making a concerted effort to recycle, and use social media to encourage residents and businesses to recycle more. Over time, these efforts should make recycling a popular activity and make it more likely that residents will recycle as part of daily life. Where contests are widely promoted, participation is strong, and local media coverage of the winners brings recycling to the attention of local residents. The Perry County Oral History contest is a good example of reaching out to high school students to encourage them to learn more about how recycling has been an integral part of their communities for many years.

The Buy Recycled grant program allows communities and groups to purchase recycled content items for public use with District assistance, in order to demonstrate that recycled content items have equal value to virgin-content items. This educational grant ideally makes it more likely that communities will consider purchasing recycled content items after the initial grant and grow the market for such items. The reality is that groups apply for the money when they want help buying something, and the motivation is more financial than environmental. The projects would have most likely been completed even without District assistance.

Getting residents and businesses to recycle is working - as evidenced by increased materials in the drop-off bins. Our next challenge is to increase education about what materials can be recycled through the county drop-off program, what materials can be

recycled through private companies, and what materials still need to go to the landfill, and to focus on enforcing those segregations to manage the cost of the recycling program.

6. Restricted and Difficult to Manage Waste Streams Analysis

Restricted waste are defined as scrap tires, yard waste, lead acid batteries, household hazardous waste and end-of-life electronic devices, and potentially appliances, pharmaceuticals, household batteries and bulky items. There are now year-round recycling opportunities for each of these items either within the District, or in the case of HHW, nearby in Columbus. Therefore, the District's primary role in addressing these materials is to promote the private sector companies that accept them from residents. The promotion is done via websites, Facebook posts and printed recycling guides. Therefore, calls for assistance are generally directed to these offices.

It is a long held District philosophy that waste generators must take responsibility, including financial responsibility, for recycling or disposal of all of the waste that they generate. Free collection events perpetuate the belief that disposing of such items is the responsibility of government, not the owner. Such events encourage residents to hoard materials for a future event that may never occur. Therefore, when legitimate disposal or recycling opportunities are not be locally available to all residents at an affordable cost, the District may provide financial support to collection events for these items if they are needed and as funds are available once mandated programs have been funded, provided that competitive fees are charged to participants at all collection events to cover the disposal portion of the events.

To determine if the available resources sufficiently serve the District population, each material is analyzed separately. Only a costly waste sort would determine how much of each material is still landfilled, so the analysis focuses on continued requests from the public (or lack of same) for recycling services.

Yard Waste

Yard waste facilities exist in Fairfield and Licking Counties. These facilities can be used by residents and businesses to handle brush and leaves. Due to the rural nature of the majority of District land, few residents actually use them. Even professional mowing companies use mulching mowers, so grass clippings are less common than in the past. Private facilities that rely on services other than yard waste management for their revenue have been the most successful and longstanding. Cities that provided fall leaf collection have discontinued the service. Local farmers continue to provide an outlet for that material. Yard waste collection is not a service that is in high demand.

Household Hazardous Waste

In the past, collection events were held in all four counties at great expense. They served the purpose of clearing many garages and basements of old chemicals and

other dangerous substances. Each year, the materials collected grew less hazardous, with latex paint comprising 75% of the weight. By 2011, participation had dropped to a level that made the events very inefficient and they were discontinued. The last event collected 12 tons of material at a cost of \$2213 per ton.

In 2013, the District initiated an agreement with Environmental Enterprises, Inc. in Columbus to accept materials from our residents at a cost. Additionally, residents and businesses are connected to their closest Habitat for Humanity ReStore, which accepts full gallons of usable paint for resale. Properly disposing of unusable paint by drying it out is also promoted. No records are kept as to how many residents follow through on that guidance and actually take their materials to the facilities mentioned, or take the time to dry out their paint for disposal. In telephone conversations, the general reaction is that the resident doesn't truly want to make the effort suggested.

The most common items found in homes - mercury and cfl bulbs - are accepted in at least one location in each county year round for recycling. At the District office location, residents bring cfl bulbs in for recycling every week and approximately 9 boxes per year are mailed to LampMaster for recycling. Residents who use the program show appreciation and a wish that more locations collected the tube lights.

Each health department collecting mercury has the opportunity to educate residents about the dangers of mercury and encourage less dangerous alternatives. Four years into this program, only one five gallon bucket has been returned to the Columbus EEI facility. It is not a service in high demand, but the few who have used this opportunity show appreciation for its existence.

While rechargeable batteries are easily recycled throughout the District, alkaline batteries have fewer outlets. In 2017, the District sponsored a pilot program using Retrieval Technologies' "Big Green Box". Rather than paying the cost of having empty boxes shipped to us and mailing the full boxes back to Retrieval, the District negotiated a lower price for boxes that are picked up and delivered back to Retrieval at our expense. Because they are located in Lancaster, this is an easy trip for all four counties. The pilot was successful and has been added to this plan as a permanent recycling strategy. One challenge has been in properly insulating the individual batteries sufficiently to satisfy the recycling facility. For that reason, county recycling offices have limited the number of sites to a number more easily monitored and checked prior to transport.

Comparing our approach to that of other districts, the options seem to be - education only, offer direct collection services through contract with a hazardous waste company, or build a facility. There are examples of each throughout the state. Until our District has mastered the mandatory recycling component of solid waste management, spending additional dollars on this small portion of the waste stream is not a cost effective use of District funds.

Scrap Tires

While most people leave their old tires at the retailer when they buy new tires, there are still too many tires that escape the recycling system and end up in ditches when the resident finally gets tired of storing them or when the retailer trusts the wrong person to handle their tire pile. Tires that fall outside the legal disposal system will be a focus of health departments and litter law enforcement deputies in this plan.

Our education programs are still battling the old mentality that scrap tires have value and should be hoarded until someone will buy them. Too many residents are unwilling to pay to dispose of them, even at periodic tire collection events. Several local health departments have made use of OEPA tire collection grants, which removes tires from homes, but muddies the message by providing a free disposal day. Residents remember those events and hoard for potential future free events rather than use outlets that are already available year round at a cost.

Electronic Equipment

Electronic devices have multiple private sector recycling outlets within the District. In addition, computer groups refurbish old computers for students and others who cannot afford to buy new units. Electronics are also included in periodic recycling drives, so the conclusion is that there is no need for new programs for electronics. In this District, electronic equipment is not "hard to handle".

Lead acid Batteries

Residents have recycled lead-acid batteries for years, returning them to retailer when they buy new batteries. This private sector system works very well to keep lead-acid batteries out of landfills and the District will continue to rely on this system to address lead-acid batteries. In this District, lead acid batteries are not "hard to handle".

Appliances

Appliances have value as scrap metal once the freon is removed. Companies that deal in air conditioning provide freon removal and stickers to confirm freon is gone from the appliance. Scrap dealers have the capacity to handle all appliances disposed in the District. In addition, AEP has a take-back program for working refrigerators and freezers. Where appliances become trash littering roadways, it is a function of laziness on the part of the dumper and the unwillingness to take responsibility for properly disposing/recycling their items. In some cases, the resident thought they were being responsible by paying someone to dispose for them, but chose an irresponsible individual to provide the service.

Pharmaceuticals

Each county in the District has at least one law enforcement agency with a container to collect prescription medications, some have multiple agencies providing the service. Additionally, communities participate in the National Take-back collection events,

providing residents an outlet for more than just solid pills. Phone calls asking about how to handle old medications have dwindled over the years as there is more information from a variety of sources to guide them.

Other

Bulky items such as furniture and mattresses are becoming an issue. There are resellers throughout the District providing re-use opportunities for good, functional furniture, and auctions, yard sales, and scavengers provide additional means of re-use for some items. However, items at their end of life are destined for the landfill. Haulers insist on them being completely wrapped in plastic because of bedbug infestations, transfer stations still accept them, and there are private companies that will pick up items and transport them to the landfill for a fee. However, even with these outlets, such items are increasingly found dumped at recycling sites or along roadways because residents are unwilling to bear the out of pocket cost of responsibly disposing their own waste. This is a large part of why dumping and contamination was chosen as the priority for all programs.

7. Diversion Analysis

The District continues to choose Goal #1 (access) to achieve state recycling mandates. In 2016, three counties exceeded 90% while the fourth achieved 88% access. Overall, the District exceeded 90% access. A more realistic achievement is that almost every resident and business had a recycling opportunity within five miles. Fairfield County continues to work toward achieving 90% access as well, and is one site short of that goal at this time.

In 2016, the District fell short of residential/commercial recycling projections in the current plan by 11%, but exceeded industrial projections by 29%. Overall our total projections were exceeded by 23%. The District recycled 27% of residential/commercial waste generated and 66% of industrial waste generated. Historically, the District has exceeded the 25% residential/commercial goal since 2007, however the industrial goal has not been reached until 2015 when the material from the AEP Conesville Power Plant is included. It is that waste stream which drives the pursuit of Goal #1 because its volume dwarfs the entire waste stream of the remainder of the District.

One new factor in tracking progress is the more stringent limitation on what surveys can be used to claim recycling credit. By eliminating surveys outside the allowed date range for existing companies, it appears that there is less industrial recycling than there actually is.

8. Special Program Needs Analysis

Health Department Enforcement: The Solid Waste Management District relies upon local health departments to ensure that federal, state, and local solid waste laws and regulations are followed. While OEPA-approved Health Departments are required to have solid waste enforcement programs meeting certain minimum standards, district contracts require each Health Department go beyond the minimum requirements. Therefore, to supplement (not replace) the existing revenues for solid waste programs, the District may provide contracts to health departments to inspect facilities, investigate complaints, and prosecute violators. This contract may also cover time spent by the solid waste sanitarian assisting in the management of debris following a declared disaster, as specified in the jurisdiction's emergency plan for Disaster Debris Management. Costs covered may include salary and fringes, vehicle expenses, equipment, supplies, and training to maintain the sanitarian's registration requirements until OEPA training is created. Approximately 90% of the funding is salary and fringes. Funding is provided via contracts following an application from the Health Department for financial assistance. In 2016, District funding paid for 90 landfill inspections, resolution of 300 dump complaints, and 160 open burning complaints. In this plan, the health departments will increase their focus on tire retailers, resellers, haulers and storage facilities to ensure that tires remain within the legal disposal system.

Well Testing To identify possible health risks to district residents living near solid waste disposal facilities (for any site contained within the District's solid waste management plan), Health Departments may test water wells for contamination. Local Health Departments have developed criteria by which to determine if a request for testing is within their parameters. Solid Waste District funds may be used for testing near closed or currently operating facilities, and also background testing adjacent to newly permitted, unconstructed sites. Funding is provided via contracts following an application from the Health Department for financial assistance. While a possible use, this has not been pursued in many years.

Law Enforcement Local law enforcement agencies may receive funding from the Solid Waste District to assign personnel to enforce litter laws and issue citations for violations. Litter law enforcement officers work closely with local Recycling offices and local health departments to ensure coordinated efforts to deter littering. The deputy's role in handling debris from declared disasters, as written in the county's emergency plan may be covered under this contract. Costs may include salary and fringes, supplies, vehicle expenses, training and equipment. Approximately 93% of funding covers salary and fringes. Funding is provided via contracts following an application from the Sheriff Office for financial assistance. In 2016, District funding paid for 81 citations, 48 litter convictions and 418 litter investigations. In this plan, deputies will increase their focus on enforcement of tire regulations and identifying tire dumpers for prosecution.

Dump Cleanup on Public Property Property maintenance is the responsibility of the landowner, which in the case of public property is the local government or state. Therefore, local agencies are eligible to apply for funds to clean up dumps on public land and along roadways and public easements. Applications that request funds for specific dump site cleanup must include a list of the specific dump sites to be cleaned, a

timeline for cleanup, and the method by which collected materials will be disposed or recycled. Adopt-an-Area Programs are included in this activity. If a declared disaster occurs within the contractor's jurisdiction and assistance in cleanup is required, this program may assist where debris is located on public property. Approximately 36% of funding covers salary and fringes with the remainder covering bags, gloves, vehicle maintenance, fuel and disposal of collected waste. In 2016, District funding paid for the clean up of 354 road miles, removal of 32 tons of trash and 4,178 tires, and the participation of more than 10,000 volunteers in special cleanup projects.

County Assistance: Ohio Revised Code allows solid waste districts to use funding derived from disposal fees to assist counties, townships and municipalities offset additional costs of maintaining roads and other public facilities, and providing emergency and other public services where solid waste facilities operate. District funds may not replace funding for activities that would be occurring if the solid waste facility were not there. It is the responsibility of the applicant to demonstrate that but for the location and operation of the solid waste facility, the requested expenses would not be incurred. Funding is provided via contracts following an application from the County or Township for financial assistance. In 2017, the District provided \$110,000 for Perry County to repave the road leading to one landfill that had been damaged by increased traffic. This assistance has been budgeted at \$50,000 each year, and the unused amount will be reserved within this line item for future years. Because the District does not, at this time, have contracts or agreements with any solid waste facility, it is the expectation that only counties with operating landfills will apply for this funding. However, in the event that there are changes in facilities or agreements during the planning period, eligible applicants for the funding may also change.

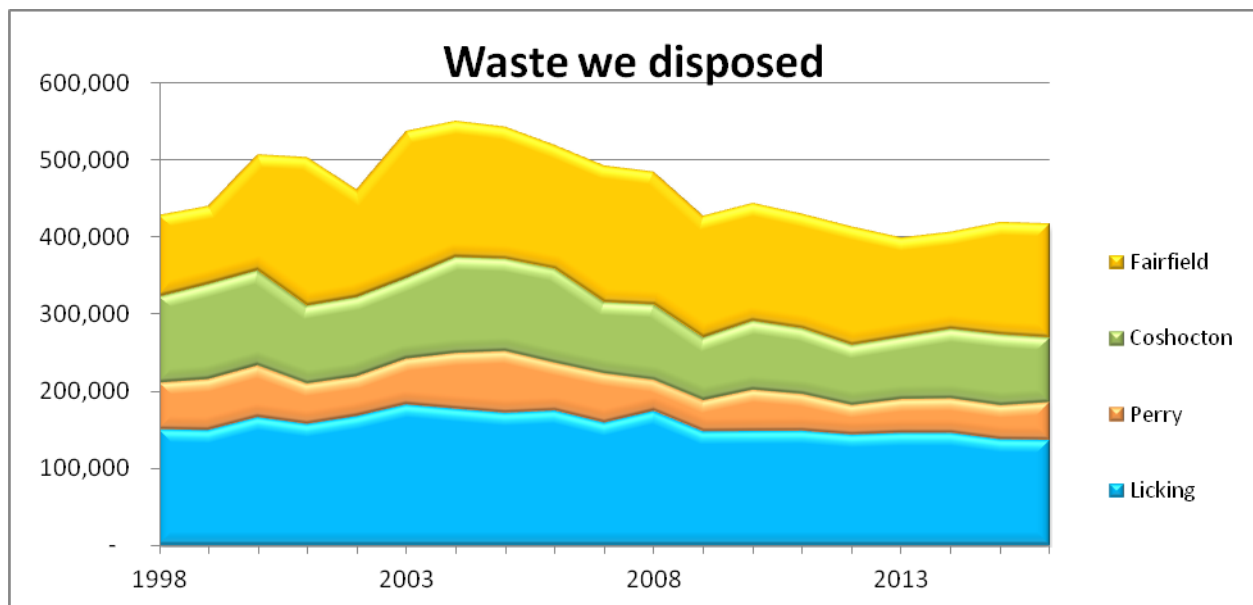
FUND 2, VACATION/SICK PAYOUT The District Board of Directors adopted a policy to take some responsibility for the separation payments made to employees who devoted their service to the contracts with the solid waste district. To implement the policy, a separate fund was established and an amount of funding is maintained within the fund to cover upcoming retirement payouts. Dollars are transferred from the primary fund only as needed, and funds are not appropriated until use is requested by a member county.

The current policy states "In the event of termination of an employee currently funded by a contract with the solid waste district, who is working no less than 75% of the employee's time on contract activities at the time of termination, where the employee is entitled to receive a separation payment for accrued and unused vacation and/or sick leave from the employer, the District will reimburse the employer a portion of the payment for vacation and/or sick leave accrued and not used during the time the employee was paid through this or previous District contracts equal to the percentage of time the employee devoted to the contracts."

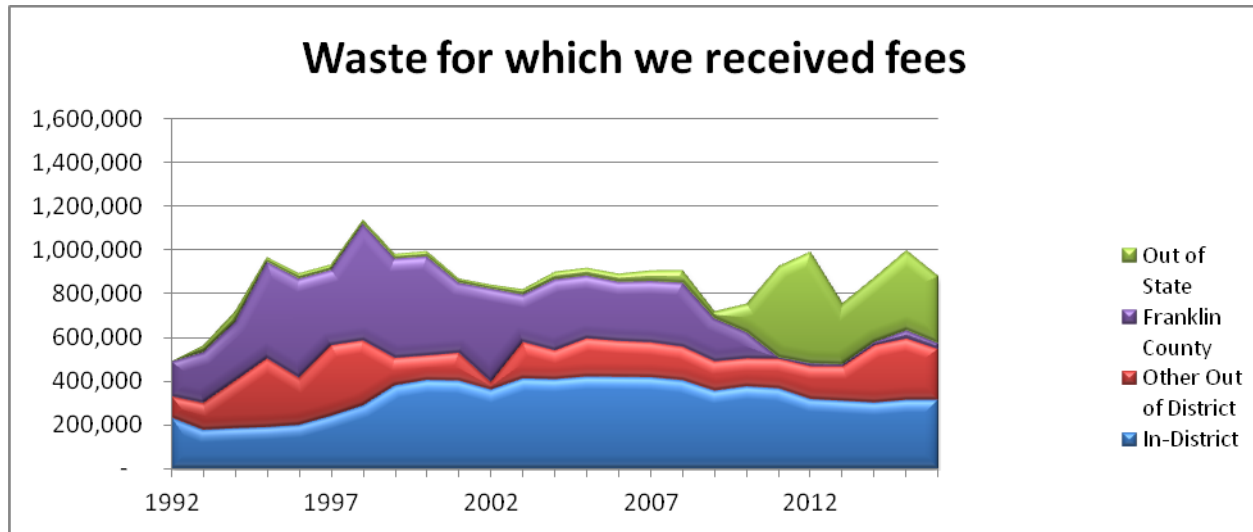
9. Financial Analysis

Revenue

The District receives revenue through disposal fees and generation fees. In the reference year 2016, the disposal fee changed from \$1.25/3.50/1.25 to \$2.00/4.00/2.00 and the generation fee changed from \$2.00 to \$1.25 per ton. The change was made to maximize revenue from other locales that use in district landfills without raising the overall rate for in-district residents and businesses. This resulted in a 2% increase in revenue over 2015 even as tons disposed decreased slightly. The fees are projected to remain as they are throughout the planning period.

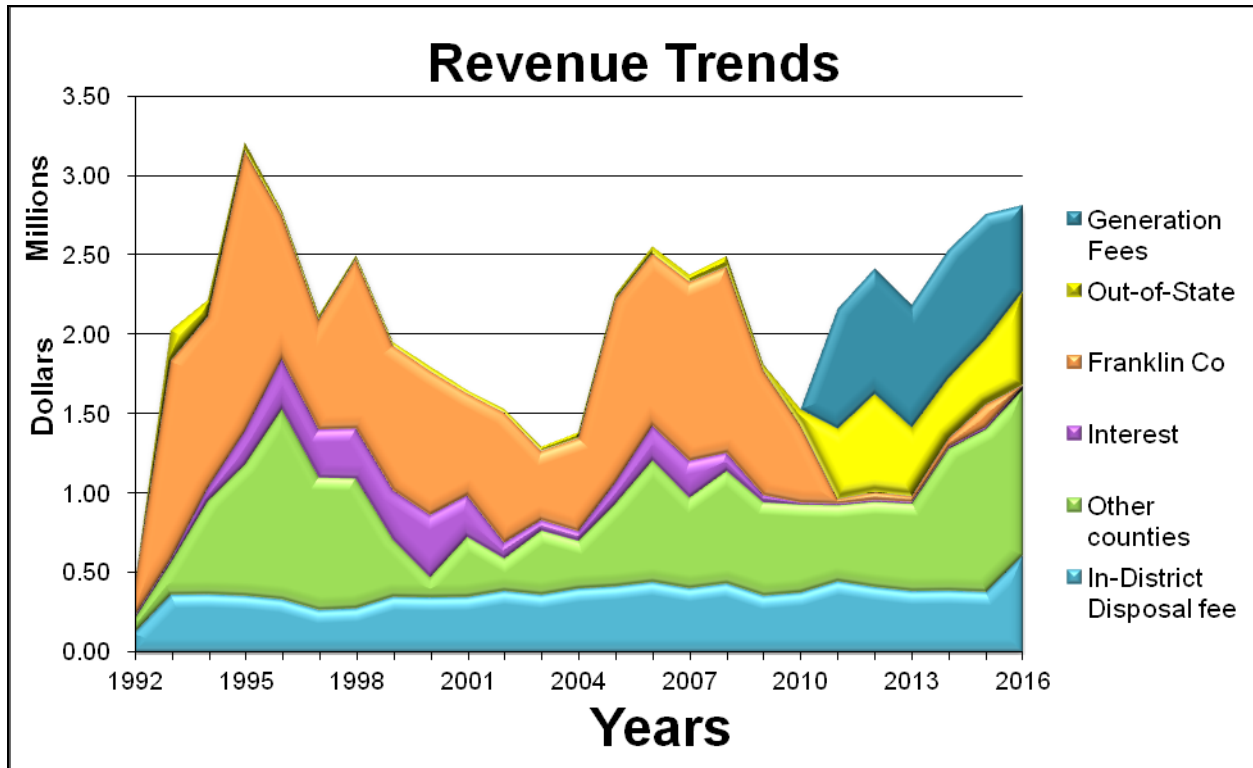


Non-exempt in-district waste disposed has averaged 430,000 tons over the last 19 years. While it fluctuates above and below this average, it remains fairly constant. Its overall consistency makes a generation fee a stable revenue source.



Out-of-district disposal fees were, at one time, primarily from Franklin County. Because surrounding districts do not have landfills, there was also a large amount from Muskingum County, Delaware and Knox Counties, and Ross County. When Franklin County initiated flow control, it had a significant short term impact on our revenue (it was the impetus for initiating the generation fee). The most recent three year increase is industrial waste from Butler (Pine Grove), Belmont and Monroe Counties (Suburban) that did not previously come to this District and was not included in the previous plan projections. This is an example of the difficulty in predicting future actions by private industry.

Out-of-state waste was minimal until the opening of Tunnell Hill Reclamation and the 2010 influx of east coast waste. There was a brief period of accepting waste from oil drilling in Pennsylvania, but that has slowly diminished. The diversion of this material to beneficial use projects, or a decision by the state to exempt it from disposal fees could eliminate all revenue from this waste stream at any time. Over the last ten years, the characterization of the out-of-state waste received is trending toward construction and demolition debris which does not contribute to District revenue. Only Tunnell Hill Reclamation accepts significant amounts of out-of-state waste and the trend is that it is coming from affiliates and subsidiaries of Tunnel Hill Partners rather than from third parties.



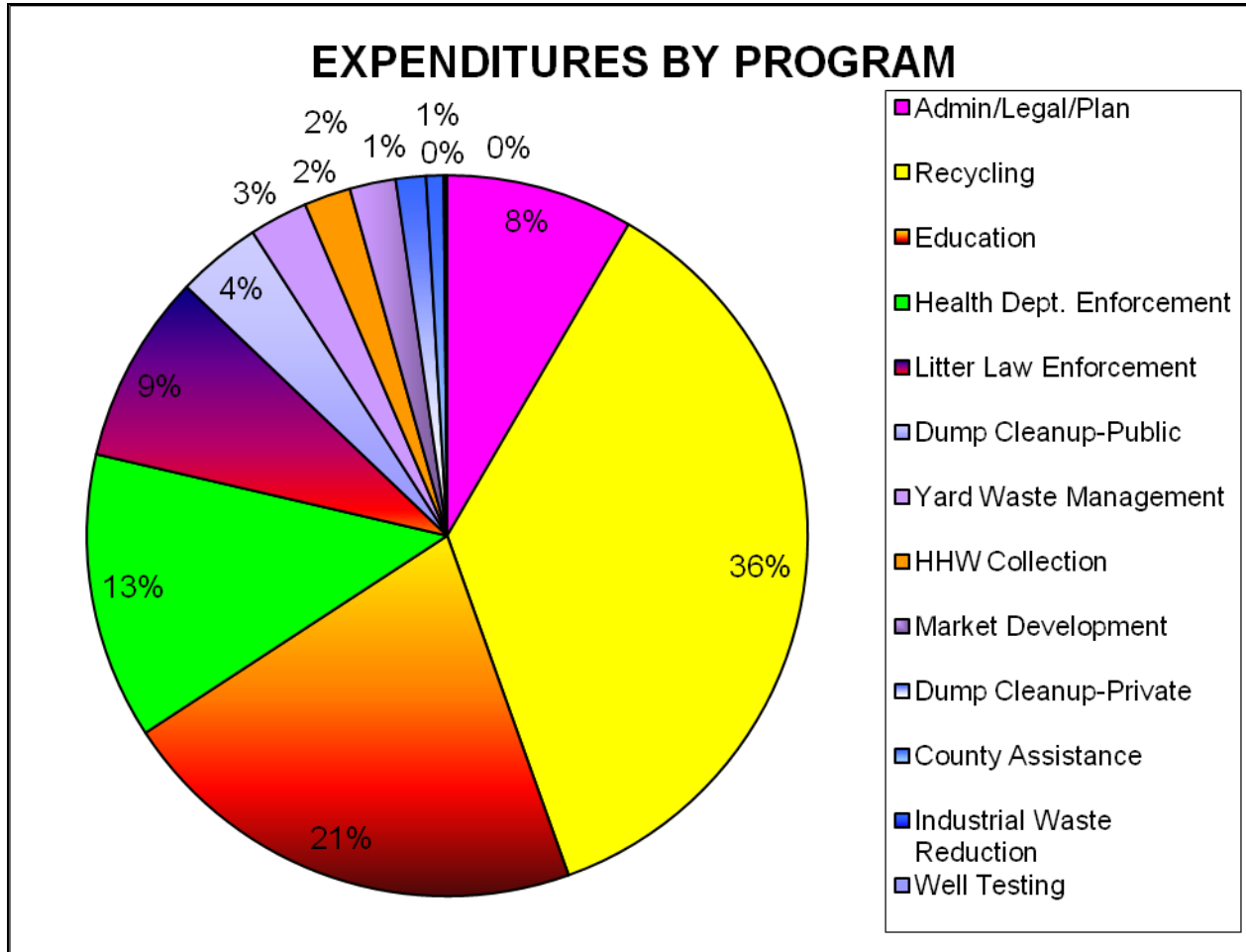
As the above chart illustrates, only in-district disposal fees have remained fairly consistent over the years. Fees from other counties has contributed greatly to our revenue stream, but are at the mercy of decisions made by other districts and their industries. A small amount of revenue is derived from reimbursement of contract funds advanced but not spent, or reimbursement for District-funded equipment as it is retired from use. This miscellaneous income is usually minimal and cannot be predicted so, with the exception of 2016 and 2017, it is not included in the revenue projections. At one time, interest earned on the solid waste account, generously donated by Licking County which serves as the District's auditor and treasurer, contributed a significant portion of the revenue, however it is now less than 1% of total revenue.

History has taught us that projecting future waste disposal is most accurate for in-district waste. Because decisions concerning out-of-district and out-of-state waste receipts are made by private companies that do not share their strategic planning with government, those projections can only be based upon what we know today. Tunnel Hill Partners markets this landfill on their website to attract east coast customers and it is common sense that Republic and Waste Management will want to maximize use of their facilities and attract as many customers as they can. Coshocton Landfill is not currently operating, but may be reactivated if and when enough customers are available to make its operation profitable. Opening up of Wayne National Forest for oil drilling is one change that may impact the amount of waste being disposed locally, but it is too early to predict how much.

Because revenue based on disposal fees is uncertain, the District has chosen to be conservative in projections for both revenue and expenditures. Revenue in excess of

projections gives the District security for years in which revenue is lower than projected. The fee revenue projected on Table O-6 is based on historical data for waste receipts through 2016 and information obtained in 2017.

Expenditures



District expenditures stay fairly true to plan projections or slightly below. If counties spend less than budgeted in any given year, that savings is tracked to their credit for use in future years, thus giving each county incentive to be fiscally conservative. Plan budgeting involves all funded entities projecting their budgetary needs for the planning period including equipment purchases and replacements, staffing changes and program-specific expenses. Deviations from the budget result from equipment schedules being moved forward or back, improvements in efficiencies that lower cost, or staffing disruptions. The previous plan budget earmarked the savings realized by Licking County in changing their method of drop-off collection and processing for 2018, in the event that the subcontract was not continued, and the county needed to purchase equipment and rehire staff. The subcontract was successfully renewed in 2016 for three years.

The chart above illustrates expenditures by the District since its formation in 1988. Slightly more than half the budget (57%) has been for recycling and education which are the mandatory part of the solid waste plan. An additional 22% has been spent on enforcement programs - both health departments and sheriff offices, to ensure that disposal laws and regulations are followed. Optional programs comprise 13% of expenses and administration comprised 8% of expenses.

A significant expenditure trend is the increased emphasis on mandatory programs and decreasing expenditure for optional programs that do not contribute toward meeting state goals. This is a reflection of the maturation of the solid waste district and understanding of the limitations of our revenue stream.

The budget in this plan update reflects projected needs for maintaining and expanding the recycling program, maintaining the education program, and continuation of optional programs that benefit the residents and businesses of the District.

Balance

Throughout the history of the District, carryover balances have been maintained to ensure the continuation of programs even if all revenue ceased, for at least two years. This is due to the long process needed to create a new plan with new revenue sources and have it approved. Having that two year cushion ensures that recycling programs can be fully funded and services maintained even under worst case scenario. At times, when waste disposed in-district is higher than projected, the balance increases. The District has addressed those times by adjusting fees. At the end of the reference year, the balance was \$2,265,117 above the projected balance in the solid waste plan.

10. Regional Analysis

Of the solid waste districts adjacent to this one, Franklin County, Holmes County, Stark-Wayne-Tuscarawas, and Athens-Hocking have open public landfills. This district serves some of Ross-Fayette-Highland-Pickaway, Delaware-Marion-Morrow-Knox, and Southeastern Ohio Districts' disposal needs as well as our own. We are also an exporting district, with haulers taking waste to their own landfills in other Ohio Districts.

The implementation of flow control by Franklin County's SWACO in 2010 impacted our District significantly. What had been 40% of our revenue ceased within the space of months with very little notice. Because it happened while we were updating our plan, we included a generation fee starting in 2011 to make up for the lost income. The result has been a revenue stream that is more stable than relying solely upon disposal fees. The lesson learned was that frequent, clear communication between districts is vital to our operations and that relying upon revenue from outside sources for core programs is unwise.

Private companies offering recycling services is currently dominated by Rumpke and Kimble, with few services offered by Republic and Waste Management. While there are a multitude of haulers bidding on trash-only contracts, it is difficult in this area to get competitive bids on trash contracts involving recycling. Processing capacity is dominated by Rumpke and Kimble, although there are smaller private recyclers processing lesser amounts of recyclables.

The DKMM District has expressed an interest in working with our District on increasing processing capacity that is not controlled by one waste company. Having an independent facility would benefit both Districts, their businesses and their smaller haulers who would like to offer recycling collection services but currently have no facility to process the materials. This will be addressed in the 2019 feasibility study.

In addressing the contamination of recyclables issue, the District reached out to other solid waste districts for comparisons and ideas for addressing the problem. While a few districts had advice on surveillance cameras, the majority of districts responded with "let me know what you find out, because we have the same problem". The District submitted an application to the OEPA for funding a pilot program to place surveillance cameras at four highly contaminated county drop-off sites with the intent of determining if it would dissuade dumpers or catch them in the act. Lawrence-Scioto has had success with their program, and it is hoped that we can have similar results.

11. Population Analysis

The population of Coshocton County is gradually decreasing, while Licking and Fairfield are growing rapidly - due to their proximity to Franklin County. Perry County's northern population is gradually increasing as people commuting to Columbus move further and further away from the city. Overall, the population has increased 30% since the district was formed, consistent with the projections made in the original solid waste management plan.

The demographics studied by the state indicate that the race, age, family structure, educational attainment and income have not varied significantly since 2006. The population in 2016 was 90% or more white, 83-92% graduates of high school or more, 50% couples with one or two in the labor force, median income of \$41-60,000, 50% between the ages of 25 and 64, 60% with no children in the home, 85-92% above the poverty level, and 88% living in the same house as the previous year. This stability of demographics is beneficial to developing and implementing education programs.

In all four counties, about 26% of the population lives in rental units. While we do not have statistics indicating the split between rental houses and apartments, we do know that the segment of the rental population living in apartments are not included in municipal curbside programs. Therefore, even in communities that have non-subscription curbside recycling, there is a significant segment of the population that is left

out. The recycling strategy in this plan update increases our efforts to provide recycling opportunities to that segment of the population.

The District will continue to have disparities between the segment of the population living adjacent to Columbus and the segment living in very rural areas away from population centers. The District's education and outreach plans will address those disparities and adjust programs to fit the audiences. The recycling program will continue serving all populations with an emphasis on reaching those in rental units that do not have access to curbside programs.

12. Data Collection Analysis

Data is collected through one page fill-in-the-blank annual surveys mailed and emailed to municipalities and townships, recyclers, haulers, and industries by the District office. Hard copies mailed include a stamped return envelope to solicit a better return rate than if the recipient had to provide their own. The survey is accompanied by a cover letter explaining why we are asking for the information, and a conversion chart to translate volume into weight. District survey forms are included in Appendix R. Respondents are asked to identify the destination of the materials they collect so that data from those processors is not double counted.

Data is also collected through monthly reports by county recycling programs which breaks the information down by material and by location. This information is estimated in Fairfield and Perry Counties, and actually weighed in Coshocton and Licking. The destinations are known so adjustments can be made.

Additional information gathered by Ohio EPA (tires, some commercial businesses, haulers) is used where it does not duplicate District survey responses. Because data gathered by OEPA does not identify where the collected materials are processed, there can be no adjustment for double counting.

The commercial sector is not surveyed by the District, with the exception of a handful of businesses that are surveyed with industries (AEP Conesville for example). With more than 10,000 businesses in the four counties that change frequently, it is not practical to have an accurate mailing list. One attempt to send a business survey resulted in so many undelivered returns and only a handful of responses that the project was abandoned as a waste of postage and paper. The District does participate in OEPA's online survey but has received no responses as a result of that project.

Data from major waste haulers that engage in curbside recycling contracts and compost facilities is difficult to obtain and decipher. Some reply to both the OEPA and the District, and because the questions are different, the data is contradictory. Some haulers fail to respond at all, so programs we know exist are left unreported.

Recognizing the limitations of current data collection methods, the District will continue with annual surveys and increase follow-up with haulers and industries to return a higher percentage of surveys.

13. Education/Outreach Analysis

The District Outreach Plan addresses the five target audiences in order of priority: residents, schools/youth, businesses, communities, and industries. Within each of those audiences, the District has identified 3 strategies designed to influence their behavior to increase participation in recycling opportunities.

Within the District, each member county maintains a County Recycling Office responsible for creating a County Outreach Plan that conforms to the District Outreach Plan but is tailored for the audiences in each county. In order to keep the funds advanced by the District, each County Recycling Office is mandated to complete at least one activity for each of the strategies, however most accomplish multiple activities. The strategies in the previous plan were evaluated and found to still be valid, and so were kept as they were:

1. To focus marketing of the recycling programs to residents, the Offices will increase the visibility of recycling opportunities and of recycling in general. Positive reinforcement of desired behavior is an effective tool in maintaining and increasing participation. Offices will increase and upgrade the use of electronic and other communication methods, using technology that is current and widely popular to reach the largest population possible. Because this sector also includes the individuals that are targeted in all other groups, these strategies will reach the largest audience.
2. The Offices will continue to market recycling to youth through schools and youth organizations with programs similar to those presently implemented, continuing to keep them updated and relevant. Offices will update their programs to meet instructional standards, link classroom education with actual school and residential recycling opportunities, and engage youth (no longer targeting only the older youth) through hands-on opportunities like assisting with school recycling and waste reduction programs and with community volunteer opportunities. School age youth comprise 19% of the district population, according to the 2010 census. This demographic group will also be reached through strategies targeting the general residential population.
3. The Offices will improve communication with commercial businesses to engage their assistance in reporting recycling. This will include recognition for business recycling efforts, serving as an information source regarding recycling service providers and recycling opportunities, and maintaining relationships with local business and trade organizations. This sector includes all non-manufacturing companies, government agencies and schools. The audience is

strictly adult and the focus is on how recycling can impact "the bottom line" for the business.

4. The Offices will increase their involvement with communities and maintain contact with local officials. They will provide technical support and encouragement to communities that are providing or may in the future provide recycling opportunities – publicly recognizing their contribution to meeting the access goals. Additionally, community support will continue to include participation in and promotion of local collection or clean up events, periodic presentations to township trustees or village councils and displays at local community events. In many cases, this audience contains the hosts of drop-off locations, and continual encouragement throughout the year will increase the success of each site by engaging the host in the operation and use of those sites.

5. The Offices will support recycling and waste reduction of industries by serving as an information source regarding recycling service providers and recycling opportunities, giving public recognition to their efforts. Outreach to industries on the district level will increase communication with industries through local trade associations, website information, and annual recycling reports.

The three biggest hurdles faced by the County Recycling Offices have been 1) keeping an ongoing relationship with schools where teacher turnover is high and recycling is a low priority; 2) assisting businesses with recycling when opportunities for collection are limited; and 3) finding meaningful ways to assist the industrial audience when they are already well educated on reducing their waste streams. For industry, reducing waste disposed is a matter of economics, and they independently look for markets for their materials and ways to reduce generation. Where industrial waste is still being disposed in landfills, it is generally material that does not have a current reuse/recycling market. The District outreach plan for industries is to be supportive of their efforts and assist as requested. To address the first hurdle, programs will look for ways to combine recycling with composting, environmental sustainability, and other standards to increase the lessons' value to teachers. To address the second hurdle, county recycling offices will seek out markets for specific materials commonly disposed such as electronics and styrofoam, and share the information to improve the database of information available to businesses.

Historically, education programs were encouraged to measure their success by the number of activities they completed, the number of presentations made, and the number of contacts made throughout the year. Evolving to a measurement based on the results - increased recycling resulting from an education activity - is a challenge that we have yet to master. Many educational activities do not produce instant results, but over time, produce a population more apt to embrace recycling. As mentioned elsewhere in the plan, we believe this education program has contributed to the

decreased frequency of open dumps because the students who learned about responsible stewardship in school are now the adults living in the District.

14. Processing Capacity Analysis

There are few processing facilities within the District for recyclable materials. Two multi-material processing facilities are PerCo, Inc. in Perry County and Lancaster-Fairfield Community Action in Fairfield County. Each is open to the general public and accepts more than the five materials collected through the countywide drop-off programs. Their limitations are the volume of material that can be accepted daily, and the size/weight of trucks that can unload materials. They were designed with the Alleycats and roll-off containers in mind, rather than the large compactor trucks used by private haulers. Physical improvements will be necessary for both facilities before they can expand their services to the private sector.

Strategic Materials in Licking County is open to the public on a limited basis and processes only container glass. Their capacity is large enough to handle all the glass in the district, however it must be separated from commingled materials before being delivered, a capability the collection programs alone do not have. This facility is not resident-friendly. Delivery involves driving on broken glass and avoiding large transfer trucks using the same traffic lanes. Their focus is on processing truck-loads from recycling centers around the state.

SBC in Licking County accepts multi-materials except glass. They were, at one time, the destination for all Licking and Coshocton drop-off materials. Their facility is now focused primarily on processing commercial and industrial materials and is not set up to process commingled residential materials. Their location in the northwestern corner of Licking County puts them out of the central traffic flow and small township bridges present weight limit issues for transportation.

There are multiple facilities that accept metals and do limited processing for transportation to larger metal recyclers outside the District. Two paper mills which processed District fiber streams and also accepted fiber from the general public have closed completely.

Because Rumpke is the current subcontractor for Licking County's drop-off program, they take those materials to their own facility in Columbus for processing. Coshocton drives their drop-off materials to Kimble in Dover, via a contract for processing services. Waste haulers that provide curbside recycling services via franchises with municipalities most commonly take the collected materials to Rumpke in Columbus, which makes competition for such contracts difficult at best.

The lack of independent local processing capacity is the primary barrier to expanding recycling in the private sector. When one hauler owns the processing facility, they control the market.

Realizing the limitations of the current processing facilities, the District will undertake a study designed to lay out a specific plan for increasing processing within the District that is not controlled by one hauler. Such capacity would be available to all haulers and recycling collectors, and potentially even other solid waste districts. The study will provide a plan for implementation. Funds have been budgeted for both the study and the resulting implementation plan.

APPENDIX I ACTIONS, PRIORITIES, AND PROGRAM DESCRIPTIONS

A. Actions and Priorities

1. *Actions*

- Increase communication with/between municipalities and townships regarding recycling and increase technical assistance in contracting for services
- Minimize dumping at recycling drop-off sites and along public roadways
- Increase enforcement of tire regulations to minimize tire dumping throughout District
- Upgrade recycling collection equipment to increase cost efficiency
- Increase access to recycling services for multi-family dwellings
- Ensure that public drop-off sites have sufficient capacity to handle commercial as well as residential materials
- Ensure that all public schools in the District have the opportunity to recycle - whether through a private hauler or the county recycling program
- Undertake feasibility study to evaluate processing capacity improvements and implement recommendations.

1. *Priorities*

- Increase communication with/between municipalities and townships regarding recycling and increase technical assistance in contracting for services
- Minimize dumping at recycling drop-off sites and along public roadways
- Increase enforcement of tire regulations to minimize tire dumping throughout District
- Upgrade recycling collection equipment to increase cost efficiency
- Increase access to recycling services for multi-family dwellings
- Ensure that public drop-off sites have sufficient capacity to handle commercial as well as residential materials
- Ensure that all public schools in the District have the opportunity to recycle - whether through a private hauler or the county recycling program
- Undertake feasibility study to evaluate processing capacity improvements and implement recommendations.

B. Programs

Residential Recycling Infrastructure

Curbside Recycling Services

Non-Subscription Curbside Recycling

ID	Name	Start Date	End Date	Goal(s)
NCS1	Coshocton City	Existing	Ongoing	1 and 2
NCS2	Lithopolis	Existing	Ongoing	1 and 2
NCS3	Pleasantville	Existing	Ongoing	1 and 2
NCS4	Carroll Village	Existing	Ongoing	1 and 2
NCS5	Johnstown Village	Existing	Ongoing	1 and 2
NCS6	Pataskala City	Existing	Ongoing	1 and 2
NCS7	Granville Village	Existing	Ongoing	1 and 2
NCS8	Somerset Village	Existing	Ongoing	1 and 2

All curbside recycling programs are managed by the municipalities and operated by private haulers under contract with the municipalities. The District's role is supportive, not prescriptive.

Subscription Curbside Recycling

ID	Name	Start Date	End Date	Goal(s)
SC1	Baltimore Village	Existing	Ongoing	1 and 2
SC2	Millersport Village	Existing	Ongoing	1 and 2
SC3	Pickerington Village	Existing	Ongoing	1 and 2
SC4	Sugar Grove Village	Existing	Ongoing	1 and 2
SC5	Bowling Green Township	Existing	Ongoing	1 and 2
SC6	Etna Township	Existing	Ongoing	1 and 2
SC7	Granville Township	Existing	Ongoing	1 and 2
SC8	Harrison Township	Existing	Ongoing	1 and 2
SC9	Hebron Village	Existing	Ongoing	1 and 2
SC10	Madison Township	Existing	Ongoing	1 and 2
SC11	McKean Township	Existing	Ongoing	1 and 2
SC12	Monroe Township	Existing	Ongoing	1 and 2
SC13	Newark	Existing	Ongoing	1 and 2
SC14	St. Albans Township	Existing	Ongoing	1 and 2
SC15	Union Township	Existing	Ongoing	1 and 2

Curbside recycling in the District is implemented by municipalities and townships via franchise with a specific hauler, and by individual residents contracting for services with their chosen hauler. The number of programs has increased significantly over the course of 20 years. These programs have been most successful when desired and supported by the residents of those communities. Contracts are renewed every few years, and the specific hauler may change, therefore this table does not identify the haulers by name. In most cases, once a curbside program has been initiated, residents

are supportive of its continuation long term and the district anticipates that all the programs listed above will continue throughout the planning period.

The District will continue to be supportive of communities wishing to initiate curbside recycling programs, and may, if funds are available, offer financial assistance in program start up, but actual planning and implementation will remain the responsibility of individual municipalities and townships at such a time their residents request that service be provided. Based on historical data, it is estimated that new curbside programs will be implemented at an average of one every other year. Communities are encouraged to work together, as the villages of Carroll and Pleasantville did, to seek proposals together and find better pricing than they would individually.

The District, in cooperation with county recycling offices, will provide technical assistance in setting up programs and/or bidding out contracts to private haulers for recycling in conjunction with waste collections as requested. Through county recycling offices, the District will encourage residents living in areas served by curbside recycling to make maximum use of the service and recycle as much as possible. District and county outreach websites will highlight community curbside programs and information will be provided to the local media for inclusion in newspapers - giving recognition to the community beginning the service and making other communities aware of the opportunities available.

Drop-off Recycling Locations

Full-Time, Urban Drop-offs

ID	Name	Start Date	End Date	Goal(s)
FTU1	Coshocton City	Existing	Ongoing	1 and 2
FTU2	Berne Twp - Sugar Grove	Existing	Ongoing	1 and 2
FTU3	Bloom Twp - Collegeview	Existing	Ongoing	1 and 2
FTU4	Greenfield Twp - Havensport Rd.	Existing	Ongoing	1 and 2
FTU5	Lancaster - E. Main	Existing	Ongoing	1 and 2
FTU6	Lancaster - Park	Existing	Ongoing	1 and 2
FTU7	Lancaster - Hubert Ave	Existing	Ongoing	1 and 2
FTU8	Lancaster - Liberty Dr.	Existing	Ongoing	1 and 2
FTU9	Lancaster - Hunter Trace	Existing	Ongoing	1 and 2
FTU10	Lancaster - Granville Pike	Existing	Ongoing	1 and 2
FTU11	Lancaster - Gay St.	Existing	Ongoing	1 and 2
FTU12	Lancaster - W. Fair Ave	Existing	Ongoing	1 and 2
FTU13	Lancaster - Sugar Grove Rd.	Existing	Ongoing	1 and 2
FTU14	Liberty Twp. - Baltimore	Existing	Ongoing	1 and 2
FTU15	Pleasant Twp - Tiki Lane	Existing	Ongoing	1 and 2
FTU16	Pleasant Twp - Lancaster-Thornville Rd.	Existing	Ongoing	1 and 2
FTU17	Violet Twp-Benadum Rd.	Existing	Ongoing	1 and 2
FTU18	Violet Twp - Stonecreek Dr.	Existing	Ongoing	1 and 2
FTU19	Violet Twp - Blacklick Eastern Rd	Existing	Ongoing	1 and 2
FTU20	Violet Twp - Center St.	Existing	Ongoing	1 and 2

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FTU21	Walnut Twp - Millersport	Existing	Ongoing	1 and 2
FTU22	Etna Twp - South St	Existing	Ongoing	1 and 2
FTU23	Granville Twp	Existing	Ongoing	1 and 2
FTU24	Granville Twp - Denison Red Barn	Existing	Ongoing	1 and 2
FTU25	Harrison Twp - Outville Rd.	Existing	Ongoing	1 and 2
FTU26	Heath - Rt. 79	Existing	Ongoing	1 and 2
FTU27	Heath - Hoback Park	Existing	Ongoing	1 and 2
FTU28	Monroe Twp - S. Main St.	Existing	Ongoing	1 and 2
FTU29	Newark - East Main	Existing	Ongoing	1 and 2
FTU30	Newark - Flory Park	Existing	Ongoing	1 and 2
FTU31	Newark - Cherry Valley	Existing	Ongoing	1 and 2
FTU32	Newark - Granville Rd.	Existing	Ongoing	1 and 2
FTU33	Newark - Easy St.	Existing	Ongoing	1 and 2
FTU34	Newark - Myrtle Ave	Existing	Ongoing	1 and 2
FTU35	Newark - W. Main	Existing	Ongoing	1 and 2
FTU36	Union Twp - Hebron	Existing	Ongoing	1 and 2
FTU37	Union Twp - Buckeye Lake	Existing	Ongoing	1 and 2
FTU38	Harrison Twp - Crooksville	Existing	Ongoing	1 and 2
FTU39	Harrison Twp - Roseville	Existing	Ongoing	1 and 2
FTU40	Pike Township - N. State St.	Existing	Ongoing	1 and 2
FTU41	Pike Township - N. Main St	Existing	Ongoing	1 and 2
FTU42	Pike Township - First St.	Existing	Ongoing	1 and 2
FTU43	Pike Township - SR 13 NE	Existing	Ongoing	1 and 2

The majority of these sites are funded by the district and managed by the county recycling offices. Locations were chosen to meet the access goal. While the physical address of individual sites may change throughout the planning period, the number of sites will be maintained to meet the access goal.

Full-Time, Rural Drop-offs

ID	Name	Start Date	End Date	Goal(s)
FTR1	Adams Twp	Existing	Ongoing	1 and 2
FTR2	Franklin Twp	Existing	Ongoing	1 and 2
FTR3	Jefferson Twp-Nellie	Existing	Ongoing	1 and 2
FTR4	Jefferson Twp-Warsaw	Existing	Ongoing	1 and 2
FTR5	White Eyes Twp - Fresno	Existing	Ongoing	1 and 2
FTR6	Lafayette Twp	Existing	Ongoing	1 and 2
FTR7	Linton Twp	Existing	Ongoing	1 and 2
FTR8	Perry Twp	Existing	Ongoing	1 and 2
FTR9	Pike Twp	Existing	Ongoing	1 and 2
FTR10	Tiverton Twp	Existing	Ongoing	1 and 2
FTR11	Tuscarawas Twp	Existing	Ongoing	1 and 2
FTR12	Amanda Twp - Amanda	Existing	Ongoing	1 and 2
FTR13	Clearcreek Twp - Oakland	Existing	Ongoing	1 and 2
FTR14	Clearcreek Twp - Stoutsville	Existing	Ongoing	1 and 2
FTR15	Richland Twp - Rushville	Existing	Ongoing	1 and 2
FTR16	Richland Twp - West Rushville	Existing	Ongoing	1 and 2
FTR17	Rushcreek Twp - Bremen	Existing	Ongoing	1 and 2
FTR18	Bennington Twp - SBC	Existing	Ongoing	1 and 2
FTR19	Fallsbury Twp. - Fallsburg	Existing	Ongoing	1 and 2
FTR20	Franklin Twp - Flint Ridge Rd.	Existing	Ongoing	1 and 2

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FTR21	Hanover Twp - W. High St	Existing	Ongoing	1 and 2
FTR22	Hartford Twp - Croton	Existing	Ongoing	1 and 2
FTR23	Jersey Twp - Mink St.	Existing	Ongoing	1 and 2
FTR24	Liberty Twp - Northridge Rd.	Existing	Ongoing	1 and 2
FTR25	Licking Twp - Jacksontown Rd	Existing	Ongoing	1 and 2
FTR26	Mary Ann Twp - Wilkins Run Rd.	Existing	Ongoing	1 and 2
FTR27	McKean Twp - Fredonia	Existing	Ongoing	1 and 2
FTR28	Newton Twp - St. Louisville	Existing	Ongoing	1 and 2
FTR29	St. Albans Twp - Alexandria	Existing	Ongoing	1 and 2
FTR30	Washington Twp - Utica	Existing	Ongoing	1 and 2
FTR31	Bearfield Twp - Six Mile Turn	Existing	Ongoing	1 and 2
FTR32	Clayton Twp - Saltillo	Existing	Ongoing	1 and 2
FTR33	Coal Twp - New Straitsville	Existing	Ongoing	1 and 2
FTR34	Hopewell Twp - Glenford	Existing	Ongoing	1 and 2
FTR35	Jackson Twp - Junction City	Existing	Ongoing	1 and 2
FTR36	Monroe Twp - Corning	Existing	Ongoing	1 and 2
FTR37	Reading Twp - Somerset	Existing	Ongoing	1 and 2
FTR38	Salt Lick Twp - Hemlock	Existing	Ongoing	1 and 2
FTR39	Salt Lick Twp - Shawnee	Existing	Ongoing	1 and 2
FTR40	Thorn Twp - Thornville	Existing	Ongoing	1 and 2
FTR41	Thorn Twp - Thornport	Existing	Ongoing	1 and 2

While private recyclers continue to operate within the District, they limit the materials they accept to those with a market value that will support their successful operation or that complement their primary business, or limit the area to which they offer service. The District has supplemented those recycling opportunities with drop-off sites that accept at least five commonly recycled materials (cardboard, newspaper, aluminum cans, steel cans and plastic #1 and #2), ensuring that more than 90% of district residents have a place to recycle within five miles of their homes. All District-funded drop-off locations are full time, accept at least the five designated materials (more are encouraged where markets are available), and meet the minimum state requirements for visibility and capacity. Directional signage will be maintained where containers are not visible from the closest public roadway. This service will continue to be provided via contracts between the solid waste district and member counties. Counties may choose to operate the drop-off program with county employees, use subcontracts to operate the program, or a combination of the two. The current contract arrangement is listed in Table 5-2, however counties may change their subcontracts within the planning period if it becomes more economical to do so. Additional drop-off sites will be added as needed to fill voids in service area or to keep pace with growing populations. Counties will continue to report on the drop-off program with costs and tons recycled. District staff will continue to compile the information for annual reports. The Board of Directors and the Policy Committee will annually review the report and recommend changes if needed to maximize the cost efficiency and effectiveness of this program. Prior to removing poorly performing sites (either lack of participation or excess trash), the District and County Recycling Office staff will meet with the site host to discuss ways to improve public participation and a concerted effort will be made to improve performance with removal as a last resort. Contracts will continue to require annual surveys of residents, and a comparison against previous surveys will measure the effectiveness of the marketing and outreach by each county.

Evaluation of the current drop-off program concluded that continuing to use and maintain obsolete equipment (alleycat trailers pulled by pickup trucks) is not efficient, and depending on the method of unloading, can result in employee injuries. The use of this equipment must be phased out, and more efficient equipment purchased. This evolution should begin to bring the individual county programs into a more compatible, cohesive program where counties can support each other with staff and equipment. Equipment replacement is beginning in 2018.

The District will continue to designate corrugated cardboard, newspaper, steel containers, aluminum containers and plastic containers as the core items to be included in drop-off locations. Counties are encouraged to include as many materials as is feasible and affordable. The District recognizes that, while adding materials increases the tons recycled, it also increases the frequency of collection and increases the cost of labor and transportation, so counties will be responsible for deciding when and which materials can be added beyond the core five. The District will address contamination through better signage, stepped-up enforcement and prosecution of dumping, and engagement of site hosts to monitor sites more closely. Security cameras will be piloted in 2018 for their impact on dumping at recycling drop-off sites. If effective, they will be placed at all sites with dumping issues. Efficiency of collection will be addressed through replacement of equipment with compactor trucks and containers wherever feasible and elimination of Alleycat trailers.

Mixed solid waste materials recovery facility

Name	Start Date	End Date	Goal
No program available			

Multi-Family Unit Recycling

Name	Start Date	End Date	Goal
Additional dropoff sites-location to be determined	2019	Ongoing	1 and 2

Even though adding drop-off sites to areas where curbside exists cannot currently count toward providing access, the District recognizes that it is the only way to ensure those residents living in apartments have the same opportunity to recycle as their neighbors. Where there are large numbers of multi-family dwellings, counties will add to the existing drop-off sites to increase the number of residents served as funding is available to operate those sites. The cost will be borne by the District-County recycling contract.

Other Residential Recycling Programs (list individually below)

Name	Start Date	End Date	Goal
Private recycling opportunities - (ex Royal Oak)	Existing	Ongoing	1

Private recyclers provide residents an opportunity to recycle more than is collected through the countywide drop-off program. Some take limited materials, like the example

above with fiber. Some pay for materials such as scrap metal. Because they are privately owned and operated, the District cannot guarantee their continuation but will promote and support them as long as they remain operational and compliant with Ohio laws. The District will not compete with them for materials by offering free services where the private recyclers must charge in order to remain in business.

Commercial/Institutional Sector Reduction and Recycling Programs

School Recycling

Name	Start Date	End Date	Goal
Public school recycling collection	Existing	Ongoing	1 and 2

Each county recycling office will continue to offer recycling collection services to all public schools in their county. The schools are encouraged to include an educational component to the program and the county recycling offices provide educational presentations/activities for students. This program will continue and counties are encouraged to continue to work with schools to increase their participation in recycling - whether through the county or their trash hauler.

Collection Services (government offices)

Name	Start Date	End Date	Goal
Public office recycling collection	Existing	Ongoing	1 and 2

Each county recycling office offers recycling collection services to city, county and state offices located in their county. Bins are purchased by the county recycling offices, and training to employees is provided upon request. Paper is the most-collected material. This program will continue and counties are encouraged to continue contact with agencies to ensure they all have access to recycling services.

Collection Services (small businesses)

Name	Start Date	End Date	Goal
Cardboard Only containers	Existing	Ongoing	1 and 2

Several of the counties have initiated and will continue "cardboard only" containers that are publicly accessible but placed strategically near dense populations of small businesses so they have easy access to recycling a material that is common to most. This serves the purpose of extending the time before a multi-material bin needs to be serviced, and expands the number of entities that can participate. Private recyclers offer recycling services to their customers, and the only thing needed for that to be successful is the will of the company to separate their materials, store them for pickup and be willing to pay for the service.

Large Venue Recycling

Name	Start Date	End Date	Goal
Container loans for public events and festivals	Existing	Ongoing	1

Each county recycling office has purchased containers for recycling and loans them to groups for special event recycling. The bags are offered for festivals, parties, and other social and business functions - preferably public functions. Borrowers pick up the containers and return them clean (along with bags of recyclables) following the event. In Fairfield and Perry Counties, the Recycling Offices are physically located at recycling centers which makes follow up a one step process. This program emphasizes the responsibility that generators have for recycling their waste by including them in the process, and it allows the counties to offer more services than they could if their limited staff was responsible for delivery and pickup of containers and materials. It should be noted that this is event-oriented, not facility oriented. The District has no large-venue facilities such as stadiums or theme parks.

Currently, the outreach offices are developing district-wide criteria for loaning out containers to ensure that public tax dollars are being used for public benefit and to get the most diversion possible from each event. Since the emphasis is more on education than tons diverted, they are also working to ensure that there is an educational component to each event loan.

Technical Assistance

Name	Start Date	End Date	Goal
County recycling office waste audits and information	Existing	Ongoing	4

Each county recycling office offers waste audits to businesses and industries located in their county upon request. It is not a popular service and is seldom requested, as discussed in Appendix H. It is advertised in newsletters, on websites, and Facebook pages.

A new initiative will be an internet-based database containing results of research done by county recycling offices in order to maximize the ability to find recycling opportunities. By putting their research results online, offices can instantly share information with other counties, keep it updated in a timely manner and increase their ability to help businesses. This will make the technical assistance component more effective.

This plan anticipates that current practices will continue and that county recycling offices will continue to offer technical assistance to the commercial sector to increase their ability to participate in recycling programs wherever possible. Increased interaction through the local Chambers of Commerce and other business associations will help reach local businesses with recycling information. Assisting public agencies and schools recycle materials will continue, and methods of collection will continue to evolve to increase cost-effectiveness.

Workgroup/Roundtable

Name	Start Date	End Date	Goal
No program available			

Award/Recognition

Name	Start Date	End Date	Goal
Fairfield County Awards Program	Existing	Ongoing	3 and 4

Fairfield County Recycling Office holds an Earth Day event at a local park and includes an award ceremony to recognize a teacher who has contributed to educational efforts in the county. This program will continue into the foreseeable future.

Industrial Sector Reduction and Recycling Programs

Waste Assessments/Waste Audits

Name	Start Date	End Date	Goal
County recycling office waste audits	Existing	Ongoing	4

Each county recycling office offers waste audits to businesses and industries located in their county upon request. It is not a popular service and is seldom requested, as discussed in Appendix H. It is advertised in newsletters, on websites, and Facebook pages. The target audience for this is the 83 businesses with 20-99 employees that may have significant tons yet to be diverted from landfills.

Collection Services

Name	Start Date	End Date	Goal
Private haulers, including Fairfield Community Action	Existing	Ongoing	1 and 2

The private haulers, including Fairfield-Lancaster Community Action Recycling Center, enter into agreements with local industries to provide recycling collection services at a cost. Industries are also encouraged to bring materials to drop-off centers. This is not a district funded or sponsored activity.

Contracting Assistance

Name	Start Date	End Date	Goal
Technical Assistance to Industries	Existing	Ongoing	3 and 4

The District office and county recycling offices provide technical assistance as requested by industries who are interested in contracting for recycling services or

seeking outlets for specific materials. The new database will assist in this effort. The District Office and County Recycling Offices will also promote any waste exchanges that are operating successfully.

Workgroup/Roundtable

Name	Start Date	End Date	Goal
No program available			

Award/Recognition

Name	Start Date	End Date	Goal
County Recycling Office Outreach	Existing	Ongoing	3 and 4

A District-wide strategy for reaching out to industries is to recognize them for their recycling efforts. This is accomplished via articles in newsletters, newspapers, Facebook posts, and other media as deemed effective in spreading the message.

Economic Incentives

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

Name	Start Date	End Date	Goal
No program available			6

Grants

Name	Start Date	End Date	Goal
Curbside, Buy Recycled, MRF improvement	Existing	Ongoing	6

The District program to offer financial assistance for public benefit for starting curbside programs, purchasing recycled content items for public use, and improving material recovery facilities to process more recyclables from the public will be continued and used as funds are available. Only MRF improvement has been budgeted because it was identified as a specific need to increase the District's ability to divert more materials from landfills. The other programs will be offered as funds are available.

Financial Award Programs (e.g. RecycleBank, "Get Caught Recycling")

Name	Start Date	End Date	Goal
Contests, recognition	Existing	Ongoing	6

County recycling offices will continue to implement outreach plans that include recognition for recycling efforts by all target audiences, including newsletter and newspaper articles, social media posts, contests, and awards programs.

Restricted/Difficult to Manage Wastes

First and foremost, District funded programs are designed to complement and enhance private recycling businesses, not compete by offering services already existing in the private sector. The District and County Recycling Offices will promote year-round legitimate recycling and disposal opportunities operated by the private sector.

In the case of materials like tires and other difficult to manage materials, legitimate disposal or recycling opportunities may not be locally available to all residents at an affordable cost. The District may provide financial support to collection events for these items if they are needed and as funds are available once mandated programs have been funded, provided that competitive fees are charged to participants at all collection events to cover the disposal portion of the events.

Yard Waste

Name	Start Date	End Date	Goal
Privately owned facilities	Existing	Ongoing	5

Facilities accepting yard waste and brush from the public are available in Fairfield and Licking Counties. County recycling offices educate the general public to compost and mulch at home. The District will continue to support the creation and expansion of public yard waste management facilities and may provide financial assistance when funds are available to applicants who have demonstrated an ability to remain self-sustaining beyond the initial period of assistance.

Household Hazardous Waste

Name	Start Date	End Date	Goal
Privately owned facilities	Existing	Ongoing	5
Limited collection for common materials	Existing	Ongoing	5

The District is committed to continually providing a public education program to educate residents about the problems associated with HHW disposal and encouraging residents to find alternatives to using or disposing of products considered to be hazardous. Household hazardous waste education has been incorporated into the ongoing outreach programs in each of the four counties. Each County Recycling Office will continue to be responsible for education within their county, and while the program will deliver a consistent message and theme, actual presentations and materials may differ locally.

The minimum requirements will be availability and delivery in an appropriate manner of:

- a. A brochure or flyer targeted to residential waste generators with consumer information about ways to reduce the amount of hazardous household material requiring disposal and about safe disposal alternatives.

- b. At least one newspaper, newsletter or other public article on reducing household hazardous waste and using safer alternatives in each county each year.

Both the District Office and County Recycling Offices will continue to encourage residents to take their materials to the EEI facility, HFH Restores, or properly dispose of them with their trash.

Within the District, there is at least one place per county where residents can take CFL Bulbs and tube florescent bulbs for proper disposal. The District provides pre-paid boxes to package the bulbs and they are sent to Lamp Master for proper disposal/recycling. Businesses seeking a recycling option to comply with universal waste rules are given the information for Lamp Master or EEI in Columbus so they can get a certificate of recycling for their records. The number of bulbs recycled through this program is not high, but it serves as an opportunity for those residents willing to drive them to a collection point. The program will continue through the planning period.

Within the District, there is at least one place per county where residents can take mercury for proper disposal. Health Departments accept mercury and mercury containing devices from residents and funnel it to the District office for storage until a full bucket can be taken to Environmental Enterprises Inc. in Columbus. While this does not generate even one five gallon bucket per year, it provides an outlet for residents who are willing to drive the material to a collection point. This program will continue through the planning period. Businesses seeking a recycling option to comply with universal waste rules are given the information for EEI in Columbus so they can get a certificate of recycling for their records.

Within the District, there are multiple recycling opportunities for rechargeable batteries and those are promoted by the District and County Recycling Offices. In 2017, the District sponsored the purchase of 50 pre-paid alkaline battery recycling boxes and distributed them to County Recycling Offices. The boxes were placed strategically throughout the counties as a pilot to see how well they were received. The boxes filled quickly, indicating that there is a desire amongst residents to recycle alkaline batteries. The cost for this pilot was \$1.00 per pound, or \$2000 per ton. The District will make this program permanent, with a budget of \$5000 per year to purchase boxes. Having the processing facility in our district makes it possible for county recycling offices to pick up empty boxes and deliver full boxes, saving the cost of shipping, thus earning us a discounted rate for the boxes. Where/when private businesses accept alkaline batteries, those businesses will be promoted by the District and County Recycling Offices as well.

Scrap Tires

Name	Start Date	End Date	Goal
Privately owned facilities	Existing	Ongoing	5
Enforcement and education	Existing	Ongoing	5

The District will continue to implement four waste tire management strategies:

- a. Through the county health departments, monitor compliance with the requirements of Ohio's tire management regulations regarding the collection, transportation, storage, and disposal of tires. If funding is available after mandatory programs have been funded, the District may support the cleanup of tires on private property through local health departments where a commitment has been made to attach a lien on the property to recover the funds invested.
- b. Promote to the public, particularly to individuals who may generate waste tires, year-round opportunities to use licensed tire haulers/recyclers and legal disposal options.
- c. Where year-round recycling/disposal opportunities do not exist, provide opportunities for residents to dispose of tires through special tire collection events where fees are charged to participants to cover disposal costs.
- d. If funding is available after mandatory programs have been funded, the District may financially support litter collection programs on public property (roadways, parks, waterways) to include the removal of illegally dumped tires.

In addition to these strategies which have been in place for some years, the health departments and sheriff offices will be stepping up their efforts to educate tire retailers about the regulations for disposing of tires properly, ensuring that they have a disposal/recycling program in place at all times, and follow up with the haulers to ensure that they take the used tires to a legal, appropriate destination. The county health departments will pursue OEPA assistance with clean up efforts when possible to reduce the number of tires in open dumps.

Electronic Equipment

Name	Start Date	End Date	Goal
Privately owned facilities	Existing	Ongoing	5

The District will continue to include recycling opportunities for electronics in all recycling guides and brochures. There are many opportunities throughout the district to recycle electronics year round. Several groups hold collection events using a local electronics recycler to collect those items. The Licking County Computer Society has held periodic events, collecting and refurbishing computers for distribution to the public.

Lead-Acid Batteries

Name	Start Date	End Date	Goal
Privately owned facilities	Existing	Ongoing	5

Appendix I Conclusions, Priorities, and Program Descriptions

Residents have recycled lead-acid batteries for years, returning them to retailer when they buy new batteries. This private sector system works very well to keep lead-acid batteries out of landfills and the District will continue to rely on this system to address lead-acid batteries.

Appliances

Name	Start Date	End Date	Goal
Privately owned facilities	Existing	Ongoing	5

The District and County Recycling Offices will continue to promote and support all private companies that remove freon and recycle appliances. Sheriff deputies will continue to seek the individuals responsible for dumping appliances along roadways, and litter collection programs will continue to pick them up for proper disposal.

Pharmaceuticals

Name	Start Date	End Date	Goal
Sheriff and police departments	Existing	Ongoing	5
Collection drives - nationally sponsored	Existing	Ongoing	5

Individual communities and law enforcement agencies will continue to participate in the National Take Back Day for prescription medications. Additionally, multiple police and sheriff offices host a prescription drug drop box program that is available year round.

Other Material Specific Programs

Food Waste

Name	Start Date	End Date	Goal
No program currently available			

The Compost Farm in Alexandria is licensed to accept food waste, so the District does have an outlet for this material if companies that produce it are willing to transport it.

Glass

Name	Start Date	End Date	Goal
Privately owned facility in Licking County	Existing	Ongoing	1

Strategic Materials in Newark accepts container glass from recyclers and the general public. This outlet is promoted and supported

Market Development Programs

Name	Start Date	End Date	Goal
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Appendix I Conclusions, Priorities, and Program Descriptions

Buy Recycled Contract Program	Existing	Ongoing	8
Market Development Contract Program	Existing	Ongoing	8
Outreach/Education	Existing	Ongoing	8

The District understands that strong markets pull recyclables through the system. Without markets recycling collection efforts are futile. Therefore, the District will be involved in promoting market growth. The following strategies will be implemented:

- a. The District will identify sources of information regarding recycled products and vendors of recycled products and will disseminate this information in answer to inquiries.
- b. The District will purchase and use recycled content products whenever suitable products are available at competitive prices and will encourage county agencies, local governments and private businesses to “buy recycled.”
- c. The District will require all of the recycling offices to continue including “buy-recycled” in public education programs.
- d. “Buy recycled” will be integrated into business and industry waste reduction and recycling programs and education materials whenever appropriate.
- e. Purchase recycled content products to be used by the general public for the purpose of demonstrating the performance of products in practical applications. This is an optional strategy to be implemented if there is a need. No funds have been budgeted but this may be implemented if funds are available after mandatory programs have been funded.

Funding for Outreach/Education components are included with the Outreach budget annually. Funding for buy recycled and market development programs is not being set aside specifically for this purpose, but if funds are available after the mandatory programs have been completed, counties may use their funds for this purpose.

Feasibility Studies

Name	Start Date	End Date	Goal
Processing capacity study	2019	2019	1 and 2

The District will contract with a professional firm to analyze and evaluate processing capacity within and adjacent to the District and make recommendations for improving the District's ability to market collected recyclables, including the countywide drop-off programs and privately operated programs.

Facilities

Materials Recovery Facilities/Recycling Centers

Appendix I Conclusions, Priorities, and Program Descriptions

Name	Start Date	End Date	Goal
Improvement Contracts	Existing	Ongoing	1 and 2

The District administers a contract program designed to assist processing centers expand or improve to increase tons recycled in the district. The program itself is ongoing, and entities may apply for the assistance at any time, however, a dollar amount has been budgeted for 2020 in anticipation of recommendations coming from the feasibility study. It is expected that the recommendations will include modifications to PerCo, and the Lancaster-Fairfield Community Action Recycling Centers as well as possibly additional facilities.

Landfills

Name	Start Date	End Date	Goal
Privately owned and operated facilities	Existing	Ongoing	

Landfills will remain a function of the private sector, and haulers will continue to use facilities that meet their needs throughout the planning period. The District does not intend to build or operate landfills.

Closed Facility Maintenance (Closure/Post-Closure Care)

Name	Start Date	End Date	Goal
No program available			

Transfer Facilities

Name	Start Date	End Date	Goal
Privately owned and operated facilities	Existing	Ongoing	

Transfer facilities will remain a function of the private sector, and haulers will continue to use facilities that meet their needs throughout the planning period. The District does not intend to build or operate transfer facilities.

Composting Facilities

Name	Start Date	End Date	Goal
Privately owned and operated facilities	Existing	Ongoing	

Yard waste management facilities will remain a function of the private sector, and the District will continue to encourage their use by all sectors throughout the planning period. The District does not intend to build or operate yard waste management facilities. The District has a contract program to assist the private sector in establishing and operating publicly available yard waste management facilities and may provide financial assistance within the planning period when funds are available.

Data Collection

Appendix I Conclusions, Priorities, and Program Descriptions

Name	Start Date	End Date	Goal
Annual surveys	Existing	Ongoing	9

Annual surveys are sent to all municipalities and townships, recyclers, waste haulers, and industries to gather data on their recycling programs. Survey questions are tailored to the recipients, and may change to improve the quality of the responses. Email is used for those who respond better to that form of communication, and hard copies are sent to the rest, with postage paid return envelopes to increase the chance that surveys will be mailed back. By continuing to survey each year, the District has "trained" recipients to look for the mailing and to complete the survey when it arrives. The District also uses data provided by Ohio EPA where they have surveyed tire recyclers, food waste recyclers and some commercial entities. Every effort is made by District staff to eliminate double counting by asking where materials are delivered to, but that has been very challenging as sources of recycling information increase.

Health department support (Allowable Use 3)

Name	Start Date	End Date	Goal
District contracts with 4 county health departments	Existing	Ongoing	

The Solid Waste Management District relies upon local health departments to ensure that federal, state, and local solid waste laws and regulations are followed. While OEPA-approved Health Departments are required to have solid waste enforcement programs meeting certain minimum standards, district contracts require each Health Department go beyond the minimum requirements. Therefore, to **supplement** (not replace) the existing revenues for solid waste programs, the District may provide contracts to health departments to inspect facilities, investigate complaints, and prosecute violators. This contract may also cover time spent by the solid waste sanitarian assisting in the management of debris following a declared disaster, as specified in the jurisdiction's emergency plan for Disaster Debris Management. Costs covered may include salary and fringes, vehicle expenses, equipment, supplies, and training to maintain the sanitarian's registration requirements until OEPA training is created. Approximately 90% of the funding is salary and fringes. Funding is provided via contracts following an application from the Health Department for financial assistance.

County Assistance

Name	Start Date	End Date	Goal
District contract program	Existing	Ongoing	

Ohio Revised Code allows solid waste districts to use funding derived from disposal fees to assist counties to defray **added** costs of maintaining roads and other public facilities, and providing emergency and other public services resulting from the location and operation of a solid waste facility within the county under the district's approved solid waste management plan. Solid waste facilities are defined in statute as any site

used for incineration, composting, sanitary landfilling, or other methods of disposal of solid waste, or for the collection, storage or processing of scrap tires; for the transfer of solid wastes, or for the storage, treatment or disposal of hazardous waste. District funds may not replace funding for activities that would be occurring if the solid waste facility were not there. It is the responsibility of the applicant to demonstrate that but for the location and operation of the solid waste facility, the requested expenses would not be incurred. Funding is provided via contracts following an application from the County for financial assistance. This assistance has been budgeted at \$50,000 per year, and the unused amount will be reserved within this line item for future years.

Open Dumping/Litter Enforcement

Name	Start Date	End Date	Goal
District Open Dump Cleanup on Public Property	Existing	Ongoing	

Local law enforcement agencies may receive funding from the Solid Waste District to assign personnel to enforce litter laws and issue citations for violations. Litter law enforcement officers work closely with local Recycling offices and local health departments to ensure coordinated efforts to deter littering. The deputy's role in handling debris from declared disasters, as written in the county's emergency plan may be covered under this contract. Costs may include salary and fringes, supplies, vehicle expenses, training and equipment. Approximately 93% of funding covers salary and fringes. Funding is provided via contracts following an application from the Sheriff Office for financial assistance.

Open dump/tire dump cleanup

Name	Start Date	End Date	Goal
District open dump cleanup contract	Existing	Ongoing	

Local agencies are responsible for ensuring that open dump sites do not persist, and that responsible parties are held accountable for clean-up costs. Only local health departments are eligible to apply for funds to clean up open dumps on private land through their enforcement process. Private land **cannot** be cleaned up with District contract funds without health department enforcement to recover cleanup costs through property liens or assessments, and any other means available to the department. If a disaster is declared in the contractor's jurisdiction, contract funds may be used to assist in the cleanup of disaster debris where other funding is not available. Funding is provided via contracts following an application from the Health Department for financial assistance. Historically these projects are very expensive and liens have not recovered funds from property owners, therefore it is unlikely that funding will be available for this purpose.

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

Name	Start Date	End Date	Goal
4 county sheriff offices	Existing	Ongoing	

Local law enforcement agencies may receive funding from the Solid Waste District to assign personnel to enforce litter laws and issue citations for violations. Litter law enforcement officers work closely with local Recycling offices and local health departments to ensure coordinated efforts to deter littering. The deputy's role in handling debris from declared disasters, as written in the county's emergency plan may be covered under this contract. Costs may include salary and fringes, supplies, vehicle expenses, training and equipment. Approximately 93% of funding covers salary and fringes. Funding is provided via contracts following an application from the Sheriff Office for financial assistance.

Municipal Corporation/Township Assistance

Name	Start Date	End Date	Goal
District contract assistance	Existing	Ongoing	

The District has a contract available to assist municipalities and townships should there ever be a facility under contract with the District that causes local issues. There are currently no such contracts, therefore no money is budgeted for this allowable use.

Disaster debris/disaster assistance

Name	Start Date	End Date	Goal
Sanitarian and deputy labor costs	Existing	Ongoing	

Under the District contracts with health departments and sheriff offices to enforce solid waste regulations, it is allowable for sanitarians and the litter law enforcement deputies to perform their duties under the county's disaster debris plan and claim that time for reimbursement by the District.

Closed Facility Maintenance/Post-Closure Care

Name	Start Date	End Date	Goal
No program available			

Facility Ownership/Operations

Name	Start Date	End Date	Goal
No program available			

Waste-to-energy projects

Name	Start Date	End Date	Goal
No program available			

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

A. Residential Sector Opportunity to Recycle

Table J-1 Demonstration of Residential Opportunity to Recycle

ID #	Coshocton	2016		2026	
	Name of Community (City, Village, Township)	Community Population	Population Credit	Community Population	Population Credit
<i>Non-subscription curbside</i>					
NCS1	Coshocton	11112	11112	10786	10786
<i>Full-time, urban drop-off</i>					
FTU1	Coshocton City	11112	0	10786	0
<i>Full-time, rural drop-off</i>					
FTR1	Adams Twp	783	2500	760	2500
FTR2	Franklin Twp	1218	2500	1182	2500
FTR3	Jefferson Twp-Nellie	1487	2500	1443	2500
FTR4	Jefferson Twp-Warsaw	1487	0	1443	0
FTR5	White Eyes Twp - Fresno	1183	2500	1149	2500
FTR6	Lafayette Twp	4043	2500	3925	2500
FTR7	Linton Twp	640	2500	621	2500
FTR8	Perry Twp	704	2500	684	2500
FTR9	Pike Twp	632	2500	614	2500
FTR10	Tiverton Twp	445	2500	432	2500
FTR11	Tuscarawas Twp	1847	2500	1793	2500
Total County Population		36,548		35,486	
Total Population Credit		36,112		35,786	
Percent of Population		99%		101%	

ID #	Fairfield	2016		2026	
	Name of Community (City, Village, Township)	Community Population	Population Credit	Community Population	Population Credit
<i>Non-subscription curbside</i>					
NCS2	Lithopolis	1197	1197	1355	1355
NCS3	Pleasantville	1039	1039	1176	1176
NCS4	Carroll	567	567	642	642

**Appendix J Reference Year Opportunity to Recycle
and Demonstation of Achieving Goal 1**

<i>Subscription curbside</i>					
SC1	Baltimore Village	3209	802	3633	908
SC2	Millersport Village	1130	283	1279	320
SC3	Pickerington Village	19791	4948	22301	5575
SC4	Sugar Grove Village	461	115	522	131
Violet Township		20552	5138	23268	5817
<i>Full-time, urban drop-off</i>					
FTU2	Berne Twp - Sugar Grove	5505	5000	6233	5000
FTU3	Bloom Twp - Collegeview	8802	5000	9968	5000
FTU4	Greenfield Twp - Havensport Rd.	5439	5000	6158	5000
FTU5	Lancaster - E. Main	41961	5000	47506	5000
FTU6	Lancaster - Park	41961	5000	47506	5000
FTU7	Lancaster - Hubert Ave	41961	5000	47506	5000
FTU8	Lancaster - Liberty Dr.	41961	5000	47506	5000
FTU9	Lancaster - Hunter Trace	41961	5000	na	na
FTU10	Lancaster - Granville Pike	41961	5000	47506	5000
FTU11	Lancaster - Gay St.	41961	5000	47506	5000
FTU12	Lancaster - W. Fair Ave	41961	5000	47506	5000
FTU13	Lancaster - Sugar Grove Rd.	41961	5000	47506	5000
FTU14	Liberty Twp. - Baltimore	8565	5000	9697	5000
FTU15	Pleasant Twp - Tiki Lane	6582	5000	7451	5000
FTU16	Pleasant Twp - Lancaster-Thornville Rd.	6582	5000	7451	5000
FTU17	Violet Twp-Benadum Rd.	40343	5000	45674	5000
FTU18	Violet Twp - Stonecreek Dr.	40343	5000	45674	5000
FTU19	Violet Twp - Blacklick Eastern Rd	40343	5000	45674	5000
FTU20	Violet Twp - Center St.	40343	5000	45674	5000
FTU21	Walnut Twp - Millersport	7403	5000	8381	5000
FTU22	Lancaster - Rt. 33	na	na	47506	5000
FTU	Hocking Township-Rt. 159	na	na	5723	5000
FTU	To be determined	na	na		5000
FTU	To be determined	na	na		5000
<i>Full-time, rural drop-off</i>					
FTR12	Amanda Twp - Amanda	2928	2500	3315	2500
FTR13	Clearcreek Twp - Oakland	4390	2500	4970	2500
FTR14	Clearcreek Twp - Stoutsville	4390	2500	4970	2500
FTR15	Richland Twp - Rushville	2375	2500	2689	2500
FTR16	Richland Twp - West Rushville	2375	0	2689	2500
FTR17	Rushcreek Twp - Bremen	4213	2500	4769	2500

**Appendix J Reference Year Opportunity to Recycle
and Demonstation of Achieving Goal 1**

FTR18	To be determined	na	na		2500
Total County Population		145,948		165,234	
Total Population Credit		126,589		148,424	
Percent of Population		87%		90%	

ID #	Licking	2016		2026	
	Name of Community (City, Village, Township)	Community Population	Population Credit	Community Population	Population Credit
<i>Non-subscription curbside</i>					
NCS5	Johnstown	4868	4868	5339	5339
NCS6	Pataskala	15726	15726	17247	17247
<i>Subscription curbside</i>					
SC5	Bowling Green Township	1836	459	1998	500
SC6	Etna Township	8735	2184	9502	2376
SC7	Granville Township	4354	1089	4737	1184
SC8	Granville Village	5934	1484	6437	1609
SC9	Harrison Township	7395	1849	8045	2011
SC10	Hebron Village	2455	614	2671	668
SC11	Madison Township	3327	832	3619	905
SC12	McKean Township	1601	400	1741	435
SC13	Monroe Township	2432	608	2646	662
SC14	Newark	50001	12500	54394	13599
SC15	St. Albans Township	2027	507	2206	552
SC16	Union Township	3891	973	4233	1058
<i>Full-time, urban drop-off</i>					
FTU22	Etna Twp - South St	8735	5000	9511	5000
FTU23	Granville Twp	10271	5000	11174	5000
FTU24	Harrison Twp - Outville Rd.	7947	5000	8645	5000
FTU25	Heath - Rt. 79	10836	5000	11788	5000
FTU26	Heath - Hoback Park	10836	5000	11788	5000
FTU27	Monroe Twp - S. Main St.	7300	5000	7942	5000
FTU28	Newark - East Main	50001	5000	54394	5000
FTU29	Newark - Flory Park	50001	5000	54394	5000
FTU30	Newark - Cherry Valley	50001	5000	54394	5000
FTU31	Newark - Granville St.	50001	5000	54394	5000
FTU32	Newark - Easy St.	50001	5000	54394	5000
FTU33	Newark - Myrtle Ave	50001	5000	54394	5000
FTU34	Newark - W. Main	50001	5000	54394	5000

**Appendix J Reference Year Opportunity to Recycle
and Demonstration of Achieving Goal 1**

FTU35	Union Twp - Hebron	9231	5000	10042	5000
FTU	To be determined	na	na		5000
FTU	To be determined	na	na		5000
Full-time, rural drop-off					
FTR18	Bennington Twp - SBC	1773	2500	1929	2500
FTR19	Fallsbury Twp. - Fallsburg	1031	2500	1122	2500
FTR20	Franklin Twp - Flint Ridge Rd.	2226	2500	2422	2500
FTR21	Hanover Twp - W. High St	2843	2500	3092	2500
FTR22	Hartford Twp - Croton	1504	2500	1636	2500
FTR23	Jersey Twp - Mink St.	2856	2500	3107	2500
FTR24	Liberty Twp - Northridge Rd.	2480	2500	2698	2500
FTR25	Licking Twp - Jacksontown Rd	4868	2500	5295	5000
FTR26	Mary Ann Twp - Wilkins Run Rd.	2224	2500	2419	2500
FTR27	McKean Twp - Fredonia	1601	2500	1756	2500
FTR28	Newton Twp - St. Louisville	3383	2500	3680	2500
FTR29	St. Albans Twp - Alexandria	2570	2500	2797	2500
FTR30	Washington Twp - Utica	3302	2500	3572	2500
Total County Population		165,797		180,363	
Total Population Credit		146,591		163,143	
Percent of Population		88%		90%	

ID #	Perry	2016		2026	
	Name of Community (City, Village, Township)	Community Population	Population Credit	Community Population	Population Credit
Non-subscription curbside					
Subscription curbside					
SC17	Somerset Village	1520	380	1598	400
Full-time, urban drop-off					
FTU36	Harrison Twp - Crooksville	5390	5000	5668	5000
FTU37	Harrison Twp - Roseville	5390	5000	5668	5000
FTU38	Pike Township - N. State St.	7104	5000	7470	5000
FTU39	Pike Township - N. Main St	7104	5000	7470	5000
FTU40	Pike Township - First St.	7104	0	7470	0
FTU41	Pike Township - SR 13 NE	7104	0	7470	0
Full-time, rural drop-off					
FTR31	Bearfield Twp - Six Mile Turn	1721	2500	1809	2500

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

FTR32	Clayton Twp - Saltillo	1606	2500	1689	2500
FTR33	Coal Twp - New Straitsville	1069	2500	1124	2500
FTR34	Hopewell Twp - Glenford	2462	2500	2589	2500
FTR35	Jackson Twp - Junction City	2930	2500	3082	2500
FTR36	Monroe Twp - Corning	1547	2500	1627	2500
FTR37	Reading Twp - Somerset	4485	2500	4715	2500
FTR38	Salt Lick Twp - Hemlock	1295	2500	1362	2500
FTR39	Salt Lick Twp - Shawnee	1295	0	1362	0
FTR40	Thorn Twp - Thornville	4364	2500	4588	2500
FTR41	Thorn Twp - Thornport	4364	2500	4588	2500
Total County Population		37,777		39,720	
Total Population Credit		45,380		45,400	
Percent of Population		120%		114%	
Total District Population		386,070		420,803	
Total Population Credit		354,672		392,753	
Percent of Population		92%		93%	

Only Fairfield County is obliged to add recycling drop-off locations to maintain 90% access through the planning period. Coshocton, Licking and Perry Counties have a sufficient number of sites in locations with populations that exceed 90% of their counties' total populations. Actual physical addresses of sites may change throughout the planning period, but the overall 90% per county will be maintained. As the table indicates, some townships have multiple sites, and not all of them may be included in calculating access, but the counties will add sites to areas where the service is needed and used, as requested and as affordable.

B. Commercial Sector Opportunity to Recycle

This sector includes retail and wholesale businesses, schools, banks, government offices, and similar businesses and organizations. In order to demonstrate compliance with plan standards, the District must demonstrate that there are recycling services available to this sector which handles five of the seven materials used to meet the overall recycling goal. The materials designated for this sector are office paper, corrugated cardboard, newspaper, aluminum cans and steel cans. Table J-4 shows some of the services currently in place to demonstrate access for this sector. Commercial materials, particularly materials generated in large quantities may be recycled through out-of-district brokers, scrap yards, and end use industries that are not included in this list. The District will continue to encourage haulers that service commercial establishments to continue or expand recycling services.

Table J-4 Demonstration of Commercial Opportunity to Recycle

Service Provider	Type of Recycling Service Provided	Material Type	Material Type	Material Type	Material Type	Material Type
Coshocton						
Countywide dropoff bins	full time drop off	Aluminum	steel cans	cardboard	office paper	newspaper
Fairfield						
Countywide dropoff bins	full time drop off	Aluminum	steel cans	cardboard	office paper	newspaper
Community Action Center	full time drop off	Aluminum	steel cans	cardboard	office paper	newspaper
Paper Retriever Bins	full time drop off			cardboard	office paper	newspaper
Licking						
Countywide dropoff bins	full time drop off	Aluminum	steel cans	cardboard	office paper	newspaper
Paper Retriever Bins	full time drop off			cardboard	office paper	newspaper
SBC Solutions	full time drop off	Aluminum	steel cans	cardboard	office paper	newspaper
Perry						
Countywide dropoff bins	full time drop off	Aluminum	steel cans	cardboard	office paper	newspaper
PERCO Center	full time drop off	Aluminum	steel cans	cardboard	office paper	newspaper

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C. Demonstration of Meeting Other Requirements for Achieving Goal 1

1. Residential/Commercial Waste Reduction and Recycling Rate

As illustrated in Table K-1, the District is exceeding the 25% residential/commercial recycling target established in Goal #2, and the expectation is that the percentage will continue to rise each year as the programs expand and more people use them.

2. Industrial Waste Reduction and Recycling Rate

As illustrated in Table K-2, the District is exceeding the 66% industrial goal established in Goal #2, and the expectation is that the percentage will continue to increase annually, although not by a large amount. Because this percentage is solely reliant upon the existence of industries in our District and their continued participation in recycling surveys, this percentage is not guaranteed.

3. Encouraging Participation

The continuation of outreach and marketing programs on a county level ensures that residents and business owners will be encouraged to participate in recycling opportunities. County outreach plans are tailored to the individual needs of each county while maintaining a consistent overall theme and goal.

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)
2016	386,070	99,400	262,902	362,301	27.44%	1.41
2017	389,301	99,897	262,902	362,798	27.54%	1.41
2018	392,533	100,396	263,033	363,429	27.62%	1.40
2019	395,764	100,898	263,165	364,063	27.71%	1.40
2020	398,996	101,403	263,296	364,699	27.80%	1.39
2021	402,651	101,910	263,428	365,337	27.89%	1.39
2022	406,307	102,419	263,560	365,979	27.98%	1.38
2023	409,962	102,931	263,691	366,623	28.08%	1.38
2024	413,618	103,446	263,823	367,269	28.17%	1.37
2025	417,273	103,963	263,955	367,918	28.26%	1.37
2026	420,620	104,483	264,087	368,570	28.35%	1.36
2027	424,316	105,005	264,219	369,225	28.44%	1.36
2028	427,837	105,530	264,351	369,882	28.53%	1.35
2029	431,359	106,058	264,484	370,541	28.62%	1.35
2030	434,880	106,588	264,616	371,204	28.71%	1.34

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

Year	Waste Reduced and Recycled (tons)	Waste Disposed (tons)	Non-Recyclable Waste	Waste Generated (tons)	Waste Reduction and Recycling Rate (percent)
2016	795,449	361,594		1,157,043	68.75%
2017	795,449	359,786		1,155,235	68.86%
2018	795,449	357,987		1,153,436	68.96%
2019	795,449	356,197		1,151,646	69.07%
2020	795,449	354,416		1,149,865	69.18%

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

2021	795,449	352,644		1,148,093	69.28%
2022	795,449	350,881		1,146,330	69.39%
2023	795,449	349,126		1,144,575	69.50%
2024	795,449	347,381		1,142,830	69.60%
2025	795,449	345,644		1,141,093	69.71%
2026	795,449	343,916		1,139,365	69.82%
2027	795,449	342,196		1,137,645	69.92%
2028	795,449	340,485		1,135,934	70.03%
2029	795,449	338,783		1,134,232	70.13%
2030	795,449	337,089		1,132,538	70.24%

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

Year	Waste Reduced and Recycled (tons)	Waste Disposed (tons)	Waste Generated (tons)	Waste Reduction and Recycling Rate (percent)
2016	894,848	624,496	1,519,344	58.90%
2017	895,345	622,688	1,518,033	58.98%
2018	895,845	621,020	1,516,865	59.06%
2019	896,347	619,362	1,515,709	59.14%
2020	896,851	617,712	1,514,564	59.22%
2021	897,358	616,072	1,513,430	59.29%
2022	897,868	614,441	1,512,309	59.37%
2023	898,380	612,818	1,511,198	59.45%
2024	898,895	611,204	1,510,099	59.53%
2025	899,412	609,599	1,509,011	59.60%
2026	899,932	608,003	1,507,935	59.68%
2027	900,454	606,415	1,506,870	59.76%
2028	900,979	604,836	1,505,816	59.83%
2029	901,507	603,266	1,504,773	59.91%
2030	902,037	601,705	1,503,742	59.99%

Sources of Information: Data is a compilation of data from previous tables.

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

Overview

Each member county employs staff that comprise the County Recycling Offices. Those offices provide the education and outreach on behalf of the District via annual contracts. County Recycling Offices must create an Outreach and Marketing plan for their county annually, and District funding varies depending on the cost of implementing that plan. The plan must incorporate all the elements set forth in the state format for best practices. The plans are expected to evolve and change, discarding programs that are unsuccessful and adding new programs that may achieve better results. Because these plans have yet to be written, this plan cannot detail what will be in every one of them. The following description outlines what will be common to all of them, providing a level of consistency throughout the District.

Aligning outreach to available infrastructure is not seen as a best practice to strive for in this District. It is seen as simple common sense that has been used since the programs began. It is senseless to preach recycling to any group of people who don't have access. Therefore, one common theme throughout the outreach program is (and has always been) that the County Recycling Offices focus on what is available in their county (or near enough to use) and educate their constituency in its use. If a presentation is given to a group in the city of Coshocton, the focus is on the city's curbside program. If a presentation is given to Coal Township, the focus is on using the drop-off location in New Straitsville.

A. Minimum Required Education Programs

Web Page

Name	Start Date	End Date	Goal
All County Recycling Offices, District Office	Ongoing	Ongoing	Goal #3

Each county recycling office and the district office maintain websites that contain recycling infrastructure, recycling resources, calendar of events, teacher resources and contact information. The District website is updated by District staff as needed. The District website includes information about the District, its partners, where to recycle each material, maps of drop-off locations, listings for landfills, transfer stations, haulers and County Recycling Offices, and business recycling tips. It also includes a schedule of all district meetings, board minutes, policy committee minutes, and financial reports to assist the general public in staying informed and involved. In Coshocton and Perry Counties, recycling office staff update their websites and in Licking and Fairfield

Appendix L Minimum Required Education Programs, Outreach Plan, and General Education Requirements

Counties, webmasters update the sites for the recycling offices. Their pages include information similar to the District's, but tailored to their counties. The measurement of success is whether or not the websites contain updated information at all times.

Infrastructure Inventory

Name	Start Date	End Date	Goal
All County Recycling Offices, District Office	Ongoing	Ongoing	Goal #3

This is most often combined with the information in the resource guide because there is much overlap in the information. However, should an office choose to create multiple brochures, this would include all the information put forth in Format 4.

Resource Guide

Name	Start Date	End Date	Goal
All County Recycling Offices, District Office	Ongoing	Ongoing	Goal #3

Each county recycling office maintains a recycling guide that contains local opportunities to recycle a variety of items, landfills, transfer facilities, compost information, and other valuable tips. The information is printed and disseminated at all educational events. The District office consolidates all this information on its website and uses it to complete plan tables. Information is updated as needed, and dissemination is reported quarterly to the District.

Speaker/Presenter

Name	Start Date	End Date	Goal
All County Recycling Offices, District Office	Ongoing	Ongoing	Goal #3

All county recycling offices and the District office offer their staff as speakers for public, civic, and social events throughout the year. Presentations are a major component of annual Outreach plans, and are used with all five target audiences. In 2017, 455 presentations were given to more than 11,000 people District-wide.

B. Outreach and Marketing Plan

While each County Recycling Office creates a plan for its member county, there are commonalities that apply to all of them. The outreach subcommittee felt that the priorities and strategies from the last plan are still valid and so are carried forth into this plan. The target audiences are listed in order of priority, with the highest showing the most promise for a return on effort.

Residential Sector

Name	Start Date	End Date	Goal
Increase visibility of recycling opportunities	Ongoing	Ongoing	Goal #4
Positive reinforcement of desired behavior	Ongoing	Ongoing	Goal #4
Increased use of electronic communication	Ongoing	Ongoing	Goal #4

This is the largest audience and the easiest to reach with marketing campaigns. Activities include displays at community events, newsletters, press releases, radio and TV ads, public workshops, and loaning recycling containers for public events. These activities create opportunities for the general public to learn more about recycling in their community. Each CRO recognizes efforts of individuals to encourage more recycling participation. The use of Facebook posts has increased exposure to the recycling message and invited a younger audience to participate. CRO's are using email to disseminate newsletters and event updates for increased timeliness and broader reach. The emphasis in all presentations has evolved from general awareness to encouraging people to use the local resources properly, divert recyclable material from landfills, and restrain from dumping trash at recycling sites and along roadways. This last part addresses the outreach priority of minimizing contamination of recyclables collected through the drop-off and litter collection programs. The measurement of success is the amount of material recycled through all programs - curbside and drop-off.

Schools Sector

Name	Start Date	End Date	Goal
Update activities to meet instructional standards	Ongoing	Ongoing	Goal #4
Link classroom with actual recycling	Ongoing	Ongoing	Goal #4
Hands on recycling experience for youth	Ongoing	Ongoing	Goal #4

Creating classroom lessons that teach to the ever-changing instructional standards is essential in gaining access to classrooms as teachers find their time limited in what they can accommodate. Combining recycling with other environmental lessons increases the odds that teachers will invite the programs into their classes. Contests widen the message and combine learning with the act of recycling or composting. CRO's use this educational opportunity to invite more schools to actively begin a school recycling program, either through their services or the school's waste hauler. The Hands-on

Appendix L Minimum Required Education Programs, Outreach Plan, and General Education Requirements

component combines classroom lessons with actual recycling activities, whether it is participation in a recycling challenge, setting up a school recycling program, or volunteering for a litter cleanup. Presentations to administrators and teachers focus more on setting up recycling programs within the schools and the financial benefit of doing so. One measurement of success for activities aimed at this audience is the mindset of these students as they become the adults who make purchasing decisions and recycling decisions for households. Recycling is more a mainstream activity now than twenty years ago, hopefully in part due to this education. Another measurement is the percentage of schools in each county with a recycling program. The goal is 100%.

Commercial/Institutional Sector

Name	Start Date	End Date	Goal
Improve communication	Ongoing	Ongoing	Goal #4
Recognize recycling efforts	Ongoing	Ongoing	Goal #4
Provide information on recycling opportunities	Ongoing	Ongoing	Goal #4
Maintain relationships with trade organizations	Ongoing	Ongoing	Goal #4

All county recycling offices provide information as requested, offer waste audits and link businesses with private sector recyclers for services. By publicizing the efforts of these businesses through newsletters, Facebook posts and newspaper articles, they encourage other businesses to participate. Interaction with local chambers of commerce increases exposure to the commercial sector, and providing recycling containers for chamber events strengthens the partnership with businesses in spreading the recycling message. It is more difficult to convince businesses to recycle than residents, because their opportunities come with a price. They must weigh the cost of staff time, storage space, and either a fee for pickup (if they can find a hauler willing to offer it) or transportation to the nearest drop-off site against the cost of disposing of it in their existing trash dumpster. The County Recycling Offices will continue to provide businesses with the information needed to make such decisions.

As an example of aligning outreach to a available infrastructure, communication with businesses in the city of Lancaster do not encourage businesses to work with their waste hauler to set up recycling, because their waste hauler is the city of Lancaster which does not offer recycling services. Instead, businesses are offered the opportunity to participate in the low cost recycling program offered by Lancaster-Fairfield Community Action or bring their materials to any of the local recycling facilities.

To assist with the enforcement priority of educating the tire dealers, county recycling offices will help develop a flyer that health department sanitarians and deputies can hand out when they visit those businesses. The flyer will focus on the proper and legal way to handle scrap tires and the penalties for noncompliance.

The CRO's offer on-site pickup of recyclables to government offices to reinforce that the local government is being responsible with the waste it generates. The goal of this activity is to have 100% of government offices participating, and each office strives to

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add at least one governmental entity each year. The educational component of this program is that each CRO is responsible for training the employees to separate recyclable material and get it to a central collection point for pick-up. The measurement of their success is the tons recycled through the programs and increases at each agency annually.

Political Leaders

Name	Start Date	End Date	Goal
Provide support and encouragement for efforts	Ongoing	Ongoing	Goal #4
Public recognition for efforts	Ongoing	Ongoing	Goal #4

County recycling offices actively support community cleanup efforts by providing bags, gloves, safety vests, promotion and publicizing efforts. They loan recycling containers for community events, bringing the individual communities in as partners in the effort to increase recycling. Publicizing those efforts with Facebook posts and newspaper articles shows communities their efforts are appreciated, and that they make a difference. County Recycling Offices include community recycling programs in all their literature and promote those programs in presentations. Technical assistance in starting curbside recycling programs is available, and promoted via presentations, program brochures and websites. As has been discussed elsewhere in the plan, this outreach is more reactive than proactive in that we do not push communities to start curbside recycling programs if they are not ready, but willingly and gladly assist them when they reach the decision to start. The measurement of success in educating this sector is the number of community events at which recycling is an integral part, whether it is through containers borrowed from the CRO's or their own.

Industrial Sector

Name	Start Date	End Date	Goal
Provide information on recycling opportunities	Ongoing	Ongoing	Goal #4
Public recognition for efforts	Ongoing	Ongoing	Goal #4
Increase communication	Ongoing	Ongoing	Goal #4

Education for industries is supportive of already extensive recycling efforts. The goal is to network individuals at various industries to increase their efforts and give them the tools needed to find markets for their materials. County recycling offices publicize successful recycling efforts in their newsletters, on Facebook, and through newspaper articles. Technical assistance is available via waste audits and information on markets, and is promoted in presentations, websites and program brochures. As has been discussed elsewhere in the plan, the industrial sector is shrinking in these four counties. The number of industries too small for staff devoted to recycling, but too big to use residential roll-off containers is finite, and many have specialized wastes not amenable to recycling. The role of the District and the County Recycling Offices is to be supportive of their efforts, provide assistance as requested, but focus on those entities

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and audiences where the most recycling can be gained. Increasing communication with this sector will be measured by the number of industries with which the program has direct contact throughout the year, either through a visit, interview, telephone conversation, mailing of a newsletter or flyer, or shared event.

Appendix L Minimum Required Education Programs, Outreach Plan, and General Education Requirements

C. Outreach Priority

Name	Start Date	End Date	Goal
Decrease contamination at recycling sites	2019	Ongoing	Goal #4

Although an ongoing problem since the inception of recycling drop-off sites, dumping of unrecyclable materials is on the upswing due to disposal limitations by private waste haulers, and the unwillingness of individuals to pay for legal pickup of the waste they generate. The nature of the contamination makes it clear that it is not a matter of confusion over what materials are acceptable. Education efforts will expand to educating citizens to report when they see people dumping at recycling sites and along roadways, and coordination with the litter deputies in each county will ensure follow-up for prosecution. Widely publicizing successful prosecutions is intended to deter others from attempting to dump trash illegally. The use of surveillance cameras at drop-off sites is being explored to determine if they increase successful prosecutions or deter additional dumping.

Incorporating Best Practices

County Recycling Offices are the front line in knowing what recycling resources are available locally, and that information drives everything they do. Every presentation and activity is designed with recycling infrastructure in mind.

Annual surveys are used to elicit input into why people do or do not recycle, what media is most effective in conveying the message, and what improvements to the recycling programs would result in increased participation. The County Recycling Offices are required by their contract with the District to analyze the survey responses and make improvements to their programs to address the concerns conveyed. County Recycling Offices create newsletters that vary depending on the audience. What is sent to the general public differs from that sent to businesses.

Measurement of results is new for this District. In the past, the focus of education programs was to document the number of activities and the number of people reached. Outreach reports now require offices document what resulted from the activities rather than how it was planned or presented. It remains challenging to correlate measurements to specific activities. County recycling offices are directed to evaluate activities in terms of results produced and refocus efforts on those activities that produce results in terms of altering recycling behavior. All counties participate in the statewide association of their peers, and share information continually about model programs.

APPENDIX M WASTE MANAGEMENT CAPACITY ANALYSIS

A. Access to Publicly-Available Landfill Facilities

Table M-1 Remaining Operating Life of Publicly-Available Landfills

Facility	Location	Years of Remaining Capacity
Coshocton Landfill	Coshocton	68.85
Pine Grove	Fairfield	63
Suburban	Perry	53
Tunnell Hill	Perry	18
American	Stark	85.6
Kimble	Tuscarawas	32.05
Athens-Hocking	Hocking	46.9
American	Stark	85.6
Noble Rd	Richland	8.5
Countywide Landfill	Stark	77.2
SWACO Landfill	Franklin	21
Beech Hollow	Jackson	78.3
Evergreen Landfill	Wood	42.2
Carbon Limestone	Mahoning	59.1
Crawford Co. Landfill	Crawford	10.8

Source(s) of Information: 2016 Annual Operating Reports submitted by facilities to Ohio EPA

Assumptions: Assumption is that data is accurate, and that no permit changes/waste changes will be made that would increase or decrease years of remaining capacity.

Based on 260 disposal days per year, the average daily need at publicly available landfills in 2016 was 1,502 tons. It will remain about the same throughout the planning period. The existing landfills in the district are permitted to take up to 18,500 tons per day or more than 4,810,000 tons per year. Obviously, not all of that capacity is actually available to the District, but the calculation does demonstrate that the capacity available far exceeds anticipated needs. Even if the AEP Conesville Landfill were to close when its present permitted capacity is expended, the other landfills could manage all of the waste generated in the District for the entire planning period. It is expected that waste will continue to go to out-of-district facilities in about the same proportions as it has in the past.

Since the District does not direct waste and has not entered into contracts with facilities to take specific amounts of waste, the landfills in the District can and do accept out-of-district and out-of-state waste. However, unless there is a drastic

Appendix L Minimum Required Education Programs, Outreach Plan, and General Education Requirements

change in the flow of waste, the District's needed capacity is secure. There is also considerable capacity within a 70 mile radius of the District. The capacity outside the District provides security for the District in several ways. Facilities outside of the District will be available for district waste if needed. Ample disposal capacity to the east and northeast of the District provide buffers between this District and waste exporting counties in northern Ohio and east coast states. Substantial capacity in southeast Ohio offers an out-of-district alternative to the southeast sector of the District.

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B. Access to Captive Landfill Facilities

Table M-3 Remaining Operating Life of Privately-Available Landfills

Facility	Location	Years of Remaining Capacity
American Electric Power	Coshocton	18
Owens Corning	Licking	56

Source(s) of Information: Annual Operating Reports submitted by facilities to Ohio EPA

Assumptions:

As of December 2008, American Electric Power (AEP) planned to construct a new Class III Residual Waste (RSW) Landfill near the Conesville Power Plant. The Reiker Hill Residual Solid Waste Landfill will be located in Muskingum County. The wastes anticipated to be placed in this landfill included coal fly ash, bottom ash, stabilized flue gas desulfurization (FGD) materials, synthetic gypsum, and purge stream solids. These wastes were to be hauled by truck from Coshocton County for placement and disposal in the landfill. In the meantime, AEP has filed a permit application with the Ohio EPA to reduce its output and it is anticipated that the plant will close within this planning period.

The Owens-Corning facility has a projected capacity that substantially exceeds the planning period. Obviously, planned or unplanned changes in production and/or new waste reduction and recycling programs will affect the amount of material that each industry sends to its own facility. We are assuming that when the industries made the projections for the life of their disposal facilities, the industries took anticipated changes in waste generation into account.

C. Incinerators and Energy Recovery Facilities

Use of incinerators in the District is limited to one incinerator in an animal shelter in Fairfield County. The amount of waste disposed in this manner is negligible.

APPENDIX N EVALUATING GREENHOUSE GAS EMISSIONS

Analysis Results

Waste Reduction Model (WARM) -- Results

Total Energy Use from Baseline MSW Generation and Management (million BTU):	205,602
Total Energy Use from Alternative MSW Generation and Management (million BTU):	(9,406,545)
Incremental Energy Use (million BTU):	(9,612,147)

BTU = British Thermal Unit

Per Ton Estimates of Energy Use for Alternative Management Scenarios

Material	Energy Savings per Ton of Material Source Reduced (million BTU)	Energy Savings per Ton of Material Recycled (million BTU)	Energy Savings per Ton of Material Landfilled (million BTU)	Energy Savings per Ton of Material Combusted (million BTU)	Energy Savings per Ton of Material Composted (million BTU)
Aluminum Cans	(89.66)	(152.76)	0.53	0.63	NA
Aluminum Ingot	(126.92)	(113.85)	0.53	0.63	NA
Steel Cans	(29.85)	(19.97)	0.53	(17.10)	NA
Copper Wire	(122.32)	(82.59)	0.53	0.57	NA
Glass	(6.87)	(2.13)	0.53	0.53	NA
HDPE	(61.22)	(50.36)	0.53	(19.71)	NA
LDPE	(71.05)	NA	0.53	(19.60)	NA
PET	(50.38)	(32.05)	0.53	(10.31)	NA
LLDPE	(66.38)	NA	0.53	(19.67)	NA
PP	(66.63)	NA	0.53	(19.67)	NA
PS	(75.02)	NA	0.53	(17.72)	NA
PVC	(48.47)	NA	0.53	(7.59)	NA
PLA	(31.08)	NA	0.53	(8.08)	0.58
Corrugated Containers	(22.25)	(15.05)	0.21	(6.75)	NA
Magazines/third-class mail	(33.20)	(0.69)	0.23	(4.97)	NA
Newspaper	(36.44)	(16.49)	0.40	(7.66)	NA
Office Paper	(36.57)	(10.08)	0.04	(6.51)	NA
Phonebooks	(40.14)	(11.93)	0.40	(7.66)	NA
Textbooks	(35.55)	(1.03)	0.04	(6.51)	NA
Dimensional Lumber	(3.65)	0.59	0.51	(8.01)	NA
Medium-density Fiberboard	(11.85)	0.86	0.52	(8.01)	NA
Food Waste (non-meat)	(7.20)	NA	0.34	(2.08)	0.58
Food Waste (meat only)	(43.60)	NA	0.34	(2.08)	0.58
Beef	(63.88)	NA	0.34	(2.08)	0.58
Poultry	(26.48)	NA	0.34	(2.08)	0.58
Grains	(5.62)	NA	0.34	(2.08)	0.58
Bread	(6.51)	NA	0.34	(2.08)	0.58

Analysis Results

Fruits and Vegetables	(5.07)	NA	0.34	(2.08)	0.58
Dairy Products	(14.27)	NA	0.34	(2.08)	0.58
Yard Trimmings	0.00	NA	0.46	(2.51)	0.58
Grass	0.00	NA	0.48	(2.51)	0.58
Leaves	0.00	NA	0.46	(2.51)	0.58
Branches	0.00	NA	0.43	(2.51)	0.58
Mixed Paper (general)	(29.40)	(20.37)	0.22	(6.78)	NA
Mixed Paper (primarily residential)	(28.62)	(20.37)	0.23	(6.75)	NA
Mixed Paper (primarily from offices)	(34.61)	(20.85)	0.19	(6.21)	NA
Mixed Metals	(50.87)	(66.64)	0.53	(10.87)	NA
Mixed Plastics	(54.64)	(39.25)	0.53	(14.01)	NA
Mixed Recyclables	NA	(14.85)	0.31	(6.68)	NA
Food Waste	(14.56)	NA	0.34	(2.08)	0.58
Mixed Organics	NA	NA	0.40	(2.28)	0.58
Mixed MSW	NA	NA	0.32	(4.71)	NA
Carpet	(91.06)	(21.57)	0.53	(7.31)	NA
Personal Computers	(956.74)	(29.24)	0.53	(6.27)	NA
Clay Bricks	(5.13)	NA	0.53	NA	NA
Concrete	NA	(0.11)	0.53	NA	NA
Fly Ash	NA	(4.77)	0.53	NA	NA
Tires	(71.66)	(3.67)	0.53	(28.49)	NA
Asphalt Concrete	(1.68)	(1.22)	0.53	NA	NA
Asphalt Shingles	(3.11)	(2.46)	0.53	(8.50)	NA
Drywall	(3.53)	(2.65)	0.53	NA	NA
Fiberglass Insulation	(4.70)	NA	0.53	NA	NA
Vinyl Flooring	(10.73)	NA	0.53	(7.59)	NA
Wood Flooring	(14.49)	NA	0.53	(10.58)	NA

Energy Use from Baseline Management of Municipal Solid Wastes

	Baseline Generation of Material (Tons)	Estimated Recycling (Tons)	Annual Energy Consumption from Recycling (million BTU)	Estimated Landfilling (Tons)	Annual Energy Consumption from Landfilling (million BTU)	Estimated Combustion (Tons)	Annual Energy Consumption from Combustion (million BTU)	Estimated Composting (Tons)	Annual Energy Consumption from Composting (million BTU)	Total Annual Energy Consumption (million BTU)
Material										
Aluminum Cans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Aluminum Ingot	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Steel Cans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Copper Wire	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Glass	68,852.0	0.0	0.0	68,852.0	36,312.5	0.0	0.0	NA	NA	36,312.5
HDPE	13,053.0	0.0	0.0	13,053.0	6,884.2	0.0	0.0	NA	NA	6,884.2
LDPE	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
PET	11,062.0	0.0	0.0	11,062.0	5,834.1	0.0	0.0	NA	NA	5,834.1
LLDPE	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0

Analysis Results

PP	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
PS	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
PVC	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
PLA	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Corrugated Containers	44,017.0	0.0	0.0	44,017.0	9,445.8	0.0	0.0	0.0	NA	NA	9,445.8
Magazines/third-class mail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Newspaper	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Office Paper	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Phonebooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Textbooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Dimensional Lumber	72,022.0	0.0	0.0	72,022.0	36,516.6	0.0	0.0	0.0	NA	NA	36,516.6
Medium-density Fiberboard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Food Waste (non-meat)	38,107.0	NA	NA	38,107.0	12,813.7	0.0	0.0	0.0	0.0	0.0	12,813.7
Food Waste (meat only)	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beef	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poultry	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grains	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bread	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fruits and Vegetables	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dairy Products	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yard Trimmings	11,045.0	NA	NA	11,045.0	5,104.4	0.0	0.0	0.0	0.0	0.0	5,104.4
Grass	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leaves	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Branches	10,754.0	NA	NA	10,754.0	4,619.2	0.0	0.0	0.0	0.0	0.0	4,619.2
Mixed Paper (general)	21,528.0	0.0	0.0	21,528.0	4,833.2	0.0	0.0	0.0	NA	NA	4,833.2
Mixed Paper (primarily residential)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Mixed Paper (primarily from offices)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Mixed Metals	85,448.0	0.0	0.0	85,448.0	45,065.3	0.0	0.0	0.0	NA	NA	45,065.3
Mixed Plastics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Mixed Recyclables	102,048.0	0.0	0.0	102,048.0	31,759.4	0.0	0.0	0.0	NA	NA	31,759.4
Food Waste	1,074.0	NA	NA	1,074.0	361.1	0.0	0.0	0.0	0.0	0.0	361.1
Mixed Organics	9,794.0	NA	NA	9,794.0	3,916.6	0.0	0.0	0.0	0.0	0.0	3,916.6
Mixed MSW	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Carpet	204.0	0.0	0.0	204.0	107.6	0.0	0.0	0.0	NA	NA	107.6
Personal Computers	96.0	0.0	0.0	96.0	50.6	0.0	0.0	0.0	NA	NA	50.6
Clay Bricks	0.0	NA	NA	0.0	0.0	NA	NA	NA	NA	NA	0.0
Concrete	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	NA	NA	0.0
Fly Ash	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	NA	NA	0.0
Tires	3,750.0	0.0	0.0	3,750.0	1,977.8	0.0	0.0	0.0	NA	NA	1,977.8
Asphalt Concrete	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	NA	NA	0.0
Asphalt Shingles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Drywall	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	NA	NA	0.0
Fiberglass Insulation	0.0	NA	NA	0.0	0.0	NA	NA	NA	NA	NA	0.0

Analysis Results

Vinyl Flooring	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
Wood Flooring	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
Total	492,854.0	0.0	0.0	492,854.0	205,602.1	0.0	0.0	0.0	0.0	205,602.1

Energy Use from Projected Alternative Management of Municipal Solid Wastes

Material	Baseline Generation of Material (Tons)	Projected Source Reduction (Tons)	Annual Energy Consumption from Source Reduction (million BTU)	Projected Recycling (Tons)	Annual Energy Consumption from Recycling (million BTU)	Projected Landfilling (Tons)	Annual Energy Consumption from Landfilling (million BTU)	Projected Combustion (Tons)	Annual Energy Consumption from Combustion (million BTU)	Projected Composting (Tons)	Annual Energy Consumption from Composting (million BTU)	Total Annual Energy Consumption (million BTU)
Aluminum Cans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Aluminum Ingot	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Steel Cans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Copper Wire	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Glass	68,852.0	0.0	0.0	68,852.0	(146,338.7)	0.0	0.0	0.0	0.0	NA	NA	(146,338.7)
HDPE	13,053.0	0.0	0.0	13,053.0	(657,306.7)	0.0	0.0	0.0	0.0	NA	NA	(657,306.7)
LDPE	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
PET	11,062.0	0.0	0.0	11,062.0	(354,589.0)	0.0	0.0	0.0	0.0	NA	NA	(354,589.0)
LLDPE	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
PP	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
PS	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
PVC	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
PLA	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Corrugated Containers	44,017.0	0.0	0.0	44,017.0	(662,631.6)	0.0	0.0	0.0	0.0	NA	NA	(662,631.6)
Magazines/third-class mail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Newspaper	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Office Paper	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Phonebooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Textbooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Dimensional Lumber	72,022.0	0.0	0.0	72,022.0	42,344.7	0.0	0.0	0.0	0.0	NA	NA	42,344.7
Medium-density Fiberboard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Food Waste (non-meat)	38,107.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	38,107.0	22,254.5	22,254.5
Food Waste (meat only)	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beef	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poultry	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grains	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bread	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fruits and Vegetables	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dairy Products	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yard Trimmings	11,045.0	NA	NA	NA	NA	0.0	0.0	0.0	0.0	11,045.0	6,450.3	6,450.3
Grass	0.0	NA	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leaves	0.0	NA	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Branches	10,754.0	NA	NA	NA	NA	0.0	0.0	0.0	0.0	10,754.0	6,280.3	6,280.3

Analysis Results

Mixed Paper (general)	21,528.0	0.0	0.0	21,528.0	(438,561.0)	0.0	0.0	0.0	0.0	NA	NA	(438,561.0)
Mixed Paper (primarily residential)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Mixed Paper (primarily from offices)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Mixed Metals	85,448.0	0.0	0.0	85,448.0	(5,694,494.6)	0.0	0.0	0.0	0.0	NA	NA	(5,694,494.6)
Mixed Plastics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Mixed Recyclables	102,048.0	NA	NA	102,048.0	(1,515,325.9)	0.0	0.0	0.0	0.0	NA	NA	(1,515,325.9)
Food Waste Mixed	1,074.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	1,074.0	627.2	627.2
Organics Mixed	9,794.0	NA	NA	NA	NA	0.0	0.0	0.0	0.0	9,794.0	5,719.7	5,719.7
MSW Carpet	0.0	NA	NA	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
Personal Computers	204.0	0.0	0.0	204.0	(4,400.5)	0.0	0.0	0.0	0.0	NA	NA	(4,400.5)
Clay Bricks	96.0	0.0	0.0	96.0	(2,807.3)	0.0	0.0	0.0	0.0	NA	NA	(2,807.3)
Concrete	0.0	0.0	0.0	NA	NA	0.0	0.0	NA	NA	NA	NA	0.0
Fly Ash	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	NA	NA	0.0
Tires	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	NA	NA	0.0
Asphalt Concrete	3,750.0	0.0	0.0	3,750.0	(13,766.4)	0.0	0.0	0.0	0.0	NA	NA	(13,766.4)
Asphalt Shingles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	NA	0.0
Drywall	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Fiberglass Insulation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	NA	0.0
Vinyl Flooring	0.0	0.0	0.0	NA	NA	0.0	0.0	NA	NA	NA	NA	0.0
Wood Flooring	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
Total	492,854.0	0.0	0.0	422,080.0	(9,447,877.0)	0.0	0.0	0.0	0.0	70,774.0	41,332.0	(9,406,544.9)

Incremental Energy Use from Projected Alternative Management of Municipal Solid Wastes

		Incremental Energy Consumption from Source Reduction		Incremental Energy Consumption from Recycling		Incremental Energy Consumption from Landfilling (million BTU)		Incremental Energy Consumption from Combustion		Incremental Energy Consumption from Composting		Total Incremental GHG Energy Consumption (million BTU)
Material	Source Reduction (Tons)	(million BTU)	Incremental Recycling (Tons)	(million BTU)	Incremental Landfilling (Tons)			(million BTU)		(Tons)	(million BTU)	
Aluminum Cans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Aluminum Ingot	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Steel Cans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Copper Wire	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Glass	0.0	0.0	68,852.0	(146,338.7)	(68,852.0)	(36,312.5)	0.0	0.0	0.0	NA	NA	(182,651.3)
HDPE	0.0	0.0	13,053.0	(657,306.7)	(13,053.0)	(6,884.2)	0.0	0.0	0.0	NA	NA	(664,190.8)
LDPE	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
PET	0.0	0.0	11,062.0	(354,589.0)	(11,062.0)	(5,834.1)	0.0	0.0	0.0	NA	NA	(360,423.1)
LLDPE	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
PP	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
PS	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
PVC	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
PLA	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Analysis Results

Corrugated Containers	0.0	0.0	44,017.0	(662,631.6)	(44,017.0)	(9,445.8)	0.0	0.0	NA	NA	(672,077.4)
Magazines/third-class mail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Newspaper	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Office Paper	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Phonebooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Textbooks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Dimensional Lumber	0.0	0.0	72,022.0	42,344.7	(72,022.0)	(36,516.6)	0.0	0.0	NA	NA	5,828.1
Medium-density Fiberboard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Food Waste (non-meat)	0.0	0.0	NA	NA	(38,107.0)	(12,813.7)	0.0	0.0	38,107.0	22,254.5	9,440.8
Food Waste (meat only)	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beef	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poultry	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grains	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bread	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fruits and Vegetables	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dairy Products	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yard Trimmings	NA	NA	NA	NA	(11,045.0)	(5,104.4)	0.0	0.0	11,045.0	6,450.3	1,345.9
Grass	NA	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leaves	NA	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Branches	NA	NA	NA	NA	(10,754.0)	(4,619.2)	0.0	0.0	10,754.0	6,280.3	1,661.1
Mixed Paper (general)	0.0	0.0	21,528.0	(438,561.0)	(21,528.0)	(4,833.2)	0.0	0.0	NA	NA	(443,394.2)
Mixed Paper (primarily residential)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Mixed Paper (primarily from offices)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Mixed Metals	0.0	0.0	85,448.0	(5,694,494.6)	(85,448.0)	(45,065.3)	0.0	0.0	NA	NA	(5,739,559.8)
Mixed Plastics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Mixed Recyclables	NA	NA	102,048.0	(1,515,325.9)	(102,048.0)	(31,759.4)	0.0	0.0	NA	NA	(1,547,085.3)
Food Waste Mixed	0.0	0.0	NA	NA	(1,074.0)	(361.1)	0.0	0.0	1,074.0	627.2	266.1
Organics Mixed	NA	NA	NA	NA	(9,794.0)	(3,916.6)	0.0	0.0	9,794.0	5,719.7	1,803.1
MSW Carpet	NA	NA	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
Personal Computers	0.0	0.0	204.0	(4,400.5)	(204.0)	(107.6)	0.0	0.0	NA	NA	(4,508.1)
Clay Bricks	0.0	0.0	96.0	(2,807.3)	(96.0)	(50.6)	0.0	0.0	NA	NA	(2,858.0)
Concrete	0.0	0.0	NA	NA	0.0	0.0	NA	NA	NA	NA	0.0
Fly Ash	NA	NA	0.0	0.0	0.0	0.0	NA	NA	NA	NA	0.0
Tires	NA	NA	0.0	0.0	0.0	0.0	NA	NA	NA	NA	0.0
Asphalt Concrete	0.0	0.0	3,750.0	(13,766.4)	(3,750.0)	(1,977.8)	0.0	0.0	NA	NA	(15,744.2)
Asphalt Shingles	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	NA	0.0
Drywall	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0
Fiberglass Insulation	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	NA	0.0
Vinyl Flooring	0.0	0.0	NA	NA	0.0	0.0	NA	NA	NA	NA	0.0
Wood Flooring	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
	0.0	0.0	NA	NA	0.0	0.0	0.0	0.0	NA	NA	0.0
Total	0.0	0.0	422,080.0	(9,447,877.0)	(492,854.0)	(205,602.1)	0.0	0.0	70,774.0	41,332.0	(9,612,147.1)

a) For explanation of methodology, see the EPA WARM Documentation:

Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks '-- available on the Internet at

<http://epa.gov/epawaste/conserve/tools/warm/SWMGHGreport.html>

b) Emissions estimates provided by this model are intended to support voluntary GHG measurement

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	Disposal Fee Schedule (\$/ton)			Revenue (\$)			Total Disposal Fee Revenue (\$)
	In-District	Out-of-District	Out-of-State	In-District	Out-of-District	Out-of-State	
2012	\$1.25	\$3.50	\$1.25	\$407,732	\$585,749	\$615,202	\$1,608,682.84
2013	\$1.25	\$3.50	\$1.25	\$382,134	\$583,236	\$431,044	\$1,396,413.98
2014	\$1.25	\$3.50	\$1.25	\$385,551	\$943,276	\$378,912	\$1,707,738.62
2015	\$1.25	\$3.50	\$1.25	\$377,433	\$1,161,335	\$410,099	\$1,948,867.25
2016	\$2.00	\$4.00	\$2.00	\$607,194	\$1,042,904	\$588,099	\$2,238,197.50
2017	\$2.00	\$4.00	\$2.00	\$608,740	\$1,487,396	\$524,946	\$2,621,082.04
2018	\$2.00	\$4.00	\$2.00	\$611,782	\$1,494,833	\$527,551	\$2,634,166.15
2019	\$2.00	\$4.00	\$2.00	\$614,841	\$1,502,307	\$530,169	\$2,647,317.01
2020	\$2.00	\$4.00	\$2.00	\$617,916	\$1,509,818	\$532,800	\$2,660,533.62
2021	\$2.00	\$4.00	\$2.00	\$621,005	\$1,517,367	\$535,444	\$2,673,816.32
2022	\$2.00	\$4.00	\$2.00	\$624,110	\$1,524,954	\$538,101	\$2,687,165.43
2023	\$2.00	\$4.00	\$2.00	\$627,231	\$1,532,579	\$540,772	\$2,700,581.28
2024	\$2.00	\$4.00	\$2.00	\$630,367	\$1,540,242	\$543,455	\$2,714,064.22
2025	\$2.00	\$4.00	\$2.00	\$633,519	\$1,547,943	\$546,153	\$2,727,614.56
2026	\$2.00	\$4.00	\$2.00	\$636,686	\$1,555,683	\$548,864	\$2,741,232.66
2027	\$2.00	\$4.00	\$2.00	\$639,870	\$1,563,461	\$551,588	\$2,754,918.85
2028	\$2.00	\$4.00	\$2.00	\$643,069	\$1,571,279	\$554,326	\$2,768,673.48
2029	\$2.00	\$4.00	\$2.00	\$646,284	\$1,579,135	\$557,077	\$2,782,496.87
2030	\$2.00	\$4.00	\$2.00	\$649,516	\$1,587,031	\$559,843	\$2,796,389.38

Source(s) of Information: Historical information based on actual fees collected. Projections assume no change in fee rates and continued operation of the three landfills currently paying disposal fees. Because these calculations are on fees collected, they will not match actual fees received by the district, which are a month later than collected.

Assumptions: Revenue was calculated using an annual increase in the tons accepted at landfills of .05% per year. While some years may actually see decreases, the trend has been holding constant or slight increases.

The District will continue to use a disposal fee for the entire planning period, assuming no legislative changes eliminate or limit disposal fees. At the present time the District disposal fee is \$2.00 per ton for in-district (Tier I) and out-of-state (Tier III) wastes, and \$4.00 per ton for out-of-district waste (Tier II). The fees that are set in this Plan are necessary to provide adequate funding to continue the programs described in this Plan.

There are currently three publicly available landfills in the District that are taking in waste and collecting district disposal fees for the CFLP District.

The fee revenue projected on Table O-1 is based on projections of the amount of in-district, out-of-district, and out-of-state non-exempt waste that will be accepted at publicly available in-District landfills during the planning period. The amounts are based on 28 years of historical data for waste receipts through 2017 and on information obtained in 2018.

Overall waste disposal has decreased by Coshocton and Perry Counties since 1998, has remained level by Licking, and has increased by Fairfield. Overall, district disposal increased 1998-2005, peaked and then decreased back to 1998 levels by 2016. The percentage of our waste disposed in other districts has fluctuated between 9% and 17% since 1999, and will continue to fluctuate as haulers win and lose contracts.

Waste disposed here by other districts decreased dramatically since 1998: from almost 828,000 tons to 165,000 tons in 2012, then began to increase again to near 2009 levels. The biggest factor in the 2010 decrease was the decision by SWACO (Franklin County) to limit exports of their waste to other districts, however, out-of-district waste entering our landfills had been on the decline long before that happened.

Out-of-state waste comprised less than 2% of fee tons accepted in 1998, but grew to 51% in 2012. Tunnell Hill Reclamation's main business is out-of-state waste brought in by rail. The decrease in out-of-district waste combined with the influx of waste from New York and New Jersey as well as fracking waste from Pennsylvania account for this increase. However, the fracking waste decreased in 2013 and is not predictable as a revenue source. The diversion of this material to upcoming beneficial use projects, or a decision by the state to exempt it from disposal fees could eliminate all revenue from this waste stream at any time. In 2016, out-of-state waste accounted for 35% of fee tons. Because of the rail access to Tunnell Hill Reclamation and the investment from the east coast, out-of-state waste is projected to remain fairly steady for the next ten years.

The District is predicting a very small increase in waste receipts during the planning period consistent with the recent minor upward trend. An analysis of the waste receipts at in-district landfills over the past fifteen years shows significant growth in the past five years with the exception of Tunnell Hill. The amount of waste received leveled off before the economic downturn of 2008 and 2009. The District expects a very slight increase in in-district waste for disposal over the duration of the planning period as the counties vie for new businesses. Because these landfills are privately owned and must seek new business to remain profitable, it is expected that they will become more competitive for existing in-district waste or seek new out-of-district and out-of-state contracts.

2. .Generation Fee

Table O-2 Generation Fee Schedule and Revenue

Year	Generation Fee Schedule (\$ per ton)	Total Revenue from Generation Fee (\$)
2012	\$2.00	\$786,871
2013	\$2.00	\$769,616
2014	\$2.00	\$804,958
2015	\$2.00	\$783,953
2016	\$1.25	\$540,384
2017	\$1.25	\$458,003
2018	\$1.25	\$460,293
2019	\$1.25	\$462,594
2020	\$1.25	\$464,907
2021	\$1.25	\$467,232
2022	\$1.25	\$469,568
2023	\$1.25	\$471,916
2024	\$1.25	\$474,275
2025	\$1.25	\$476,647
2026	\$1.25	\$479,030
2027	\$1.25	\$481,425
2028	\$1.25	\$483,832
2029	\$1.25	\$486,251
2030	\$1.25	\$488,682

Source(s) of Information: Historical information based on actual fees collected (not when received by district). Projections assume no change in fee rates and continued generation of waste consistent with history.

Assumptions: Revenue was calculated using an annual increase in the tons disposed at landfills of .5% per year. While some years may actually see decreases, the trend has been holding constant or slight increases. The amount of waste generated, and thus the amount of revenue from generation fees, is directly impacted by the commercial and industrial sector, where the loss of industries reduces both the generation of waste, and often the recycling of waste.

3 Other Revenues

Table O-5: Other Sources of Revenue

Year	Interest	Reimbursements	Total Other Revenue
2012	\$11,237	\$82,966	\$94,203
2013	\$12,183	\$75,413	\$87,597
2014	\$13,445	\$298,283	\$311,727
2015	\$15,623	\$152,253	\$167,876
2016	\$26,239	\$171,919	\$198,158
2017	\$16,861	\$159,162	\$176,023
2018	\$20,000	\$184,838	\$204,838
2019	\$20,000		\$20,000
2020	\$20,000		\$20,000
2021	\$20,000		\$20,000
2022	\$20,000		\$20,000
2023	\$20,000		\$20,000
2024	\$20,000		\$20,000
2025	\$20,000		\$20,000
2026	\$20,000		\$20,000
2027	\$20,000		\$20,000
2028	\$20,000		\$20,000
2029	\$20,000		\$20,000
2030	\$20,000		\$20,000

In 2017, the Licking County Treasurer changed the method for paying interest into the District fund. Beginning mid-year, payments into the fund will be made once per year. Therefore, no interest payments were received the second half of 2017 (hence the significant decrease). Projections were made using an amount midway between 2015 and 2016 levels. Reimbursements consist of contract funds advanced to agencies but not spent on the approved program being returned to the District following the end of the contract year, and funds returned from the sale of district-funded equipment. Because budgets were created to project real costs, the assumption must be that contracts will be totally spent, therefore no reimbursements are projected. We are not able to project when program equipment will be retired from service, nor the amount (if any) gained from their sale, therefore no revenue from the sale of equipment is projected.

4 Summary of District Revenues

Table O-6 Total Revenue

Year	Disposal Fees	Generation Fees	Designation Fees	Other Revenue	Total Revenue
2012	\$1,608,683	\$786,871	\$0	\$94,203	\$2,489,756
2013	\$1,396,414	\$769,616	\$0	\$87,597	\$2,253,627
2014	\$1,707,739	\$804,958	\$0	\$311,727	\$2,824,424
2015	\$1,948,867	\$783,953	\$0	\$167,876	\$2,900,696
2016	\$2,238,198	\$540,384	\$0	\$198,158	\$2,976,739
2017	\$2,621,082	\$458,003	\$0	\$176,023	\$3,255,108
2018	\$2,634,166	\$460,293	\$0	\$204,838	\$3,299,297
2019	\$2,647,317	\$462,594	\$0	\$20,000	\$3,129,911
2020	\$2,660,534	\$464,907	\$0	\$20,000	\$3,145,441
2021	\$2,673,816	\$467,232	\$0	\$20,000	\$3,161,048
2022	\$2,687,165	\$469,568	\$0	\$20,000	\$3,176,733
2023	\$2,700,581	\$471,916	\$0	\$20,000	\$3,192,497
2024	\$2,714,064	\$474,275	\$0	\$20,000	\$3,208,339
2025	\$2,727,615	\$476,647	\$0	\$20,000	\$3,224,261
2026	\$2,741,233	\$479,030	\$0	\$20,000	\$3,240,262
2027	\$2,754,919	\$481,425	\$0	\$20,000	\$3,256,344
2028	\$2,768,673	\$483,832	\$0	\$20,000	\$3,272,505
2029	\$2,782,497	\$486,251	\$0	\$20,000	\$3,288,748
2030	\$2,796,389	\$488,682	\$0	\$20,000	\$3,305,072

Source(s) of Information: This information is a compilation of data from previous tables.

B. Cost of Implementing Plan

Table O-7 is a planning tool. More than 28 years of history provides a sound basis for developing the annual costs of maintaining or expanding the mandatory programs. The District is committed to implementing the mandatory programs in a cost-effective manner. Failure to expend the full amount included in this Plan for a facility, activity or service should not be considered as evidence that the Plan is not being fully or appropriately implemented. In addition, nothing contained in these cost projections should be construed as a binding commitment by the District to provide a specified amount of money for a particular program, activity or service. The District Board of Directors, with the advice and assistance of District staff and the Policy Committee, will review and revise the annual District budget as needed to implement planned programs and activities as effectively as possible with the funds that are available.

It has long been the policy of the District that if a member county realizes a savings within its programming, they may use the savings to expand their programs within the solid waste plan.

This gives each county the incentive to be fiscally conservative for the benefit of its constituents. Therefore, if a county spends less than the projected amount in Tables 5 on a specific program, the savings will be reserved for that county's use rather than reallocated to another county. It is this funding that is referred to throughout the expenditure portion as "if funds are available".

For the first time, the District is setting aside a significant amount of funding for capital improvements. The processing infrastructure available to the District is inadequate, and the reliance upon private companies in other Districts makes cost control very difficult. The actual cost of addressing this issue may cost more or less than the amount set aside. The District will already be working on the next plan update at the time this is happening, and the budget will be adjusted as needed to ensure that improvements can be made.

Table O-7 Expenses

Line #	Category/Program	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	1. Plan Monitoring/Prep.	-	294	5,941	-	153	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.a	a. Plan Preparation	-	294	5,941	-	153	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.b	b. Plan Monitoring																			
1.c	c. Other																			
2	2. Plan Implementation	1,714,579	1,783,880	1,697,904	1,750,412	1,940,016	2,030,064	2,510,390	3,331,710	5,583,854	2,788,473	2,634,014	2,686,297	2,790,784	2,866,772	2,887,323	2,967,415	3,109,624	3,121,202	3,255,873
2.a	a. District Administration	163,514	163,061	174,872	171,555	180,925	178,570	193,727	212,454	202,457	206,330	217,409	220,115	233,022	231,447	238,580	239,856	248,266	249,708	261,407
2.a.1	Personnel	131,998	137,086	143,415	147,645	151,656	155,950	162,320	168,537	175,042	181,844	188,958	194,973	201,265	204,879	208,684	212,756	217,112	221,774	226,762
2.a.2	Office Overhead	26,689	21,868	28,457	21,560	27,272	21,070	26,407	38,918	22,415	19,486	23,451	20,142	26,757	21,568	24,896	22,101	26,153	22,935	29,645
2.a.3	Other - Legal	4,827	4,107	3,000	2,350	1,998	1,550	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
2.b	b. Facility Operation	3,394	4,039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.b.1	MRF/Recycling Center																			
2.b.2	Compost	3,394	4,039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.b.3	Transfer																			
2.b.4	Special Waste																			
2.c	c. Landfill Closure/Post-Closure																			
2.d	d. Recycling Collection	989,296	827,339	834,019	804,094	1,023,543	1,071,618	1,517,862	2,309,105	1,566,889	1,692,121	1,550,601	1,577,644	1,626,797	1,714,076	1,705,929	1,761,108	1,853,302	1,859,591	1,959,925
2.d.1	Curbside	4,499	8,398	4,594	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.d.2	Drop-off	946,538	781,529	777,995	727,569	934,845	951,758	1,309,277	2,087,386	1,335,327	1,383,156	1,306,870	1,325,148	1,367,260	1,458,576	1,444,041	1,492,710	1,577,979	1,577,236	1,670,281
2.d.3	Combined Curbside/Drop-off																			
2.d.4	Multi-family																			
2.d.5	Institutional	38,259	37,412	51,430	76,525	88,698	119,861	208,585	221,719	231,562	308,965	243,730	252,497	259,538	255,500	261,888	268,398	275,322	282,355	289,645
2.d.6	Other																			
2.e	e. Special Collections	2,000	7,411	1,670	1,760	241	2,177	5,000	7,000	5,000	7,000	5,000	7,000	5,000	7,000	5,000	7,000	5,000	7,000	5,000
2.e.1	Tire Collection																			
2.e.2	HHW Collection	-	6,555	-	200	-	1,680	5,000	7,000	5,000	7,000	5,000	7,000	5,000	7,000	5,000	7,000	5,000	7,000	5,000
2.e.3	Electronics Collection																			
2.e.4	Appliance Collection																			
2.e.5	Other Collection Drives	2,000	855	1,670	1,560	241	497	-	-	-	-	-	-	-	-	-	-	-	-	-
2.f	f. Yard Waste/Other Organics																			
2.g	g. Education/Awareness	386,424	406,717	476,667	532,461	512,845	511,242	619,125	615,827	644,764	676,564	693,098	712,973	727,788	746,625	768,528	788,496	831,243	831,214	854,546
2.g.1	Education Staff																			
2.g.2	Advertisement/Promotion	1,000	1,931	-	-	-	-	-	500	500	500	500	500	500	500	500	500	500	500	500
2.g.3	Other	385,424	404,786	476,667	532,461	512,845	511,242	619,125	615,327	644,264	676,064	692,598	712,473	727,288	746,125	768,028	787,996	830,743	830,714	854,046
2.h	h. Recycling Market Development	6,382	16,378	-	1,150	227	9,293	-	-	-	-	-	-	-	-	-	-	-	-	-
2.h.1	General Market Development Activities	6,382	16,378	-	1,150	227	9,293	-	-	-	-	-	-	-	-	-	-	-	-	-
2.h.2	ODNR pass-through grant																			
2.i	i. Service Contracts	111,770	301,704	147,851	169,989	165,755	194,839	-	-	-	-	-	-	-	-	-	-	-	-	-
2.j	j. Feasibility Studies	-	-	-	-	-	-	-	25,000	3,000,000	-	-	-	-	-	-	-	-	-	-
2.k	k. Waste Assessments/Audits																			
2.l	l. Dump Cleanup																			
2.m	m. Litter Collection/Education	51,800	57,231	62,825	69,403	56,481	62,326	92,175	62,324	64,744	106,458	67,905	68,564	98,176	67,625	69,285	70,955	71,813	73,688	74,995
2.n	n. Emergency Debris Management																			
2.o	o. Loan Payment																			
2.p	p. Other						-	82,500	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000

3	3. Health Dept. Enforcement	163,061	161,235	162,949	129,928	135,787	159,778	174,112	219,071	193,894	221,188	208,190	223,700	234,427	245,462	271,513	270,000	282,177	290,858	300,406
	Health Department Name: all four	163,061	161,235	162,949	129,928	135,787	159,778	174,112	219,071	193,894	221,188	208,190	223,700	234,427	245,462	271,513	270,000	282,177	290,858	300,406
	Health Department Name:																			
	Health Department Name:																			
	Health Department Name:																			
4	4. County Assistance	-	-	-	-	-	110,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
4.a	a. Maintaining Roads																			
4.b	b. Maintaining Public Facilities																			
4.c	c. Providing Emergency Services																			
4.d	d. Providing Other Public Services	-	-	-	-	-	110,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
5	5. Well Testing																			
6	6. Out-of-State Waste Inspection																			
7	7. Open Dump, Litter Law Enforcement	199,095	196,653	141,007	159,936	166,237	207,072	278,370	252,107	297,368	262,846	268,551	274,493	280,669	287,120	293,841	300,846	348,150	315,766	323,706
7.a	a. Heath Departments	-	1,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.b	b. Local Law Enforcement	199,095	195,153	141,007	159,936	166,237	207,072	278,370	252,107	297,368	262,846	268,551	274,493	280,669	287,120	293,841	300,846	348,150	315,766	323,706
7.c	c. Other																			
8	8. Heath Department Training																			
9	9. Municipal/Township Assistance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.a	a. Maintaining Roads																			
9.b	b. Maintaining Public Facilities																			
9.c	c. Providing Emergency Services																			
9.d	d. Providing other Public Services																			
10	10. Compensation to Affected Community (ORC Section 3734.35)																			
	Total Expenses	2,076,736	2,142,062	2,007,801	2,040,276	2,242,193	2,506,914	3,012,871	3,852,888	6,125,116	3,322,507	3,160,755	3,234,489	3,355,880	3,449,353	3,502,676	3,588,261	3,789,951	3,777,825	3,929,986

:

*Explanation of Expenses***1 Plan Monitoring/Prep.**

- 1.a Plan Preparation - absorbed into District Office expenses. District staff writes the plan, facilitates committee meetings, holds hearings and publishes required notices.
- 1.b Plan Monitoring - absorbed into District Office expenses. This has always been a function of the District Office.
- 1.c Other - none

2 Plan Implementation

- 2.a District Administration - the majority of these costs fulfill Goal #9. The District Office also provides waste reduction and recycling information and technical assistance for industrial waste generators. Projected costs anticipate no major changes in employment or function that would necessitate an increase or decrease in expenses.
 - 2.a.1 Personnel - Salary and benefits (including public employees retirement, medical insurance, and payroll taxes) for two full time employees - Director and Assistant Director, 2% annual cost of living increases projected.
 - 2.a.2 Office Overhead - Rent, supplies, communications, postage, biennial state audits, travel, insurance, auditor/treasurer services, costs of preparing plan updates, and public records management. Only rent used an inflation factor, which is 4% as written in the annual lease. There is no plan to expand this office. The spike in 2019 is replacement of the district vehicle which was purchased in 2002.
 - 2.a.3 Other - Legal fees through private attorney, budgeted at a rate that supports regular business. In the event more funds are needed to address a specific legal issue, the Board of Directors may adjust the annual budget accordingly, therefore no inflation factor was used.
- 2.b Facility Operation - no facilities are operated by the District, nor are any projected.
 - 2.b.1 MRF/Recycling Center
 - 2.b.2 Compost
 - 2.b.3 Transfer
 - 2.b.4 Special Waste
- 2.c Landfill Closure/Post-Closure - no landfills are owned by the District
- 2.d Recycling Collection

- 2.d.1 Curbside - No funds are budgeted specifically for this purpose, although communities may request assistance with implementing curbside programs throughout the planning period if funds are available.
- 2.d.2 Drop-off - The District enters into annual contracts with member counties to provide countywide drop-off recycling to meet Goal #1. The costs include collection and processing of recyclable materials. Projected costs include the replacement of collection equipment to increase efficiency.

This Plan requires that the recycling programs provide access through the entire planning period and includes the expectation that the recycling programs will aggressively work to remove more material from the waste stream each year to meet Goal #2. It is important that each of the county programs be adequately funded to meet present and future challenges. Past expenses reflect a maintenance of current drop-off sites and staffing, while the projection for the planning period reflects an investment in equipment and facilities that will serve the recycling programs long past the coming ten years, and an expansion of the services to a broader audience than the minimum needed for achieving Goal #1. Therefore, costs saved by increasing efficiency of equipment will be offset by program expansion.

Each County Recycling Office was asked to prepare projections for the costs of operations and capital expenditures for ten years. Factors that were considered included the number of staff, the amount of fuel, the volume of materials to be processed to expand operations and accommodate growth, need for additional and replacement equipment including trucks, trailers, and/or containers. Even though the cost projections are based on realistic scenarios for anticipated needs, actual expenditures may vary. Annual budgets will be responsive to ongoing assessments of capital needs to increase efficient program operation. The capital costs are not broken out (i.e. trucks, trailers, etc.) from operational costs and are part of the contract between the District and individual counties to provide recycling access. Expansions and upgrades are beginning as early as 2018 and will continue through the first five years of this plan to ensure all county programs are improved. Even with saving money by improving efficiency, operational costs for staff, fuel, and maintenance continues to rise, and the increase in the number of sites to address multi family units will increase the cost of providing this service.

Rather than using one inflation factor applied to all expenses in every county, inflation factors were tailored to each line item in each county where appropriate, similar to the method used for District administration. For example, medical insurance for an employee using only single coverage is vastly different than medical insurance for an employee in another county for family coverage. Each office used real numbers for projections based on current staffing.

After bidding out residential recycling drop-off collection services to the private sector, Licking County divested itself of staff and equipment no longer in use. The decrease in expenditures for 2013, 2014 and 2015 are reflective of this contract. The savings realized by this action resulted in a large carryover of funding for Licking County. However, the risk of privatization is the possibility of a lack of competitive bids when it is time to renew the contract. Were this to happen in 2018, it would be necessary to directly provide the services as the county did prior to privatization. To eliminate any impact on the other three counties should this scenario arise, Licking County is holding the majority of their savings in reserve, and that reserve is reflected within this plan budget. With this prudent action, Licking County will have adequate funds to rehire staff and purchase collection equipment without impacting the other three counties and their budgetary needs. The longer the contract is successfully privatized, the less of the reserve will be needed, and Licking County may be able to use it to further expand recycling services and meet future solid waste diversion responsibilities. This is an example of how the current policy of retaining saved funds within the county that realized the savings versus redistributing it between all counties benefits the county taking the action. Using the worst case scenario, this budget would allow Licking County to again collect recyclables using the direct method without negatively impacting other member counties.

Counties cannot rely upon revenue from the sale of materials to offset collection/processing costs, as the processors currently retain all such revenue. Both Community Action and PerCo have retained the revenue realized by selling processed materials to support operations at their recycling centers beyond what District contracts cover. Additionally, they have applied for grant funding from external sources or used general fund dollars to supplement District funding.

In the case of PerCo Recycling Center, administration of the facility is changing in 2018. Although the land and building have always been the property of Perry County, the operation of the business has been subcontracted to PerCo, Inc., a nonprofit organization by the county's Board of Developmental Disabilities. Beginning in 2017, the Board of DD is divesting itself of its connection to PerCo, Inc., and the County Recycling Office will assume managerial responsibility of the recycling center in 2018. It is expected that PerCo Inc. will continue to provide processing labor, while county employees will continue to provide collection labor. Cost to the District will increase, with the addition of the collection labor added to the District contract.

To ensure that residents receive the best service available at the least cost, counties will continually monitor and analyze recycling drop-off costs and assess the opportunity for improvement. This analysis will be included in annual applications for District funding so that any recommended changes can be implemented smoothly and annual budgets set appropriately.

Changes are beginning in 2018 with the upgrade of collection equipment, retiring the obsolete Alleycat trailers and replacing them with more efficient containers.

Where long term cost savings and improved service can be realized, counties will be encouraged to pursue those changes. Expenditure by the District of less than the budgeted amount in any year of the planning period due to a change in operations will not be considered a material change warranting a plan revision, but will be considered sound fiscal management of public dollars. Savings realized may be used to fund additional recycling programs to increase diversion from landfilling.

2.d.3 Combined Curbside/Drop-off - none

2.d.4 Multi-family - The cost to provide recycling drop-off services to multi-family residences has been budgeted above and will not be tracked separately. Note - it is part of the reason for rising operational costs. County recycling offices will make a concerted effort to site recycling drop-off locations convenient to multi-family residences to give them equal access to recycling as have other county residents.

2.d.5 Business/Institutional - Each county recycling office has historical data on the cost of providing recycling collection services to local government offices and public schools. Because this plan update emphasizes the expansion of services to more public facilities, the County Recycling Offices factored in the increased time and fuel that will be necessary to provide that service. Costs vary between counties because of the number of facilities to be added, the distance between facilities, the number of personnel needed to collect materials, and the equipment being used to transport materials. Costs include personnel, fuel, vehicle maintenance, and periodically, additional containers. This may turn out costing less than budgeted, however, because school districts independently contract for waste services, and may prefer to have their hauler provide recycling as well. Our goal is to increase their recycling regardless of the service provider. Where there are spikes in costs, that is when equipment is being purchased to either replace old equipment, or expand the number of containers/vehicles to operate the program.

2.d.6 Other

2.e Special Collections - Where counties hold collection drives, participants are charged a fee that covers the cost of disposing the items collected or vendors that do not charge for disposal are used, thus eliminating the need for District funds.

2.e.1 Tire Collection - self supporting

2.e.2 HHW Collection - The District Office will continue to purchase pre-paid boxes and distribute them to counties to collect CFL and tube light bulbs and household batteries, and to pay the cost of disposing of collected mercury from households. Collection services will be available in at least one location per county. By agreeing to pick up and deliver the battery boxes to Retrie Technologies in Lancaster, the District receives a deeply discounted price on the boxes, allowing more to be purchased each year than would be possible if we used the mailing label.

2.e.3 Electronics Collection - self supporting

2.e.4 Appliance Collection - self supporting

2.e.5 Other Collection Drives - self supporting

2.f Yard Waste/Other Organics - not budgeted

2.g Education/Awareness

2.g.1 Education Staff - see below

2.g.2 Advertisement/Promotion - see below

2.g.3 Other - The costs included are based on past experience and anticipate future needs. Although funding for four individual county programs is included in the budget, in the event that District revenue is insufficient to adequately fund mandatory programs in this Plan, the education programs that are required by this Plan to meet State Plan Goals may be implemented by the District office or a consolidated education program. Even though the District reserves the option of managing the mandatory outreach programs on a District-wide basis, the District's preference is to maintain programs in each county which specifically address local needs and opportunities.

In addition to the outreach functions of the four County Recycling Offices, this line item includes the cost of adequately staffing and administering all of the programs that are implemented in each of the four counties and which are detailed in this Plan. In addition to overseeing and implementing waste reduction and recycling outreach programs, it is expected that local Recycling Office Managers and staff have solid waste management duties which include many other functions. Examples include administering recycling contracts, assisting local governments in planning and evaluating recycling programs and in applying for and administering market development contracts, assisting in the management of disaster debris, and participating on Solid Waste District committees. Past experience has shown that it is extremely difficult and inefficient to separate the staff costs and support expenses for each of these duties. The District funds each program through an annual contract process which was developed and is implemented to assure that District funding is utilized to address the requirements of the District Plan.

In order to meet the requirements of State Plan Goals #3 and #4, each County Recycling Office will create an annual outreach and marketing plan which will

clearly define the strategies that will be used to market to each target audience and will describe how the strategy or program will effect a change in behavior resulting in increased recycling and waste reduction. Because the Marketing and Outreach Plan for each county will be tailored to the needs of the county and will change from year to year as conditions change or new opportunities arise, it is impossible to break out their future activities into line items and assign arbitrary costs to them. Rather, each County Recycling Office will submit an annual funding application that includes activities for the following year, with a budget that will be approved by the District Board of Directors. Approved expenditures will be based on the needs identified in the marketing plans and will be included in annual contract process. Projections of cost for these programs is based on historical costs and expected increases in medical insurance, salaries, and office expenses. Approximately 81% of outreach costs are for salary and fringes. Real numbers using current staff were used rather than one inflation factor applied to all counties.

2.h Recycling Market Development

2.h.1 General Market Development Activities

2.h.2 Ohio EPA pass-through grant

2.i Service Contracts - Each year, the District advances the full amount of contract funds awarded to the various programs. Funds advanced but not spent are returned to the District by March of the following year. They cannot be projected, because the projections are that each program is requesting the amount of money they will spend, and there will be no funds returned. However, there are always funds returned, and the District keeps track of the amounts returned by each county. They can then request to use those funds in following years to either supplement what is already budgeted for existing programs, or use those funds to implement additional programs. Thus, there is an historical amount where funds have been advanced (and thus spent by the District) but returned (and shown as revenue on those charts) but no amounts for future years. Note: the amount shown as reimbursement in revenue contains funds reimbursed to the District for the sale of obsolete district-funded equipment, so the two line items do not match exactly. This line item should not be considered a budgeted expense line item. It is merely a place holder to show that funds were advanced (spent) by the District and so money left the District account. When it has been returned as revenue, it became part of the overall amount of money available for programs.

2.j Feasibility Studies - The District has budgeted \$25,000 in 2019 to conduct a study on the improvements needed to provide sufficient processing capacity for District recyclables. It is known that current facilities cannot handle all the collected materials without changes to their structure and/or equipment, and that an additional facility may be needed. The Board of Directors will issue a Request for Proposals and choose a contractor with experience in recycling material recovery facilities. Following the recommendation of the contractor, the Board of Directors will create a detailed budget for any construction costs to be undertaken. In 2020,

an amount of \$3 million has been budgeted to implement the recommendations of the study, however actual costs will depend upon the results of the study. The amount budgeted was what was available without raising fees or cutting existing programs. It is impossible to give any detail as to where, when and what will be constructed prior to the study. It is possible that private recyclers will open their own facilities in that time period, making District construction unnecessary. Should the District require more funding than is budgeted, we will undertake a plan revision to reallocate funding. Should less funding be needed than is budgeted, the excess will be moved to the line item 2.p where special projects are funded.

- 2.k Waste Assessments/Audits - Budgets for this activity are included in Education programs.
- 2.l Dump Cleanup - Local agencies are responsible for ensuring that open dump sites do not persist, and that responsible parties are held accountable for clean-up costs. Only local health departments are eligible to apply for funds to clean up open dumps on private land through their enforcement process. Private land cannot be cleaned up with District contract funds without health department enforcement to recover cleanup costs through property liens or assessments, and any other means available to the department. If a disaster is declared in the contractor's jurisdiction, contract funds may be used to assist in the cleanup of disaster debris where other funding is not available. Funding may be provided via contracts following an application from the Health Department for financial assistance. Historically these projects are very expensive and liens have not recovered funds from property owners, therefore it is unlikely that funding will be available for this purpose.
- 2.m Litter Collection/Education - Property maintenance is the responsibility of the landowner, which in the case of public property is the local government or state. Therefore, local agencies are eligible to apply for funds to clean up dumps on public land and along roadways and public easements. Applications that request funds for specific dump site cleanup must include a list of the specific dump sites to be cleaned, a timeline for cleanup, and the method by which collected materials will be disposed or recycled. Adopt-an-Area Programs are included in this activity. If a declared disaster occurs within the contractor's jurisdiction and assistance in cleanup is required, this program may assist where debris is located on public property. Approximately 36% of funding covers salary and fringes for a litter collection supervisor with the remainder covering bags, gloves, vehicle maintenance, fuel and disposal of collected waste. Two counties employ part time litter collection supervisors (Coshocton and Perry).
- 2.n Emergency Debris Management - not a budgeted expense
- 2.o Loan Payment - not applicable
- 2.p Other - An amount of \$100,000 has been budgeted annually to fund special projects that are mentioned throughout this plan as "may be implemented as funds are available". These special projects may include assisting communities begin

curbside recycling programs, assisting private companies develop markets for recyclable materials, or purchasing surveillance cameras for recycling drop-off sites to assist in prosecuting open dumping cases.

3 **Health Dept. Enforcement**

Four County Health Departments: The Solid Waste Management District relies upon local health departments to ensure that federal, state, and local solid waste laws and regulations are followed. While OEPA-approved Health Departments are required to have solid waste enforcement programs meeting certain minimum standards, district contracts require each Health Department go beyond the minimum requirements. Therefore, to **supplement** (not replace) the existing revenues for solid waste programs, the District may provide contracts to health departments to inspect facilities, investigate complaints, and prosecute violators. This contract may also cover time spent by the solid waste sanitarian assisting in the management of debris following a declared disaster, as specified in the jurisdiction's emergency plan for Disaster Debris Management. Costs covered may include salary and fringes, vehicle expenses, equipment, supplies, and training to maintain the sanitarian's registration requirements until OEPA training is created. Approximately 90% of the funding is salary and fringes. Funding is provided via contracts following an application from the Health Department for financial assistance. Projections for this plan update included factoring in the time needed to increase focus on tire regulations.

- 4 County Assistance** - Ohio Revised Code allows solid waste districts to use funding derived from disposal fees to assist counties, offset additional costs of maintaining roads and other public facilities, and providing emergency and other public services where solid waste facilities (defined as incineration, composting, sanitary landfilling, or other methods of disposal of solid wastes, or for collection, storage or processing of scrap tires, transfer of solid wastes, or storage, treatment or disposal of hazardous waste) operate. District funds may not replace funding for activities that would be occurring if the solid waste facility were not there. It is the responsibility of the applicant to demonstrate that but for the location and operation of the solid waste facility, the requested expenses would not be incurred. Funding is provided via contracts following an application from the County for financial assistance. This assistance has been budgeted at \$50,000 per year, and the unused amount will be reserved within this line item for future years. The budget does not separate this funding into categories as the needs are sporadic and unpredictable.

- 4.a Maintaining Roads
- 4.b Maintaining Public Facilities
- 4.c Providing Emergency Services
- 4.d Providing Other Public Services -

- 5 Well Testing** - To identify possible health risks to district residents living near solid waste disposal facilities (for any site contained within the District's solid waste management plan), Health Departments may test water wells for contamination if funding is available. Local Health Departments have developed criteria by which to determine if a request for testing is within their parameters. Solid Waste District funds may be used for testing near

closed or currently operating facilities, and also background testing adjacent to newly permitted, unconstructed sites. Funding is provided via contracts following an application from the Health Department for financial assistance, however, no funds have been specifically set aside for this activity. If member counties have achieved a savings from other programs and wish to use it for this purpose, the Board of Directors may adjust the annual budget accordingly.

- 6 Out-of-State Waste Inspection** - While no funds have been specifically set aside for this purpose, the District anticipates there may be a future need for this expense. Should circumstances arise where the acceptance of out-of-state waste characterized as exempt impacts district fees or local communities, the District may initiate a program of inspecting the out-of-state waste received to ensure accurate characterization. In addition to the initial cost of installing inspection equipment (ie. cameras), it would become the responsibility of the local Health Department to monitor the program, thus increasing their annual cost. The Board of Directors may revise the annual budget accordingly.

7 Open Dump, Litter Law Enforcement

- 7.a Heath Departments - not applicable
- 7.b Local Law Enforcement - Local law enforcement agencies may receive funding from the Solid Waste District to assign personnel to enforce litter laws and issue citations for violations. Litter law enforcement officers work closely with local Recycling offices and local health departments to ensure coordinated efforts to deter littering. The deputy's role in handling debris from declared disasters, as written in the county's emergency plan may be covered under this contract. Costs may include salary and fringes, supplies, vehicle expenses, training and equipment. Approximately 93% of funding covers salary and fringes. Funding is provided via contracts following an application from the Sheriff Office for financial assistance. Cost projections included the need for increased attention to tire retailers, resellers, transporters and facilities.
- 7.c Other

8 Heath Department Training - Program not created

- 9 Municipal/Township Assistance** - This provides financial assistance to individual municipalities and townships to defray their added costs of maintaining roads and other public facilities and of providing emergency and other public services resulting from the location and operation within their boundaries of a composting, energy or resource recovery, incineration or recycling facility that either is owned by the district or is furnishing solid waste management facility or recycling services to the District pursuant to a contract or agreement with the Board of Directors. Anticipating no claims of added costs for such a facility, no funds are budgeted within this plan, however, if circumstances change within the planning period, the Board of Directors may adjust the budget accordingly.

- 9.a Maintaining Roads
- 9.b Maintaining Public Facilities

9.c Providing Emergency Services9.d Providing other Public Services**10 Compensation to Affected Community (ORC Section 3734.35) - not applicable****Table O-8 Budget Summary**

Year	Revenue	Expenses	Annual Surplus/Deficit (\$)	Balance (\$)
2011	Ending Balance			\$4,270,972
2012	\$2,489,756	\$2,076,736	\$413,021	\$4,683,993
2013	\$2,253,627	\$2,142,062	\$111,565	\$4,795,558
2014	\$2,824,424	\$2,007,801	\$816,623	\$5,612,181
2015	\$2,900,696	\$2,040,276	\$860,421	\$6,472,601
2016	\$2,976,739	\$2,242,193	\$734,545	\$7,207,147
2017	\$3,255,108	\$2,506,914	\$748,194	\$7,955,341
2018	\$3,299,297	\$3,012,871	\$286,425	\$8,241,766
2019	\$3,129,911	\$3,852,888	-\$722,977	\$7,518,789
2020	\$3,145,441	\$6,125,116	-\$2,979,676	\$4,539,114
2021	\$3,161,048	\$3,322,507	-\$161,459	\$4,377,654
2022	\$3,176,733	\$3,160,755	\$15,978	\$4,393,632
2023	\$3,192,497	\$3,234,489	-\$41,993	\$4,351,640
2024	\$3,208,339	\$3,355,880	-\$147,541	\$4,204,099
2025	\$3,224,261	\$3,449,353	-\$225,092	\$3,979,006
2026	\$3,240,262	\$3,502,676	-\$262,413	\$3,716,593
2027	\$3,256,344	\$3,588,261	-\$331,917	\$3,384,676
2028	\$3,272,505	\$3,789,951	-\$517,446	\$2,867,230
2029	\$3,288,748	\$3,777,825	-\$489,077	\$2,378,153
2030	\$3,305,072	\$3,929,986	-\$624,914	\$1,753,239

Source(s) of Information: This table is a compilation of data from previous tables. Revenue is as the fees are collected, not as they are received by district. Expenses are as they are made from the district account.

Assumptions: This table assumes that all landfills will continue to operate and that fees will not change within the planning period.

At the end of the planning period, the District will have a balance of more than one year of operating expenses, which allows sufficient time to revise fees or programs to maintain a positive balance.

APPENDIX P DESIGNATION

A. Statement Authorizing/Precluding Designation

At the present time the District has not designated facilities to which District waste must be taken. Unless at some time during the planning period, the District designates a disposal facility or facilities, in accordance with the right to designate reserved herein, waste generated in the District may be taken to any licensed solid waste disposal facility selected by the waste generator or waste hauler.

Source separated recyclable materials may be given or sold by the owner to the hauler, broker, scrap collector, or processor selected by the owner.

Yard waste may be taken to any registered composting facility.

Lists of landfills, recycling facilities and composting facilities presented in this plan are included to identify the facilities that have been or are known to be available to accept materials generated in the District. These lists are not intended to be an endorsement of these facilities or to preclude placement of materials at facilities that are not listed.

The District reserves the right to designate a facility or facilities. The Board of Directors of the Coshocton-Fairfield-Licking-Perry Solid Waste Management District is hereby authorized to establish facility designations in accordance with Section 343.014 of the ORC after this plan has been approved by the Director of the Ohio Environmental Protection Agency.

B. Designated Facilities

Table P-1 Designated Facilities

This table has been omitted as there are no designated facilities.

APPENDIX Q DISTRICT RULES

A. Existing Rules

PUBLIC NOTICE

ORC Section 121.22 requires all public officials to take official action and to conduct all deliberations upon official business only in open meetings, unless the subject matter is specifically exempted by law, and sets forth notice requirements. This rule provides clear direction as the methods that the District will use to provide adequate notice.

Rule CFLP 1.0

PUBLIC NOTICE

All committees of the CFLP Joint Solid Waste Management District will cause public notice to be given of all meetings of the full committee and of any subcommittees or committees of the full Board of Directors through mailing or faxing (if time is too short for mailing) copies of meeting agendas or notices to all news media and individuals that have requested notification, consistent with Section 121.22 ORC. In addition, notice will be given to at least one newspaper of general circulation in each county and the administrative offices of each county for posting, so that the public may determine where and when meetings will be held, and the general subject matter of each.

B. Proposed Rules

There are no additional rules proposed in this planning period.

APPENDIX R BLANK SURVEY FORMS AND RELATED INFORMATION

Each year since 1993, the District has sent surveys to local governments, recyclers, haulers and industries to gather information about their recycling efforts. This annual survey serves the purpose of communicating on a regular basis with our customers, maintaining an updated mailing list, and updating the information about recycling within the district. In recent years, email distribution has been used to reduce the cost of supplies and postage needed and has decreased the response time in many cases.

The District attempted one commercial survey many years ago. The difficulty in obtaining valid addresses and contact information, and thus the added expense of postage for surveys that were returned undelivered, exceeded the benefit of information received. More recently, the District recently partnered with the Ohio EPA on their commercial recycling survey. Although no responses have been received via this method as yet, it is another avenue for gaining information.

**2016 ANNUAL REPORT
RECYCLERS**

Current Contact Information:

Contact Person: _____

Phone Number: _____

E-mail address: _____

RECYCLING BY MATERIAL

Tons that you collected for recycling **that came from Coshocton, Fairfield, Licking or Perry Counties**. If you recycled materials that originated in other counties, those counties should be including it on their annual reports, but we cannot include it on ours.

MATERIAL	RESIDENTIAL RECYCLING TONS	COMMERCIAL RECYCLING TONS	INDUSTRIAL RECYCLING TONS	WHERE DID YOU SEND THIS MATERIAL?
Appliances				
Batteries				
Glass				
Metals-ferrous				
Metals-nonferrous				
Corrugated cardboard				
Newsprint				
Office Paper/Mixed Paper				
Plastics				
Textiles				
Yard Waste				
Used motor oil				
Wood				
Electronics scrap				
Other (please specify)				
TOTALS:				

(Continued on back)

RECYCLING SERVICES OFFERED:

1. Recycling Center Hours of Operation Open to the Public:

2. Materials accepted:

☐ clear glass	☐ brown glass	☐ green glass
☐ newspaper	☐ office paper	☐ magazines
☐ corrugated cardboard	☐ paperboard	☐ other fiber
☐ #1 plastic	☐ #2 plastic	☐ other plastic
☐ aluminum cans	☐ scrap aluminum	☐ scrap ferrous
☐ steel/tin cans	☐ wood	☐ electronics
☐ appliances	☐ lead acid batteries	☐ household batteries
☐ motor oil	☐ antifreeze	☐ textiles
☐ tires	☐ yard waste	☐ food waste
☐ other (please list) _____		

3. Do you provide pickup service, and if so, how far away are you able to service?

MAY WE POST THIS INFORMATION ON OUR WEBSITE? ____YES ____ NO

IF YOU HAVE A WEBSITE THAT YOU WOULD LIKE TO HAVE LINKED TO YOUR INFORMATION ON OUR WEBSITE, PLEASE GIVE US THE LINK:

(check our website at www.cflpswd.org to see how your information is posted)

2016 ANNUAL REPORT
SOLID WASTE HAULERS

1. CURRENT INFORMATION

Contact Person: _____

Phone Number: _____

E-mail address _____

2. Trash hauling services provided: (please check all that apply)

____ Residential ____ Commercial ____ Industrial

3. Counties you provide trash hauling services to:

____ Coshocton ____ Fairfield ____ Licking ____ Perry

4. Disposal Facilities Used _____

5. Do you offer recycling service to individual subscription customers? ____ Yes ____ No

6. Do your customers pay extra for that recycling service? ____ Yes ____ No

7. Please list communities in our four counties where your company has an exclusive contract to provide **recycling** services and indicate if the price is included so that everyone has the service whether they use it or not (nonsubscription) or if residents who want it sign up and pay extra for the service (subscription).

Name of Community

Nonsubscription or Subscription

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(continued on the back)

8. RECYCLING TABLE:

Please list only the tons that came from Coshocton, Fairfield, Licking or Perry Counties. If you are recycling materials from other counties, those counties should be including it on their annual reports, but we cannot include it on ours.

MATERIAL	RESIDENTIAL RECYCLING	COMMERCIAL RECYCLING	INDUSTRIAL RECYCLING	WHERE DID YOU SEND THIS MATERIAL? *
	TONS	TONS	TONS	
Appliances				
Batteries				
Glass				
Metals-ferrous				
Metals-nonferrous				
Corrugated cardboard				
Newsprint				
Office Paper/Mixed Paper				
Plastics				
Textiles				
Yard Waste				
Used motor oil				
Wood				
Electronics scrap				
Other (please specify)				
TOTALS:				

* The reason we ask where you sent the recyclables is so we don't double count it if we receive surveys from those companies as well.

If you would like your listing on our website to link to YOUR web page, we would be glad to do that. Please give us your web page link here: _____

Appendix R Blank Survey Forms and Related Information

Industrial Waste Annual Survey - 2016 Solid Waste District : Coshocton/Fairfield/Licking/Perry

Company Profile - Mailing information:

Changes: _____

Company Profile - Contact Information: Phone Number: _____

E-mail Address: _____

Company Profile - Operations Information: Number of employees in 2016 _____

Product manufactured: _____

In this table, please list the amount of each solid waste **recycled** and the facility the recycled material was sent to. Do not report liquid waste or waste that was disposed.

MATERIAL TYPE	Amount Recycled Tons	Facility OR COMPANY THIS Material WAS Sent To
Batteries		
Food		
Glass		
Cardboard		
Paper (include newspaper)		
Plastic – all types		
Ferrous Metal		
Non-ferrous Metal		
Nonexempt foundry sand and slag		
Rubber (no tires)		
Tires		
Textiles		
Wood		
Yard Waste		
Non-hazardous Chemicals - solid only		
Other:		
Other:		
Total		

(continued on back)

Appendix R Blank Survey Forms and Related Information

List the amount of each material **disposed** and the landfill the material was sent to:

MATERIAL	Amount DISPOSED Tons	LANDFILL THAT RECEIVED WASTE
General trash		
Process waste		

Did you have a waste **reduction** program in 2016? ____ Yes ____ No
(If yes, please describe below)

2016 ANNUAL REPORT
MUNICIPALITIES AND TOWNSHIPS

1. Current Contact Information: Contact Person: _____
Phone Number: _____
Email Address: _____

2. How did your residents receive trash services in 2016? (check one)
_____ a. They call haulers directly and sign up for service or haul it themselves to a landfill.
_____ b. We have a contract with one hauler to provide trash service to all residents
Name of hauler _____
when does contract expire? _____

3. For communities with contracts, did it include curbside recycling? (check one)
_____ a. No, there is no curbside recycling in the contract. Trash only
_____ b. Yes, residents have the option of signing up and paying extra for curbside.
_____ c. Yes, the price of curbside is included whether residents use it or not.

4. If your residents use drop-off bins provided by the county,

Are the bins easy to find? _____ Yes _____
No
Are the sites kept clean and free of litter? _____ Yes _____
No
Is signage sufficient to indicate what materials are accepted? _____ Yes _____
No
Is the site serviced often enough to keep material from overflowing? _____ Yes _____
No
Is there a site within 5 miles of all your residents? _____ Yes _____
No

6. What improvements would you like to see in the drop-off recycling sites maintained by the county?

Continue onto back **only if you directly provide the recycling services to your residents through a private contract.** Your service provider can give you this information.

Appendix R Blank Survey Forms and Related Information

For communities that have contracts with a private hauler to collect recyclables from your residents, please provide the information in the table below. Your service provider can give you this information. Many will say they cannot break out the materials, but will just provide a total because they collect it all together. Use the "commingled" line if that is the case. **Please convert pounds to tons** (there are 2000 pounds per ton) collected for recycling:

2016 TONS COLLECTED	
MATERIAL	TONS
Aluminum cans	
Nonferrous scrap	
Glass	
Corrugated cardboard	
Newsprint	
Office Paper	
Plastics	
Steel/bimetal cans	
Ferrous scrap	
Other (please list)	
Commingled (all materials together)	
TOTALS:	

APPENDIX S SITING STRATEGY

The 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 transfer or solid waste disposal facilities to serve District needs.

If a private owner decides to site a waste disposal facility or transfer facility in Coshocton, Fairfield, Licking or Perry 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.

APPENDIX T MISCELLANEOUS PLAN DOCUMENTS

District resolutions, certification statements, public notices, other notices (e.g. a copy of the notice sent to the 50 largest generators)



RESOLUTION

IN THE MATTER OF: SOLID WASTE MANAGEMENT PLAN ADOPTION BY POLICY COMMITTEE

WHEREAS, the Policy Committee has thoroughly reviewed the current solid waste management plan for needed update, and

WHEREAS, the Policy Committee has convened a meeting with the CFLP Board of Directors to confirm consensus in the draft updated plan created.

NOW THEREFORE, BE IT RESOLVED that the Policy Committee of the CFLP Solid Waste District

1. certifies that to the best of our knowledge and belief, the statements, demonstrations and all accompanying materials that comprise the District Solid Waste Management Plan, and the availability of and access to sufficient solid waste management facility capacity to meet the solid waste management needs of the district for the ten year period covered by the Plan are accurate and are in compliance with the requirements in the District Solid Waste Management Plan Format, revision 4.0.
2. directs the Executive Director to submit the draft plan to the Ohio Environmental Protection Agency for review.

Motion made by: Patty Bratton Seconded by: Ben Carpenter

Coshocton County:
Tammi Rogers
 Tammi Rogers, County Commissioner Representative

02.23.18
 Date Signed

Joe Garrett, Municipal Representative
Curtis Lee
 Curtis Lee, Township Representative

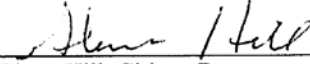
Date Signed
2-23-18
 Date Signed

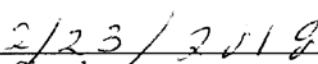
Zach Fanning
 Zach Fanning, Health Department Representative

2-23-18
 Date Signed

Joe Bulzan, Solid Waste Generator Representative

Date Signed


Glenn Hill, Citizen Representative


Date Signed

Jeff Wherley, Public Representative

Date Signed

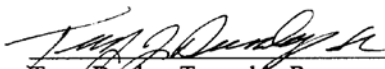
Fairfield County:

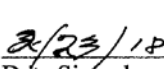
Steve Davis, County Commissioner

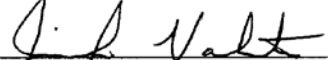
Date Signed

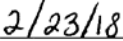
Paul Martin, Municipal Representative

Date Signed


Terry Dunlap, Township Representative

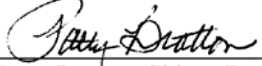

Date Signed

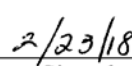

Jennifer Valentine, Health Department Representative


Date Signed

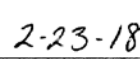
Vacant, Solid Waste Generator Representative

Date Signed

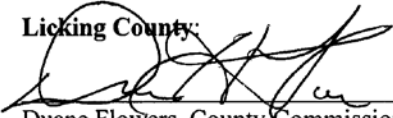

Patty Brayton, Citizen Representative

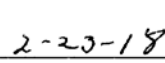

Date Signed


Tony Vogel, Public Representative


Date Signed

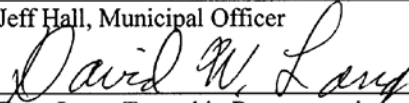
Licking County:

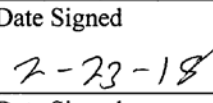

Duane Flowers, County Commissioner


Date Signed

Jeff Hall, Municipal Officer

Date Signed


Dave Lang, Township Representative


Date Signed

Chad Brown, Health Department Representative

Date Signed

Robin Bennett, Solid Waste Generator Representative

Date Signed

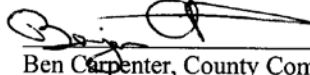
Tony Furguele, Citizen Representative

Date Signed

Seth Ellington, Public Representative

Date Signed

Perry County:



Ben Carpenter, County Commissioner

2-23-18

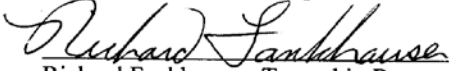
Date Signed



Bo Powell, Municipal Representative

2-23-18

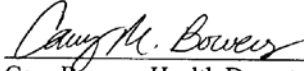
Date Signed



Richard Fankhouser, Township Representative

2/23/18

Date Signed



Cary Bowers, Health Department Representative

2-23-2018

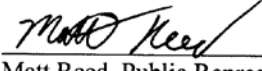
Date Signed

Kevin Walters, Solid Waste Generator Representative

Date Signed

Vacant, Citizen Representative

Date Signed



Matt Reed, Public Representative

2-23-18

Date Signed

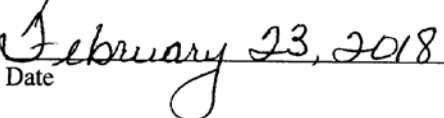
District At-Large:

Jim Hart, Public Representative

Date Signed

Attested to by:


Kim Masters, Secretary


Date

PUBLIC NOTICE

The Coshocton-Fairfield-Licking-Perry Solid Waste District is updating its Solid Waste Management Plan to meet state recycling and reduction mandates. The proposed plan continues to emphasize residential recycling through drop-off sites and education programs aimed at increasing recycling participation, and allows for additional services when funds are available. To fund the ongoing district programs, the disposal fees will remain at the current level of \$2.00 for in-district waste, \$4.00 out-of-district waste, and \$2.00 for out-of-state waste, and the generation fee will remain at the current level of \$1.25 per ton. Therefore, residents and businesses within the District will not see an increase in solid waste district fees. The updated plan retains the right of the Board of Directors to designate facilities for the disposal of solid waste, but does not include designation at this time. These proposed programs are the result of an in-depth review of recycling needs for the district and a thorough review of the solid waste management plan, conducted by the Policy Committee to ensure successful implementation of the waste reduction and recycling goals of this District.

Copies of the proposed plan update are available for review at the District Office, 675 Price Road, Newark, Ohio, 43055, and at public libraries in New Lexington, Newark, Lancaster and Coshocton. Public comment period begins May 3, 2018 and ends June 2, 2018. A series of public hearings will follow the comment period according to the following schedule: June 11, 2018 - Newark Public Library (2nd floor study room), 101 W. Main St., Newark; June 12, 2018 - Fairfield County Public Library, 219 N. Broad St., Lancaster; June 13, 2018 - Coshocton County Public Library, 655 Main St., Coshocton; June 14, 2018 - Perry County Health Department, 409 Lincoln Park Dr., New Lexington. All hearings begin at 5:30 p.m.

Questions should be directed to the District Office at 800-845-5361, or 740-349-6308.



April 23, 2018

Mr. Ernie Stall
Ohio LPA, DSIWM
P.O. Box 1049
Columbus, OH 43216 1049

Dear Ernie,

The Coshooton-Fairfield-Locking-Perry Solid Waste District Policy Committee has voted to adopt an amended solid waste management plan that may be reviewed at the public libraries in Coshooton, Lancaster, Newark and New Lexington or on our website at www.cflpawd.org.

Public comment period begins May 3, 2018 and ends June 2, 2018. A series of public hearings will follow the comment period according to the following schedule: June 11, 2018 - Newark Public Library (2nd floor conference room), 101 W. Main St., Newark; June 12, 2018 - Fairfield County Public Library, 219 N. Broad St., Lancaster; June 13, 2018 - Coshooton County Public Library, 655 Main St., Coshooton; June 14, 2018 - Perry County Health Department, 409 Lincoln Park Dr., New Lexington. All hearings begin at 5:30 p.m.

If you have any questions or concerns regarding the plan, please do not hesitate to call our office at 740-349-6308.

Sincerely,

Carol A. Philipps
Executive Director

675 Price Road, Newark, OH 43055 Phone: (740) 349-6308 Fax: (740) 349-6309

Printed on Recycled Paper

From: "CFLP Solid Waste District" <cflpswd@windstream.net>
Date: Monday, April 23, 2018 8:03 AM
To: "Roger Bail" <ahswd@nelsonvillev.com>; "Rob Reiter" <robert.reiter@wasteabate.org>; "Ty Marsh" <ty.marsh@swaco.org>; "Tom Davis" <tdavis@pickaway.org>; "Jenna Hicks" <jhicks@dkmm.org>; "Susan Haun" <hcc@co.holmes.oh.us>; "David Held" <david@timetorecycle.org>
Attach: 2019 Plan for Public Review.pdf; CFLP SOLID WASTE PLAN summary.docx; 5-Public Comment Notice-2018.doc
Subject: 2019 plan update available for review

Hello folks,

We are at the stage in our plan update process where we notify you that it is available for review. Attached is a summary of our plan, and a copy of the public notice we are running to detail where it is available for review and when/where the public hearings will be held. The plan is also up on our website, however, for your sake, I'm attaching it as a pdf so if you want to read it, you don't have to go hunting. Happy Reading!

Jenna, we do have the feasibility study for a MRF budgeted for next year, with a capital improvement budget for 2020. We recognize that the ability to process recyclables without depending on the private recyclers to control costs is an issue locally, one that we need to address. If anyone else is interested in this project, let me know and I'll keep you in the loop as we go.

Carol Philipps
CFLP Solid Waste District
740-349-6308

"Pursuant to the Ohio Public Records Act, virtually all written communications to or from local officials or employees are public records available to the public and media upon request. Email sent and received via the District Office could be disclosed unless specifically exempted from the Ohio Public Records Act."

10/31/2018

Carol Philipps

From: "CFLP Solid Waste District" <cflpswd@windstream.net>
Date: Monday, April 23, 2018 9:49 AM
To: <amystockdale@coshoctonchamber.com>
Attach: 5-Public Comment Notice-2018.doc; CFLP SOLID WASTE PLAN summary.docx
Subject: 2019 plan update available for review

Dear Ms. Stockdale,

The Coshocton-Fairfield-Licking-Perry Solid Waste District is in the process of updating our solid waste management plan. A part of that process is to notify local trade associations representing industrial waste generators when the plan is available for public review.

This email is to notify you that the plan can be found on our website at www.cflpswd.org at the bottom of the home page, it will also be available in hard copy at the Coshocton Public Library by the end of this week. The public comment period ends June 2. The attached public notice explains this process in more detail and gives the particulars for the public hearings, and the summary includes the highlights of the draft plan.

Please feel free to share this with your members, and do not hesitate to call if you have questions.

Carol Philipps
CFLP Solid Waste District
740-349-6308
1-800-845-5361

"Pursuant to the Ohio Public Records Act, virtually all written communications to or from local officials or employees are public records available to the public and media upon request. Email sent and received via the District Office could be disclosed unless specifically exempted from the Ohio Public Records Act."

10/31/2018

Carol Philipps

From: "CFLP Solid Waste District" <cflpswd@windstream.net>
Date: Monday, April 23, 2018 9:48 AM
To: <travis@lancoc.org>
Attach: 5-Public Comment Notice-2018.doc; CFLP SOLID WASTE PLAN summary.docx
Subject: 2019 plan update available for review

Dear Mr. Markwood,

The Coshocton-Fairfield-Licking-Perry Solid Waste District is in the process of updating our solid waste management plan. A part of that process is to notify local trade associations representing industrial waste generators when the plan is available for public review.

This email is to notify you that the plan can be found on our website at www.cflpswd.org at the bottom of the home page, it will also be available in hard copy at the Lancaster Public Library by the end of this week. The public comment period ends June 2. The attached public notice explains this process in more detail and gives the particulars for the public hearings, and the summary includes the highlights of the draft plan.

Please feel free to share this with your members, and do not hesitate to call if you have questions.

Carol Philipps
CFLP Solid Waste District
740-349-6308
1-800-845-5361

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10/31/2018

Carol Philipps

From: "CFLP Solid Waste District" <cflpswd@windstream.net>
Date: Monday, April 23, 2018 9:52 AM
To: <jmcdonald@lickingcountychamber.com>
Attach: 5-Public Comment Notice-2018.doc; CFLP SOLID WASTE PLAN summary.docx
Subject: 2019 plan available for public review

Dear Ms. McDonald,

The Coshocton-Fairfield-Licking-Perry Solid Waste District is in the process of updating our solid waste management plan. A part of that process is to notify local trade associations representing industrial waste generators when the plan is available for public review.

This email is to notify you that the plan can be found on our website at www.cflpswd.org at the bottom of the home page, it will also be available in hard copy at the Lancaster Public Library by the end of this week. The public comment period ends June 2. The attached public notice explains this process in more detail and gives the particulars for the public hearings, and the summary includes the highlights of the draft plan.

Please feel free to share this with your members, and do not hesitate to call if you have questions.

Carol Philipps
CFLP Solid Waste District
740-349-6308
1-800-845-5361

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10/31/2018

Page 1 of 1

Carol Philipps

From: "CFLP Solid Waste District" <cflpswd@windstream.net>
Date: Monday, April 23, 2018 9:55 AM
To: <pccofc@yahoo.com>
Attach: 5-Public Comment Notice-2018.doc; CFLP SOLID WASTE PLAN summary.docx
Subject: 2019 plan update available for review

Hi John!

The Coshocton-Fairfield-Licking-Perry Solid Waste District is in the process of updating our solid waste management plan. A part of that process is to notify local trade associations representing industrial waste generators when the plan is available for public review.

This email is to notify you that the plan can be found on our website at www.cflpswd.org at the bottom of the home page, it will also be available in hard copy at the Lancaster Public Library by the end of this week. The public comment period ends June 2. The attached public notice explains this process in more detail and gives the particulars for the public hearings, and the summary includes the highlights of the draft plan.

Please feel free to share this with your members, and do not hesitate to call if you have questions.

Carol Philipps
CFLP Solid Waste District
740-349-6308
1-800-845-5361

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10/31/2018

Carol Philipps

From: "CFLP Solid Waste District" <cflpswd@windstream.net>
Date: Monday, April 23, 2018 8:13 AM
To: "Anthony Klapac" <ajklapac@diamondpower.com>; "Barb Goldsmith" <barb.goldsmith@gmail.com>; "Barb Kelley" <j.marie@sbcglobal.net>; "Barry Marshall" <mgcol@frontier.com>; "Beth Hillyer" <jhillyer@bowerstonshale.com>; "Beth Kilbarger" <bethk@rohoio.com>; "Bill Mason" <bmason@fcbreneman.com>; "Bob Williams" <bob@allprobeads.com>; "Brad Powell" <bpowell@dfdistib.com>; "Brad Smith" <info@ludowici.com>; "Bruce Miller" <brucemiller@martinpartitions.com>; "Carol Clarke" <carol@memacindustries.com>; "Cecilia Walters" <cwalters@ohiometal.net>; "Charles Staten" <cstaten@onewriteco.com>; "Chris Gosnell" <chris@ryderengraving.com>; "Chris Mooney" <chris.mooney@starengineering.com>; "Chuck Ellis" <chuck@pearlvalleycheese.com>; "Dan Dickson" <ddickson@velveticecream.com>; "Daniel Griffith" <dgriffith@mfmfbp.com>; "Darren Booker" <darren.booker@meritor.com>; "Dave Levacy" <david.levacy@fairfieldcountyohio.gov>; "Dave DeVault" <djdevault@aep.com>; "Dave Fleming" <dave@flemingengine.com>; "Dave Forsythe" <dforsythe@shellyco.com>; "Dave Garbark" <dgarbark@tma.thk.com>; "Dave Rose" <drose@lccp.com>; "Dave Uhl" <daveuhl1965@gmail.com>; "David Vaughn" <dvaughn.hvc@live.com>; "Della Stuart" <dstuart@hopewellindustries.org>; "Denise Hess" <deniseh@smartbillcorp.com>; "Dwight Musgrave" <dwright.musgrave@thermalvisions.com>; "Edward Ratcliff" <edward.ratcliff@samuel.com>; "Eric Mahler" <eric@mcauleymfg.com>; "Ervin McCoy" <sterlingautomatic@sbcglobal.net>; "Evelyn Bricker" <evelyn.bricker@steelceilings.com>; "Gary Krinn" <signsnowgary@windstream.net>; "Gary Wygant" <gary.wygant@novelis.com>; "Gordon" <gordon@klaritymedical.com>; "Greg Benadum" <greg.northendpress@att.net>; "Greg Ptacin" <gptacin@nwcogannett.com>; "Gregory Jenkins" <gregory.jenkins@acuitybrands.com>; "Harry Timmons" <htimmons@midwestfab.com>; "Jack Hanson" <jack.hanson@na.agc-flatglass.com>; "James Gingerich" <jjayron@jumo.com>; "Jeff Gross" <FPM70@att.net>; "Jeff Lamp" <jlamp@straitandlamp.com>; "Jeff Maransky" <jmaransky@cercollc.com>; "Jeff Mullett" <muskingumgrinding@midohio.twcbc.com>; "Jeff Richcreek" <jeff_richcreek@ennis.com>; "Jeff Turner" <jturner@modweldco.com>; "Jeff Wiley" <timely@greenapple.com>; "Jeffrey Schmelzer" <jschmelzer@stuartburialvaults.com>; "Jerry McDonald" <jmcd@mwpubco.com>; "Jesse Downhour" <jdownhour@moldingtech.com>; "Jim Harris" <coshind@hotmail.com>; "Jim Kulbacki" <jkulbacki@stdcar.com>; "Jim Posey" <rockmill@mybluelight.com>; "Jodi Priest" <jettind@windstream.net>; "Joe Bulzan" <jbulzan@rocktenn.com>; "Johanna Wick" <jwick@avec-usa.com>; "John Baird" <jbaird@bairdconcrete.biz>; "John Lentz" <J.L.Lentz@dow.com>; "John Merriweather" <jmerriweather@nncogannett.com>; "John Williams" <johnwilliams@organicttech.com>; "Judith Beall" <judith@bealltool.com>; "Julie Pepper" <julie@brydet.com>; "Kelly Long" <Kelly.Long@aksteel.com>; "Kelton Brown" <kelly@budcorp.com>; "Kevin Leach" <kevines@hotmail.com>; "Kevin Stalter" <kstalter@zebcoindustries.com>; "Kevin Walters" <kevin.walters@cooperstandard.com>; "Kim Johnson" <candycottage08@gmail.com>; "Kitty VanAtta" <kitty.a.vanatta@rrd.com>
Attach: 5-Public Comment Notice-2018.doc; CFLP SOLID WASTE PLAN summary.docx
Subject: 2019 plan update available for review

Hello folks,

This email is being sent as part of the formal process of updating our solid waste management plan. We are required to send written notice to the 50 largest generators of waste in our district. Without knowing who that is, we send this to all our industries for which we have email addresses. You can view the plan update at the public libraries in Coshocton, Lancaster, Newark and New Lexington, or go to our website at www.cflpswd.org. Please do not hesitate to call if you have any questions.

Attached is the public notice with dates and times of the hearings that follow the public comment period, and also a plan summary.

10/31/2018



Advertiser:

CFLP SOLID WASTE DISTRICT

675 PRICE RD

NEWARK

OH 43065

AFFIDAVIT OF PUBLICATION

Newspaper: MHC-Cos-Coshocton Tribune

LEGAL NOTICE

ATTACHED

STATE OF WISCONSIN

REF: Order #0002981195

Account #00111-N10124
Total Amount of Charges: \$1875

I, *C. J. P.*, Sales Assistant

for the above mentioned newspaper, hereby certify that the attached
advertisement appeared in said newspaper on the following dates:

04/26/18

Last Run Date: 04/26/2018

Subscribed and sworn to me this 26th day of April, 2018

Vicky Kelly
NOTARY PUBLIC

9-11-21
Commission expires



EAGLE-GAZETTE

A GANNETT COMPANY

Media

Advertiser:

CFLP SOLID WASTE DISTRICT

675 PRICE RD

NEWARK

OH 43055

AFFIDAVIT OF PUBLICATION

Newspaper: MCDONALD-LANCASTER Eagle Gazette

LEGAL NOTICE

ATTACHED

STATE OF WISCONSIN

REF: Order #0032859471

Account #MCD NS04108
Total Amount of Order \$51.20

I, _____

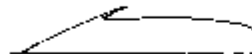
, Sales Assistant

for the above mentioned newspaper, hereby certify that the attached advertisement appeared in said newspaper on the following dates:

04/30/18

Last Run Date :04/30/2018

Subscribed and sworn to me this 30th day of April, 2018



NOTARY PUBLIC

12/14/2021

Commission expires

BERGEN GORNOWICH
Notary Public
State of Wisconsin



Advertiser:

CFLP SOLID WASTE DISTRICT

675 PRICE RD

NEWARK

OH 43055

AFFIDAVIT OF PUBLICATION

Newspaper: MCCO-Nisk-Newark Advocate

LEGAL NOTICE

ATTACHED

STATE OF WISCONSIN

REF: Order # 0002882247

Amount: \$1001.00
Total Amount of 4 Issues: \$4004.00

I, C. J. Gornowich, Sales Assistant

for the above mentioned newspaper, hereby certify that the attached advertisement appeared in said newspaper on the following dates:

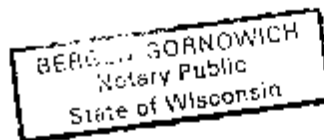
04/26/18

Last Run Date: 04/26/2018

Subscribed and sworn to me this 26th day of April, 2018

[Signature]
NOTARY PUBLIC

1214204
Commission expires





The American
 Society of
 Social Work
 is a national
 organization
 of social workers
 and social workers
 in training. The
 purpose of the
 Society is to
 advance the
 profession of
 social work and
 to improve the
 lives of the
 people of the
 United States.
 The Society
 is composed of
 individuals who
 are engaged in
 the practice of
 social work in
 various capacities.
 The Society
 is a non-profit
 organization and
 its funds are
 derived from
 contributions and
 dues of its
 members. The
 Society is
 organized into
 local chapters
 throughout the
 United States.
 The Society
 is a member of
 the American
 Association of
 Social Workers
 and the National
 Council on
 Social Work
 Education.

The Policy Committee voted in regular session to send the draft plan out for ratification by a vote, rather than by resolution, therefore the minutes of that meeting are included for the record.

Solid Waste District
POLICY COMMITTEE
MINUTES
June 22, 2018
10:00 AM
Donald D. Hill County Administration Bldg
20 S. Second St., Newark

The meeting was called to order at 10:03 a.m. by Tony Vogel, Chair.

ROLL

Attending: Cary Bowers, Patty Bratton, Terry Dunlap, Seth Ellington, Zach Fanning, Duane Flowers, Glenn Hill, Dave Lang, Curtis Lee, Paul Martin, Tammi Rogers, Dane Shryock, Jeff Wherley and Tony Vogel.

Not attending: Robin Bennett, Chad Brown, Ben Carpenter, Steve Davis, Dick Pankhauser, Tony Furgiuele, Joe Garrett, Jeff Hall, Larry Hanna, Jim Hart, Bo Powell, Matt Reed, and Kevin Walters.

APPROVAL OF MINUTES

Motion was made by Paul Martin to approve the minutes from the April 20, 2018 meeting as presented. Curtis Lee seconded the motion. The motion carried without opposition.

CONSIDERATION OF PUBLIC COMMENTS ON DRAFT PLAN

Carol advised the committee that public hearings were conducted in all four counties. Additionally she stated that no public comment was received.

VOTE TO SEND PLAN OUT FOR RATIFICATION

Dave Lang made a motion to send the plan out for ratification. Seth Ellington seconded the motion. The motion carried without opposition.

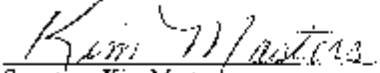
PUBLIC COMMENT

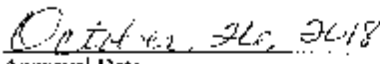
Terry Dunlap stated that he will notify all the townships in Fairfield County and express his support of the plan.

NEXT MEETING

The next meeting is scheduled for October 26, 2018. The meeting will be held at the Donald D. Hill County Administration Bldg., 20 S. Second Street in Newark at 10:00 a.m., in meeting room A (in the basement).

Motion by Dane Shryock to adjourn. Duane Flowers seconded the motion. The meeting adjourned at 9:20 a.m.


Secretary, Kim Masters


Approval Date



RESOLUTION

IN THE MATTER OF: DECLARING THAT THE AMENDED SOLID WASTE PLAN HAS BEEN RATIFIED IN ACCORDANCE WITH SECTION 3734.55 OF THE OHIO REVISED CODE

WHEREAS, following adoption of the amended solid waste management plan by the Policy Committee on June 22, 2018, the plan was sent by certified mail to all counties, municipalities and townships in the solid waste district within the thirty day timeframe prescribed by statute, and

WHEREAS, the solid waste district has received copies of resolutions and ordinances approving the amended Plan from the four boards of county commissioners, three of the four legislative bodies of the largest municipality in each county within the district, and from legislative jurisdictions representing at least 60 percent of the population within the district;

WHEREAS, no changes have been made to the plan after it was sent to all political jurisdictions within the District for ratification;

NOW THEREFORE, BE IT RESOLVED that, as required by statute, the Policy Committee of the CFLP Solid Waste Management District declares the amended solid waste management plan for the CFLP Solid Waste Management District to be ratified in accordance with Section 3734.55 of the Ohio Revised Code, and shall now cause the amended plan to be submitted to the Director of the Ohio Environmental Protection Agency for review.

This resolution shall be in effect immediately upon its adoption.

Motion made by: Paul Martin Seconded by: Seth Ellington

Those voting yes were: Cary Bowers, Patty Bratton, Chad Brown, Ben Carpenter, Seth Ellington,

Dick Fankhauser, Zach Fanning, Duane Flowers, Tony Furgiuele, Larry Hanna, Curtis Lee, Paul Martin

Bo Powell, Tammi Rogers, Dane Shryock and Tony Vogel

Those voting no were: None

Abstentions: None

Attested to by: Kimberly Masters
Kimberly Masters, Secretary

October 26, 2018
Date

APPENDIX U RATIFICATION RESULTS

Table U-1 Ratification Summary

Coshocton			
Board of County Commissioners	Approved	Rejected	Date Resolution Adopted
	✓		7/2/2018
Community	Population		Date Resolution Adopted
	Approved	Rejected	
Cities			
Coshocton	11055		7/9/2018
Townships			
Adams			
Bedford			
Bethlehem			
Clark			
Crawford	1822		7/5/2018
Franklin			
Jackson	1919		7/25/2018
Jefferson			
Keene			
Lafayette	1735		7/6/2018
Linton	482		7/9/2018
Millcreek			
Monroe	518		6/28/2018
New Castle	468		8/10/2018
Oxford			
Perry	701		7/23/2018
Pike			
Tiverton	443		6/27/2018
Tuscarawas			
Virginia			
Washington	749		7/2/2018
White Eyes			
Villages			
Conesville			
Nellie	129		8/14/2018
Plainfield	155		7/5/2018

Warsaw			
West Lafayette	2288		7/23/2018
Total	22,464	0	
County Population	36,364		
Ratification percentage	62%		

Fairfield			
Board of County Commissioners	Approved	Rejected	Date Resolution Adopted
	✓		7/10/2018
Community	Population		Date Resolution Adopted
	Approved	Rejected	
Cities			
Lancaster	42984		8/27/2018
Pickerington			
Townships			
Amanda	2182		7/9/2018
Berne	5167		7/3/2018
Bloom	7790		7/11/2018
Clearcreek	3876		7/11/2018
Greenfield	5572		6/27/2018
Hocking	5178		8/28/2018
Liberty	5487		7/16/2018
Madison			
Pleasant	6109		7/5/2018
Richland	1950		7/25/2018
Rushcreek			
Violet	21053		7/5/2018
Walnut	5325		8/7/2018
Villages			
Amanda	817		9/10/2018
Baltimore			
Bremen			
Carroll	580		9/11/2018
Lithopolis			
Millersport			
Pleasantville	1064		7/12/2018
Sugar Grove	472		9/10/2018
Rushville			
Thurston	669		7/11/2018
Stoutsville			
West Rushville	149		9/10/2018

Total	116,424	0	
County Population	149,503		
Ratification percentage	78%		

Licking			
Board of County Commissioners	Approved	Rejected	Date Resolution Adopted
	✓		7/3/2018
Community	Population		Date Resolution Adopted
	Approved	Rejected	
Cities			
Heath	11018		8/6/2018
Newark	50843		8/2/2018
Pataskala			
Townships			
Bennington			
Bowling Green			
Burlington	1307		9/19/2018
Eden			
Etna			
Fallsbury			
Franklin	2263		7/2/2018
Granville			
Hanover			
Harrison			
Hartford			
Hopewell	1334		7/24/2018
Jersey			
Liberty			
Licking	4948		8/20/2018
Madison	3382		9/5/2018
Mary Ann	2261		8/13/2018
McKean	1628		7/9/2018
Monroe			
Newark	2102		7/12/2018
Newton	3041		7/3/2018
Perry	1713		7/2/2018
St. Albans	2061		8/14/2018
Union	3956		9/6/2018
Washington			
Villages			

Alexandria			
Buckeye Lake			
Croton			
Granville			
Gratiot			
Hanover			
Hebron	2496		7/25/2018
Johnstown			
Kirkersville	561		8/1/2018
St. Louisville	399		7/10/2018
Utica	2278		7/16/2018
Total	97,591	0	
County Population	168,579		
Ratification percentage	58%		

Perry			
Board of County Commissioners	Approved	Rejected	Date Resolution Adopted
	✓		6/28/2018
Community	Population		Date Resolution Adopted
	Approved	Rejected	
Cities			
Townships			
Bearfield			
Clayton			
Coal	331		7/10/2018
Harrison			
Hopewell	2303		7/11/2018
Jackson			
Madison			
Monday Creek			
Monroe			
Pike	2268		7/10/2018
Pleasant	875		7/5/2018
Reading	2989		7/2/2018
Salt Lick	468		7/5/2018
Thorn	3375		8/8/2018
Villages			
Corning			
Crooksville	2622		7/16/2018
Glenford			

Hemlock			
Junction City	847		7/18/2018
New Lexington	4896		9/24/2018
New Straitsville			
Roseville			
Shawnee			
Somerset			
Thornville			
Total	20,974	0	
County Population	38,087		
Ratification percentage	55%		

APPENDIX V MAPS

The following four pages are maps of each county with landfills, recycling curbside and drop-off programs, compost facilities and open dumps marked.

 curbside contract
 county drop-off

L landfill
 CL captive landfill
 R recycling center
 O open dump

COSHOCTON COUNTY

	Unincorporated Places		Township Roads
	Airports		Township Sub Division Roads
	Mile Markers 2 mile		Proposed Township Roads
	Interstate Routes		Township Roads (Right of Way only)
	Proposed Interstate Routes		Municipal Streets
	U.S. Routes		Railroads
	Proposed U.S. Routes		County Boundary
	State Routes		City Boundary
	Proposed State Routes		Township Boundary
	County Roads		County Boundary 1
	County Sub Division Roads		County Boundary 2
	Proposed County Roads		County Boundary 3
	County Roads (Right of Way only)		County Boundary 4

0 1 2 3 4 5
Miles

Revised: June - 2012

