

2021

**Joint Solid Waste Management
District of Defiance, Fulton,
Paulding and Williams Counties**



**Ratified Solid
Waste
Management
Plan**

Table of Contents

CHAPTER 1 Introduction.....	1
Brief Introduction to Solid Waste Planning In Ohio.....	1
A. Requirements of County and Joint Solid Waste Management Districts.....	1
Structure.....	1
Solid Waste Management Plan.....	1
B. District Overview.....	3
C. Waste Reduction and Recycling Goals.....	5
CHAPTER 2 District Profile.....	7
A. Profile of Political Jurisdictions.....	7
Counties in the Solid Waste Management District.....	7
County Overview.....	7
B. Population.....	10
Reference Year Population.....	10
Population Distribution.....	11
Population Change.....	11
Implications for Solid Waste Management.....	11
C. Profile of Commercial and Institutional Sector.....	11
D. Profile of Industrial Sector.....	12
E. Other Characteristics.....	12
CHAPTER 3 Waste Generation.....	13
Solid Waste Generated in Reference Year.....	13
Residential/Commercial Waste Generated in Reference Year	15
Industrial Waste Generated in Reference Year.....	16
Excluded Waste Generated in Reference Year.....	17
A. Historical Waste Generated.....	17
Historical Residential/Commercial Waste Generated.....	18
Historical Industrial Waste Generated.....	19
Historical Excluded Waste Generated.....	19
B. Waste Generation Projections.....	19
Residential/Commercial Waste Projections.....	20
Industrial Waste Projections.....	21
Excluded Waste Projections.....	22
CHAPTER 4 Waste Management.....	23

A. Waste Management Overview.....	23
B. Profile of Waste Management Infrastructure Used in Reference Year.....	23
Solid Waste Management Facilities.....	23
Landfills.....	24
Transfer Stations.....	25
Composting Facilities.....	27
Processing Facilities.....	28
Other Waste Management Facilities.....	29
Waste Collection.....	29
C. Profile of Waste Management Infrastructure Used in Planning Period.....	29
D. Siting Strategy.....	30
E. Designation.....	30
Description of the SWMD’s Designation Process.....	32
List of Designated Facilities.....	34
CHAPTER 5 Waste Reduction and Recycling.....	35
A. Solid Waste Management District’s Priorities.....	35
B. Program Descriptions.....	35
Residential/Commercial Reduction and Recycling Program.....	35
Industrial Reduction and Recycling Program	42
Restricted/Difficult to Manage Waste Program.....	43
Outreach, Education, Awareness and Technical Assistance Program...	47
Other Programs.....	51
C. Waste Reduction and Recycling Rates.....	51
Residential/Commercial Recycling in the District.....	51
Industrial Recycling in the District	51
CHAPTER 6 Budget.....	53
A. Overview of the SWMD’s Budget.....	53
B. Revenue.....	53
Disposal Fees.....	53
Generation Fees.....	53
Fees Collected via Designation Agreements.....	54
Other Funding Availability.....	54
Summary of Revenue	55
C. Expenses.....	55
D. Budget Summary.....	57
APPENDIX A Miscellaneous Information.....	58
A. Reference Year.....	58

B. Planning Period (first and last years).....	58
C. Goal Statement.....	58
D. Explanations of Differences Previously Reported and in Plan.....	58
E. Material Change in Circumstances/Contingencies.....	59
APPENDIX B Recycling Infrastructure Inventory.....	60
Non Subscription Curbside Recycling Services.....	60
Drop-Off Recycling Locations.....	64
Mixed Solid Waste Material Recovery Facilities.....	76
A. Curbside Recycling and Trash Collection Service Providers.....	76
B. Composting Facilities.....	78
C. Other Food Waste and Yard Waste Programs.....	79
D. Material handling Facilities used by the SWMD in the Reference Year.....	80
APPENDIX C Population Data.....	82
A. Reference Year Population.....	83
B. Population Projections.....	84
C. Documents.....	84
o County Township Town Population	
o 2017 Population Estimates	
APPENDIX D Disposal Data.....	85
A. Reference Year Waste Disposed.....	85
B. Historical Waste Analysis.....	87
Residential/Commercial Waste Analysis.....	88
Industrial Waste Analysis.....	88
Excluded Waste Analysis	89
C. Disposal Projections.....	90
APPENDIX E Residential/Commercial Reduction and Recycling Data.....	91
A. Reference Year Recovery Data.....	91
B. Historical Recovery.....	98
C. Residential/Commercial Recovery Projections	99
APPENDIX F Industrial Waste Reduction and Recycling Data.....	101
A. Reference Year Recovery Data.....	101
B. Historical Recovery.....	105
C. Industrial Recovery Projections.....	106
APPENDIX G Waste Generation.....	107

A. Historical Waste Generated.....	107
B. Generations Projections.....	107
APPENDIX H Strategic Evaluation.....	108
Residential Recycling Infrastructure Analysis.....	108
▪ Curbside.....	108
▪ Drop Off	110
Commercial/Institutional Sector Analysis.....	113
▪ Commercial.....	113
▪ School Recycling.....	114
▪ Office Recycling	115
Industrial Sector Analysis.....	116
Residential/Commercial Waste Composition Analysis.....	117
Economic Incentive Analysis.....	118
Restricted and Difficult to Manage Waste Streams Analysis.....	119
Diversion Analysis.....	121
Special Program Needs Analysis.....	122
Financial Analysis.....	123
Regional Analysis.....	124
Population Analysis.....	125
Data Collection Analysis.....	125
Education/Outreach Analysis.....	126
Processing Capacity Analysis.....	127
A. Documents.....	127
○ Strategic Evaluation Summary	
○ Strategic Evaluation Sample Form	
APPENDIX I Actions, Priorities and Program Descriptions.....	128
A. Actions and Priorities.....	129
B. Residential Recycling Infrastructure.....	130
C. Commercial/Institutional Sector Reduction and Recycling.....	141
D. Industrial Sector Reduction and Recycling.....	145
E. Restricted/Difficult Reduction and Recycling Programs.....	146
F. Other Material Specific Programs.....	151
G. Facilities Used by District.....	153
H. Data Collections.....	155
APPENDIX J Reference Year Opportunity to Recycle and Demonstration to Achieve Goal 1.....	156
A. Residential Sector Opportunity to Recycle.....	156

B. Commercial Sector Opportunity to Recycle.....	162
C. Demonstration of Meeting Requirements to Achieve Goal 1.....	164
APPENDIX K Waste Reduction and Recycling Rates and Demonstration to Achieve Goal 2.....	165
A. Residential/Commercial Solid Waste.....	165
B. Industrial Solid Waste.....	166
APPENDIX L Required Education - Outreach/Marketing Program.....	168
A. Minimum Required Programs.....	168
B. Outreach and Education	171
C. Documents.....	177
o District HHW Resource Guide	
o Defiance County Program Brochure	
o Defiance County Adopt-A-Highway Brochure	
o Defiance County HHW Resource Guide	
o Fulton County Program Brochure	
o Fulton County Information	
o Paulding County Program Brochure	
o Paulding County Information	
o Williams County Program Brochure	
o Williams County Resource Guide	
APPENDIX M Waste Management Capacity Analysis.....	178
A. Access to Publicly-Available Landfill Facilities.....	178
B. Access to Captive Landfill Facilities.....	178
APPENDIX N – GHG/ NA	
APPENDIX O Financial Plan.....	179
A. Funding Resources and Revenue Generated.....	179
Disposal Fees.....	180
Designation Fees.....	181
Other Sources of District Revenue.....	183
Summary of District Revenue.....	183
B. Cost of Implementing Plan.....	184
Expenses.....	185
Explanation of Expenses.....	189
Budget Revenue and Expenses.....	191
C. Documents.....	192

- PMCC Fee Expense Report Form
- PMCC Fiscal Report Form
- Host Community Agreement

APPENDIX P Designation.....	193
A. Statement Authorizing/Precluding Designation.....	193
B. Designated Facilities.....	194
C. Designation Process.....	194
D. Documents.....	196
○ Board Meeting Minutes for October 22, 2018– Extending Designation Contract Time	
○ Resolution 2019-01 – Expressing Intent to Designate	
○ Resolution 2019-02 - Preliminary Designation	
○ Resolution 2019-03 – Declaring Intent to Establish Designation	
○ Resolution 2019-04 – Final Designation	
○ Legal Notice – Expressing Intent to Designate	
○ Legal Notice – Declaring Intent to Designate	
○ Public Hearing Minutes	
○ Public Comment Notes	
○ Notice to Solid Waste Generators	
○ List of Solid Waste Generators	
○ List of Municipal Authorities and EPA Director	
○ Copy of Designation Agreement	
APPENDIX Q District Rules.....	197
A. Existing Rules.....	197
B. Proposed Rules.....	197
APPENDIX R Blank Survey Forms and Related Information.....	198
○ Residential/Commercial Recycling Survey Form	
○ Industrial Recycling Survey Form	
○ Composting Yard Management Survey Form	
○ Scrap Metal Processors, Scrap Yards, Salvage Dealers Recycling Form	
○ Ohio Material Marketplace Flyer	
○ NAICS Reference Guide	
APPENDIX S Siting Strategy.....	199
APPENDIX T Miscellaneous Plan Documents.....	200
○ Timeline	

- Defiance County Resolution to Create District
- Fulton County Resolution to Create District
- Paulding County Resolution to Create District
- Williams County Resolution to Create District
- October 24, 1996 EPA Letter for District Plan Approval
- January 23, 2003 EPA Letter for District Plan Approval
- June 9, 2009 EPA Letter for District Plan Approval
- July 28, 2015 EPA Letter for District Plan Approval
- Map of Defiance County with Recycling Locations
- Map of Fulton County with Recycling Locations
- Map of Paulding County with Recycling Locations
- Map of Williams County with Recycling Locations

APPENDIX U Ratification Results..... 201

- Public Notice
- Public Hearing
- Resolution #2021-01 Draft Plan ADOPTED
- List of Legislative/Municipalities Authorities
- Copy Cover Letter Sent to Municipalities
- Copy Resolution Form for Approval of Draft Plan
- Spreadsheet of Ratification Results
- Defiance County Approval Resolutions
- Fulton County Approval Resolutions
- Paulding County Approval Resolutions
- Paulding County Email from Village of Scott – will not approve
- Williams County Approval Resolutions
- Resolution #2021-02 Draft Plan declared RATIFIED

GLOSSARY

AAH = Adopt-A-Highway

ADR = Annual District Report

ARS = Archbold Refuse Service

BDD = Board of Developmental Disabilities

CB = Cardboard

CCNO = Corrections Center of Northwest Ohio

CFL = Compact Fluorescent Light

CPU's = Central Processing Units

CY = Cubic Yards

DAC = District Advisory Committee

DEA = Drug Enforcement Agency

EPA = Environmental Protection Agency

FTR = Full Time Rural

FTU = Full Time Urban

GAC = Great American Cleanup

HDPE = High Density Polyethylene

HHW = Household Hazardous Waste

KAB = Keep American Beautiful

KOB = Keep Ohio Beautiful

LED = Light Emitting Diode

MRF = Material Recovery Facility

MSW = Municipal Solid Waste

NADDI = National Association of Drug Diversion Investigators

NAICS = North American Industry Classification System

ODOT = Ohio Department of Transportation

OMM = Ohio Material Marketplace

ORC = Ohio Revised Code

ORLP = Office of Recycling and Litter Prevention

PB = Pressboard

PETE = Polyethylene Terephthalate

PMCC = Program Manager County Coordinator

PTR = Part Time Rural

PTU = Part Time Urban

SW = Solid Waste

SWD = Solid Waste District

SWMD = Solid Waste Management District

TP = Triangular Processing

WM = Waste Management

WMEA = Waste Management Education and Awareness

WRR = Waste Reduction and Recycling Rate

i. SOLID WASTE MANAGEMENT DISTRICT INFORMATION

Table i-1 Solid Waste Management District Information

SWMD Name	Joint Solid Waste Management District of Defiance, Fulton, Paulding and Williams Counties
Member Counties	Defiance, Fulton, Paulding, Williams
Coordinator's Name (main contact)	Warren Schlatter
Job Title	District Coordinator
Street Address	500 Court Street, Suite E
City, State, Zip Code	Defiance, OH 43512
Phone	419-782-5442
Fax	419-784-3268
E-mail address	dce@defiance-county.com
Webpage	www.4cswd.com

Joint Solid Waste Management District of Defiance, Fulton,
Paulding and Williams Counties RATIFIED Plan

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

Member Name	Representing
Defiance	
Michael Pocratsky	County Commissioners
Gary Plotts	County Commissioner Designee
Mayor of Defiance - Michael McMann	CEO Municipal Corporations of largest population within county
Melinda Sprow	Mayor Designee
Dan Peck, Defiance Township Trustee	Townships
Jamie Gerken	Health Commissioner
Ron Clinger	Health Commissioner Designee
Noah McManus, Industrial (Johns Manville) Rep.	Industrial, Commercial, Institutional Rep.
Darrell Handy	General Interest Citizen - no affiliation w Waste Mgmt.
Michael Barth	Public Member
Fulton	
Jon Rupp	County Commissioners
Ziad Musallam	County Commissioner Designee
Mayor of Wauseon - Kathy Huner	CEO Municipal Corporations of largest population within county
Keith Torbet	Mayor Designee
Kenneth Leupp, German Township Trustee	Townships
Kimberly A. Cupp	Health Commissioner
Pat Wiemken	Health Commissioner Designee
Kristin Malosh (Industrial-North Star)	Industrial, Commercial, Institutional Rep.
Lindsay Huner	General Interest Citizen - no affiliation w Waste Mgmt.
Steve Brown	Public Member
Paulding	
Tony Zartman, Commissioner	County Commissioners
None	County Commissioner Designee
Mayor of Paulding - Greg White	CEO Municipal Corporations of largest population within county
Dale Goebel	Mayor Designee
George Suvar	Townships
Joseph Kuhn	Health Commissioner
Bill Edwards	Health Commissioner Designee
Jeff Hunyor, Industrial (Lafarge) Rep.	Industrial, Commercial, Institutional Rep.
Robin Harris	General Interest Citizen - no affiliation w Waste Mgmt.
Becky Suvar	Public Member
Williams	
Terry Rummel	County Commissioners
None	County Commissioner Designee
Mayor of Bryan - Carrie M. Schlade	CEO Municipal Corporations of largest population within county
None	Mayor Designee
Tom Worthington, Superior Township Trustee	Townships
Jim Watkins	Health Commissioner
Michael Shultz	Health Commissioner Designee
Brooks Meyer, Industrial(Allied Molded) Rep	Industrial, Commercial, Institutional Rep.
James 'Ken' Epling	General Interest Citizen - no affiliation w Waste Mgmt.
Jerry Lemmons	Public Member
Tyson Engstrom, Bryan Street Dept.	Extra Public Member - If District has even number of counties - no Alternate

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

Name	Michael Pocratsky
Street Address	500 Court Street, Suite A
City, State, Zip Code	Defiance, OH 43512
Phone	419-782-4761
Fax	419-782-8449
E-mail address	commissioners@defiance-county.com

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

Commissioner Name	County	Chairperson/President
Ryan Mack	Defiance	President
Gary Plotts	Defiance	
Mick Pocratsky	Defiance	
Williams Rufenacht	Fulton	
Jeff Rupp	Fulton	
Jon Rupp	Fulton	
Mark Holtzberry	Paulding	
Roy Klopfenstein	Paulding	
Tony Zartman	Paulding	Vice-President
Brian Davis	Williams	
Lewis Hilkert	Williams	
Tony Zartman	Williams	

District Advisory Committee (DAC) – Represented by the four Program Manager/County Coordinator’s (PMCC) and the District Coordinator. Responsibilities include manage/implement county program, suggest improvements to Board of Directors and Policy Committee, creates new programs and work with plan re-writ coordinator or consultant.

Warren Schlatter, District Coordinator

June Crosser, Defiance Program Manager/County Coordinator

Ziad Musallam, Fulton Program Manager/County Coordinator

Shannon Ruschel, Paulding Program Manager/County Coordinator

Michael Shultz, Williams Program Manager/County Coordinator

Consultant Information

David W. Nunn

Eastman and Smith, Attorneys at Law

One Seagate, 24th Floor

PO Box 10032

Toledo, OH 43699-0032

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. Requirement 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 SWMD and 15 are multi county SWMDs.

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

2. Solid Waste Management Plan

In its solid waste management plan, the policy committee must among other things, demonstrate that the SWMD will have access to at least 10 years of

landfill capacity to manage all of the SWMD's solid wastes that will be disposed. The solid waste management plan must also show how the SWMD will meet the waste reduction and recycling goals established in Ohio's state solid waste management plan and present a budget for implementing the solid waste management plan.

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

The policy committee begins by preparing a draft of the solid waste management plan. After completing the draft version, the policy committee submits the draft to Ohio EPA. Ohio EPA reviews the draft and provides the policy committee with comments. After revising the draft to address Ohio EPA's comments, the policy committee makes the plan available to the public for comment, holds a public hearing and revises the plan 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 the Ohio EPA for review and approval or disapproval. From the 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 0 and 4 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 passage of H.B. 592 set in motion a comprehensive solid waste planning process. This planning process is to reduce generation and disposal of solid wastes, ensure adequate disposal capacities exist, and reduce reliance on Ohio's landfills. As part of this planning process, each county had to become part of a solid waste management district, form a policy committee and submit a solid waste management plan. The Defiance County Commissioner's wanted to establish a single Solid Waste District for the county of Defiance but they did not receive a waiver of the minimum population requirement for a solid waste management district. The EPA issued Finding & Orders on July 13, 1989 directing Defiance to join with Fulton, Paulding and Williams counties to form a multi-county or joint solid waste district to be most conducive to achieve the objectives of the state solid waste plan.

The Board of Commissioners in Defiance, Fulton, Paulding and Williams' counties passed resolutions and an Agreement/Contract was signed on July 24, 1989 establishing the Joint Solid Waste Management District of Defiance, Fulton, Paulding and Williams Counties. A Policy Committee was formed and began to learn about the requirements outlined in ORC 3734.53 and the State Goals/State Solid Waste Plan in OAC 3745-27-90 that Districts were obligated to achieve. The Policy Committee contracted with Woolpert Consultants (Dayton, OH) to create the District's plan. The plan was presented September 3, 1991, ratified on December 30, 1991 and received approval/findings and orders on August 4, 1992. This is considered PLAN 1.

The next plan re-write was contracted to be written by Midwest Environmental Consulting (MEC), (Toledo, OH). The 1992 and 1996 plans were considered triennial plans and covered ten (10) years planning and the re-write process would begin every three years. The draft plan was submitted on September 15, 1995, ratified on July 24, 1996 and approved on October 24, 1996, PLAN 2.

Midwest Environmental Consulting (MEC) was contracted for the next plan re-write and it would begin the fifteen (15) year planning process. The draft plan was submitted October 10, 2001, ratified November 18, 2002 and approved on January 23, 2003, PLAN 3. Five years later the District contracted with GT Environmental Inc. (Columbus, OH); draft plan was submitted December 12, 2007, ratified April 16, 2009 and approved by the EPA on June 9, 2009, PLAN 4.

In 2014, the re-write process started again with JAZ Environmental Consulting (Middletown, OH); May 22, 2014 a draft plan was submitted, June 2, 2015 ratified and was approved July 28, 2015, PLAN 5. This draft plan re-write is considered

PLAN 6 and is being written by the Joint Solid Waste Management District of Defiance, Fulton, Paulding and Williams Counties District Office. The draft plan should be submitted by July 28, 2020, ratified date TBD and the final approval shouldn't be any later than January 28, 2022. The historical documentation of the Joint Solid Waste Management District of Defiance, Fulton, Paulding and Williams counties are in Appendix T.

The District has four (4) Office of Recycling and Litter Prevention (ORLP) offices, one for each county. These four (4) have program managers or county coordinators (PMCC) which receive funding from the District and manage/implement the strategies and programs set forth in the plan. Each ORLP is comprised of a manager/coordinator and support staff that is accountable for all recycling and litter prevention programs developed for their specific county. Each ORLP is responsible for implementing the solid waste management plan as written and for ensuring the success of each program. The District verifies that the programs meet or exceed the requirements and provides funding to each OLRP.

The Program Manager/County Coordinators report programming initiatives, recycling events and recycling quantities to the Board of Directors quarterly for assessment. The Solid Waste District's plan is reviewed and evaluated annually by the Policy Committee to amend, edit or update as needed to assure compliance with the State Recycling Goals. The Policy Committee convenes as needed during a plan re-write timeframe to assure the deadlines are kept. The Program Manager/County Coordinators report all/any changes of their county programming to the District Office.

The management or implementation of each strategy and program is at the discretion of the PMCC. The District realizes each county is different and a uniformed program will not succeed. The PMCC have the authority to contract for services, hire support staff, share services, develop new programs and opportunities, conduct presentations, create and distribute literature, etc. The stipulations are to implement the plan, meet the goals of the District and State, and keep the Board of Directors informed of programming and work within the funding provided by the District.

The District achieves a residential/commercial waste reduction rate greater than the 25 % State Goals. Because of this high waste reduction rate, the District has proven this unique arrangement works for our district. The District believes this

style of solid waste management is in the best interest of the District's residents, businesses and institutions.

The Policy Committee evaluated the strengths of existing programs, identified weaknesses and discussed the value to our district's population. The Policy Committee determined that the District does have a strong infrastructure and is progressing by adding new special events, updated brochures, and is developing an additional recycling resource through social media; Facebook. The 2009 State Solid Waste Management Plan requires SWMDs to provide outreach that addresses getting more people to participate in available recycling programs. The Program Manager/County Coordinators provide outreach through their programs in a variety of ways as described within Chapter 5 and Appendix H. The program descriptions convey the detail for that county, including problem descriptions, modifications and new events. If a county is not listed, it is because that program may utilize other means to achieve that goal or share/combine with another program. Recycling locations maps per county can be found in Appendix T.

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 alternatives waste management methods to identify 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 WSMDs 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 SWMDs 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 H for descriptions of the programs the SWMD will use to achieve the nine goals.

CHAPTER 2 DISTRICT PROFILE

This Chapter provides context for the SWMD's solid waste management plan by providing an overview of general characteristics of the individual counties within the district. Understanding these characteristics helps the Policy Committee and the PMCC to make decisions about the types of programs that will most effectively address the needs of residents, businesses and other waste generators within the district.

Population distribution and density affect the types of recycling opportunities that make sense for a particular community. The type of commercial and industrial sectors per county influences the types of wastes generated and the types of programs the district provides to assist those sectors with recycling and waste reduction efforts.

The policy committee and the PMCC 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 District is a multi-county district comprised of Defiance County, Fulton County, Paulding County and Williams County.

2. *County Overview*

DEFIANCE COUNTY

✚ Defiance County includes the City of Defiance, three incorporated villages; Hicksville, Ney and Sherwood and covers 412 square miles. The City of Defiance is named for Fort Defiance, constructed in 1794 by General 'Mad' Anthony Wayne, who was sent to subdue the Indians and end British influence in the area. It was the strongest fortification he had built during his campaigns against the Indians. Wayne is reported to have said "I defy the English, the Indians, and all the devils in hell to take it." To which General Scott replied, "Then call it Fort Defiance". At one time Defiance and Williams counties were one, with the county seat at Williams Center Ohio. When the county was split into two separate counties, the county seats became Defiance and Bryan Ohio.

✚ The Treaty of Greenville in 1795 and Ohio's statehood in 1803 brought fur traders, loggers and land developers to the fertile western sections of Ohio. Arriving late in 1836, in what is now Hicksville, Ohio was Alfred P. Edgerton (1813-1897), a young

lawyer who represented the Hicks Land Company. Alfred Edgerton would sell Hick Land Company acquired land to settlers moving into Defiance and Williams counties.

- ✚ The Village of Ney was named for Marshal Michel Ney, French revolutionary hero. Ney has been noted for having one of the shortest plan names in Ohio.
- ✚ Sherwood was platted in the 1870's when the railroad was extended to that point. The village was named for Isaac R. Sherwood a member of the United States House of Representatives from Ohio.

FULTON COUNTY

- ✚ Fulton County is a county west of the City of Toledo. Its county seat is Wauseon. Villages include Archbold, Delta, Fayette, Lyons, Metamora and Swanton, covering 407 square miles. Fulton County was included in 'Congress Lands', so called because they were sold to purchasers by the immediate officers of the general government. Land within its limits was sold by Federal Government at the price of \$1.25/acre. For free schools, Congress reserved one thirty-sixth part of all lands lying northwest of the Ohio River for their maintenance. "Fulton" is said to be chosen in honor of Robert Fulton, the inventor and builder of the first steamboat.
- ✚ Wauseon was first settled along the newly laid Michigan Southern Air Railway in 1853, being named after the native Chief Wauseon, who once lived in the county. Because of the railroad, the village soon grew larger than the county seat Ottokee and replaced it with Wauseon in 1869.
- ✚ Archbold had its start in 1855 when the railroad was extended to that point. The village was probably named for John Archbald, a railroad promoter, but another possibility is that the name is an amalgamation of Arch and Bald, two other railroad officials.
- ✚ The area in which Delta established was known as the "Six Mile Woods". The 'woods' was an area some six miles wide and twenty miles long where huge oak, walnut and sycamore trees were four feet in diameter. The growth of the village was rather slow, as the country was new and roads were bad until about 1850 when a road was laid from Delta to Toledo. Delta had many names such as; Tadmore, Tadpole, Greensprings, Fingerville and Slab Shanty. No one seems to know for sure where the name Delta originated.

- ✚ Fayette is located on a beach ridge. It crosses the west line of Franklin Township, a half mile north of the Fulton line and runs northeast to Fayette and thence to the Michigan line. An ancient shore of Lake Erie came almost to Fayette.
- ✚ Lyons was also called “Morey’s Corners” and under the latter name the village had its start in 1850 when a plank road was completed to that point. The village was named Morey’s Corners in honor of its founder Jinks Morey who also founded what became the First Universalist Church of Lyons, Ohio – now the oldest non-residential structure in Royalton Township, Fulton County Ohio.
- ✚ The first settlement at Metamora was made in the 1830’s. The name of Metamora is from a play titled: Metamora, Last of the Wampanoag’s, authors Edwin Forrest-Tom Kelleher. This play led three new Midwestern towns in Ohio, Illinois and Indiana to adopt the name Metamora.
- ✚ Spanning two counties (Fulton and Lucas), the Village of Swanton was incorporated on February 19, 1883. The name of Swanton comes from nearby Swan Creek. There was some back and forth deciding where to locate the village with establishments springing up in both counties. The Lake Shore and Michigan Southern rail lines were located in Swanton and the area flourished in the mid-1850.

PAULDING COUNTY

- ✚ Paulding is a village and the county seat of Paulding County. In addition to Paulding, other villages include; Antwerp, Broughton, Cecil, Grover Hill, Haviland, Latty, Melrose, Oakwood, Payne and Scott covering 419 square miles. Paulding was a planned community, founded in 1848. Residents named the town in honor of John Paulding, a hero of the American Revolution. Paulding helped capture Benedict Arnold, the most notorious traitor in American history.
- ✚ In 1845, Alfred Edgerton was instrumental in petitioning the Ohio General Assembly to build a toll road between Hicksville and Antwerp at the cost of \$5,000. It was called the Antwerp Pike and basically followed present day Ohio State Route 49 south to Antwerp. Using the Antwerp Pike, a fee was assessed to take goods and services to the Miami and Erie Canal in Paulding County (an effort to link the Ohio River and Lake Erie). Wagons were taken across the Maumee River near Antwerp by ferry boat. Antwerp is the nearest village to the Six Mile Reservoir, the site of the Reservoir War in 1887. The village was named after the Belgian City of Antwerp.

- ✚ A post office with the name Crane was established December 31, 1866; the name was changed to Cecil on June 8, 1868. The Grover Hill village was named after President Grover Cleveland.

WILLIAMS COUNTY

- ✚ Williams County covers 423 square miles with the City of Bryan as the county seat. It includes the villages of Blakeslee, Edgerton, Edon, Holiday City, Montpelier, Pioneer, Stryker and West Unity. Residents named the City of Bryan after John A. Bryan, a former auditor of Ohio and the person who donated the land for the Williams County seat in 1846. Residents named the county in honor of David Williams, a hero of the American Revolution. Williams helped capture spy John Andre' during the Revolutionary War.
- ✚ The village of Blakeslee was named for Schuyler E. Blakeslee, a local attorney. Edgerton sits in the extreme northwest corner of Ohio, a prominent part of the former Northwest Territory. On December 2, 1832 the St. Joseph Township was established.
- ✚ The Village of Stryker is the oldest settlement in Williams County named for New York Lawyer and railroad capitalist John Stryker who was founder of the Michigan Southern Railroad Company. The Village of West Unity is located at the intersection of three major highways, US Route 20-A, US Route 127 and State Route 191. This area is known as the "Top of Ohio" due to its proximity to Michigan and Indiana.
- ✚ The Village of Montpelier has a rich heritage stretching back more than 50 years to its beginning as a frontier mill site, county seat contender and railroad boomtown. Founded in 1997 by Bruce Kidston, the village of Holiday City is located strategically to both the Ohio Turnpike (Exit 13-2 of I-80/I-90) and the Norfolk & Southern Railroad. Holiday City is also home to the largest brass foundry in the United States, Chase Brass & Copper Company.

B. Population

1. Reference Year Population

The District's current plan was approved July 28, 2015 covering a planning period of fifteen years. Following ORC 3734.56(A) the Policy Committee of a solid waste district should begin preparing a draft amended plan no later than fifteen months before the draft plan update is due to the Ohio EPA. The draft plan update is due to be submitted by July 28, 2020. The district plan update preparation will begin earlier (in 2018) than usual, due to

the plan update being written by the District Office rather than an outside consultant. This establishes 2017 as the reference year.

2. Population Distribution

Fulton County has the highest population of the four counties, but Defiance County has the largest populated City.

Table 2-2 Population Distribution per County

County		Largest Political Jurisdiction		
Name	Population	Community Name	Population	Percent of Total County Population
Defiance	38,156	City of Defiance	16,687	44%
Fulton	42,442	City of Wauseon	7,342	17%
Paulding	18,731	Village of Paulding	3,463	18%
Williams	36,784	City of Bryan	8,357	23%
Total	136,113			

3. Population Change

The District is mostly rural, with the largest percentage of population existing within the unincorporated townships. To provide recycling opportunities to those rural locations, the District program utilizes drop-off trailers, strategically positioned in a township (rural setting) to provide recycling access within a short travel distance.

4. Implications for Solid Waste Management

The District faces unique challenges being rural. Provide recycling opportunities, education outreach and litter prevention to 90% of the overall population per county requires knowledge of each community. The Solid Waste Management Plan defines what District programs will be used to meet those challenges. The District utilizes drop-off trailers, manned trailers or containers, special events, schools educational programs, organizational presentations, roadside litter programs, website information, resource guides, brochures, etc. to continue to serve our public.

C. Profile of Commercial and Institutional Sector

The Commercial sector for the counties within the District is comparable and is represented by chain retail stores such as Wal-Mart, Kohls, Meijer, Kroger, Auto Zone and Monro Muffler. Specialty shops such as coffee houses, bakeries, carpeting and furniture also are abundant. Restaurants, hospitals, health care, automobile dealerships and government complete the diversity.

D. Profile of Industrial Sector

General Motors has been in operation in Defiance County since its concept in 1948 and John Manville Fiberglass has two plants within the city. Sensory Effects makes food and beverages, APT Tool is known for robotics, FWT for steel utility poles and many other industries.

Fulton County's location near the Ohio Turnpike creates streamline transportation of raw materials and finished goods. Fulton County has Sauder Manufactured Furniture which was established seventy years ago in Archbold. In 1997, North Star Bluescope Steel constructed a steel plant in Delta. Conagra Foods, metal stamping, precision machining, tool and die companies contribute to this sector.

Paulding County's manufacturing includes; Lafarge Holcim, cement plant established in 1956 outside of the village limits. Taylor Made Systems is a leader in framed glass windshield technology and marine glazing systems. Alex Products primarily manufactures automotive seat frame components while building customized tooling and automation for the manufacturing facilities. Paulding County is Ohio's largest wind energy producer and provides a significant economic benefit in all areas of the county.

2015 marked the 50th anniversary of Chase Brass and Copper Company in Montpelier. Spangler Candy Company, known for the Dum-Dum lollipops has been making candy since the early 1990's and The Ohio Art Company specializes in precision printing and metal lithography, known for the Etch-A-Sketch. Manufacturing variety includes Titan Tire, Bard Manufacturing and Allied Molded.

E. Other Characteristics

The District is mostly rural with farmer's raising crops such as corn, soybeans, wheat and livestock, including dairy farms. Farms for cattle, chickens, turkeys and pigs also have been established throughout the district. Water resources such as the Maumee, Auglaize, Tiffin and St. Joe Rivers contribute to agriculture success.

CHAPTER 3 WASTE GENERATION

This chapter of the solid waste management plan provides a summary of the district's historical and projected solid waste generation. The policy committee and PMCC need to understand the waste the district will generate before it can make decisions regarding how to manage the waste. The policy committee analyzed the amounts and types of waste there were generated within the district in the past and projections of waste in the future.

Calculations were made to determine how much solid waste was generated for the residential/commercial and industrial sectors. Residential/commercial waste is essentially MSW and is waste generated by a community or household. Industrial solid waste is generated by manufacturing operations. To determine how much waste was generated the quantities of waste disposed of in landfills and reduced or recycled were added.

The district obtained reduction and recycling data by the annual district survey data received from communities, recycling providers, scrap facilities, industries, compost facilities, municipal programs and other entities that recycle. Responding to the survey is voluntary and communication with the recycling entities to assure participation is needed to get a good overview of recycling activity.

The district obtained disposal data from the Ohio EPA as well as Landfill and Transfer Station information from owners/operators of solid waste facilities.

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 projections were reviewed 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.

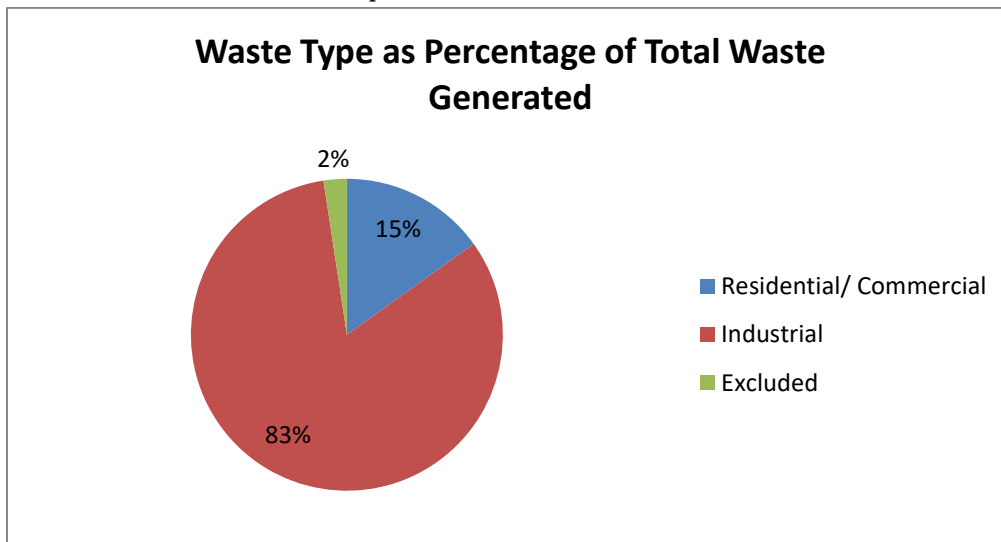
A. Solid Waste Generated in Reference Year

Table 3-1 reflects the numerical amounts of residential/commercial and industrial wastes generated within the District during 2017 (reference year). The amount generated is defined by the tons disposed in landfills plus the tons recycled, composted, and otherwise diverted from landfill disposal. Chart 3-1 shows the same data as a visual graph representation.

Table 3-1: Solid Waste Reported in 2017

Type of Waste	Quantity Generated (tons)
Residential/ Commercial	155,759
Industrial	850,565
Excluded	24,742
Total	1,031,066

Chart 3-1: Solid Waste Reported in 2017



The District surveyed recyclers, communities, brokers and haulers to obtain recycling and composting data for the reference year, 2017. The District mailed surveys requesting recycling amounts in tons on Appliances/White Goods, Batteries, Food, Glass, HHW, Ferrous Metals, Non-Ferrous Metals, Cardboard, All Other Paper, Plastic, Rubber, Tires, Textiles, Used Motor Oil, Wood/Pallets, Yard Waste, Co-Mingled, Electronics and Ash. These are the materials/categories that are creditable according to the Ohio EPA reporting requirements.

Appliances/White Goods are major household appliances; washing machines, dryers, water heaters, stoves, ranges, refrigerators and freezers. Appliances contain 75% steel and other metals that are recycled. Ferrous metals are metals that contain iron and non-ferrous metals do not. Aluminum is the best known non-ferrous material. Wood/pallets recycling interpretation could include reuse of the pallets, grinding of wood materials into mulch,

animal bedding or burning for a heat source. Used motor oil is also being burned and used as a heat source. Co-mingled could consist of newspapers with pressboard or a mix of combined recycling materials. Batteries are not necessarily defined by type; lead acid, dry cell, etc. but if they are marked, the categories will reflect that.

The District was careful to eliminate double counting by requiring each survey respondent to identify who processes and or recycles their solid waste materials. The District then subtracts the generator totals by commodity from the reported processor and recycler data provided to the District. The balance from each processor and recycler is then included as recyclable materials from the District.

In 2018, the Annual District Survey forms were updated to reflect the EPA creditable recycling categories. Four forms were developed (1) Residential/Commercial (2) Industrial (3) Compost and (4) Scrap Processors. A copy of these forms is included in Appendix R.

1. Residential/Commercial Waste Generated in the Reference Year

For this plan update, the District is using Ohio EPA Format Version 4.0. This newer version includes the use of NAICS (North American Industry Classification Systems) numbers instead of SIC (Standard Industry Classification) codes to establish the type of manufacturing/classification of an industry, business, etc.

The North American Industry Classification Systems, NAICS (pronounced nakes) is the standard used by federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing and publishing statistical data related to the U.S. business economy. It is the code definition that generates the highest revenue for that company or business within a specific category.

The surveys for Residential/Commercial were reviewed and divided into a NAICS classification that closely represented the majority of the type of business stated. A NAICS section number is the first two numbers, followed by 4 numbers. Category descriptions and the NAICS number are listed in Table 3-1a. If a survey included their NAICS number, it was used. The complete NAICS reference guide is included in Appendix R.

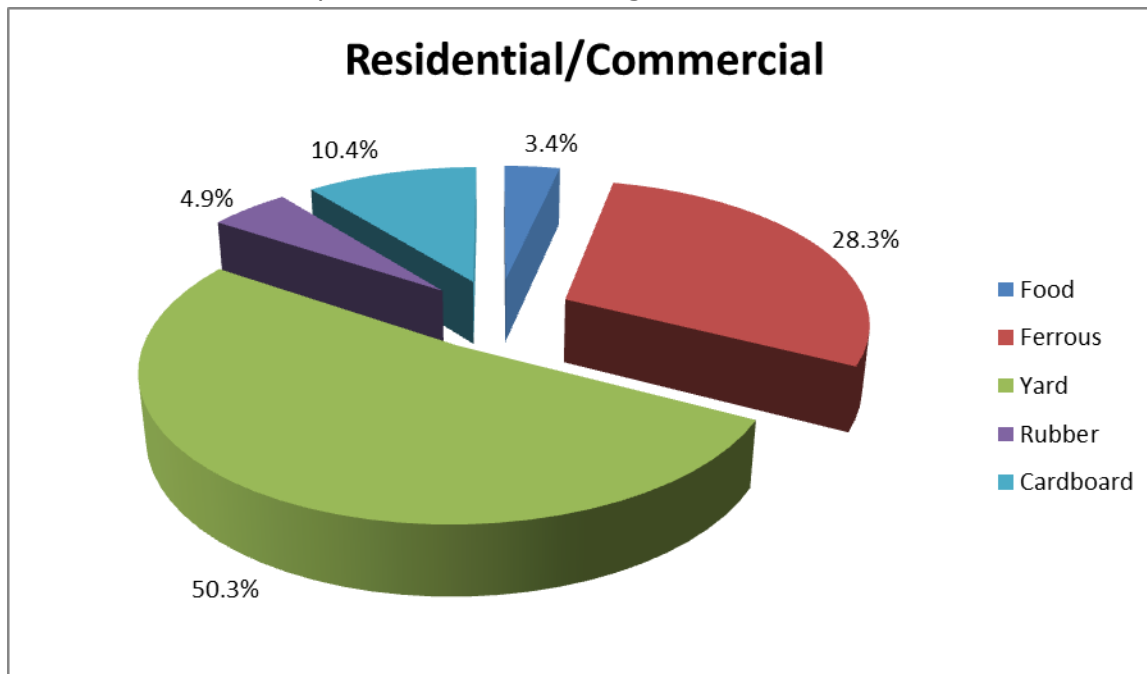
Table 3-1a: Residential/Commercial Classifications

112340 - Poultry Hatchery	311613 - Food Rendering	424820 - Beverage Distributor	423210 - Furniture
423930 - Scrap Metal Recyclers	424910 - Farm Supplies	441310 - Auto Parts	444210 - Power Equipment

442210 - Carpet Wholesale	445110 - Grocery	441120- Auto Dealerships	441210 - Recreational Equipment
441320 - Tire Dealers	444110 - Home Improvement Store	453310 - Used Merchandise	452111 - Department Store
453210 - Office Supplies	484230 - Transportation	491110 - USPS)	511110 - Newspaper/Publishing
522110 - Banking	563314 - Compost	562111 - Solid Waste Collection	562212 - Landfill
624110 - Youth Services	622310 - Hospital	811120 - Auto Repair	811111 - Auto Service
813100 - Church	921110 - Government		

Retail trades had the most surveys returned, with Government second. Villages and Cities reported community yard waste management programs along with several registered compost facilities, which clearly represents the largest percentage in the chart below is for yard waste. Ferrous metal is second (Sims Metal Management, Omni Source, Triangular Processing etc.) with cardboard third.

Chart 3-2: Residential/Commercial Percentages



2. Industrial Waste Generated in Reference Year

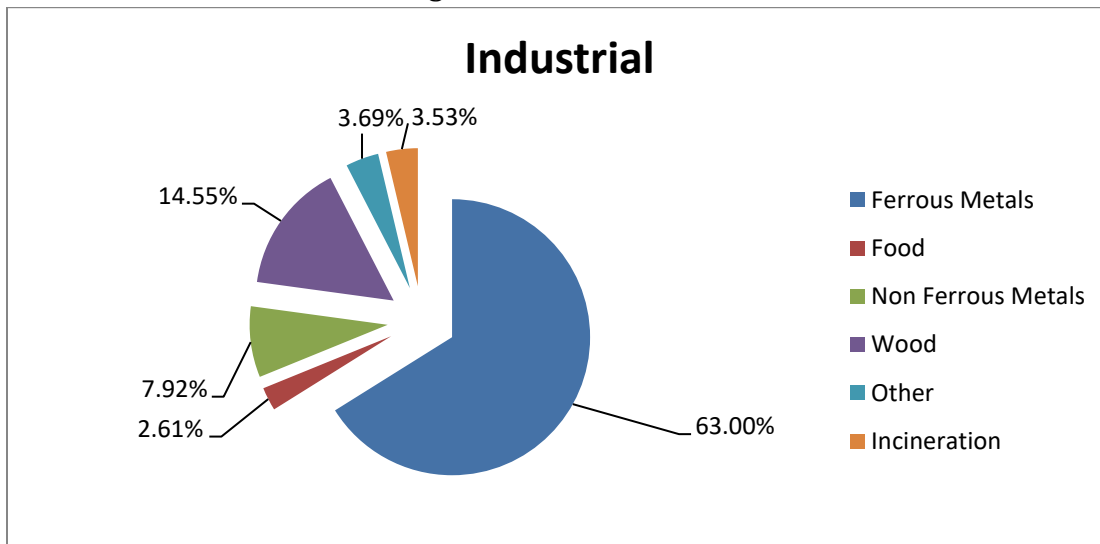
The District surveyed the industrial sector, processors, scrap yards and recycling to obtain data for the reference year. The surveys for the Industrial sector were reviewed and divided into a NAICS classification that closely represented the majority of the type of business stated. Several surveys added their complete NAICS code to their information and it is included below.

Table 3-1b: Industrial Classifications

238150 - Glass	326191 - Plastic Plumbing Mfg.	311340 - Candy Mfg	311411 - Frozen Foods
319999 - General Mfg.	321991 - Mfg. Housing	322211 - Packaging	323111 - Toy Mfg
325314 - Compost/rendering	325412 - Pharmaceutical	325991 - Mfg. Compounding	326199 - Plastic Mfg.
326211 - Tire Mfg.	327120 - Refractory	327215 - Tempered Glass	327320 - Concrete Mfg.
329611 - Fiberglass Mfg.	331110 - Iron Steel Mfg.	331111 - Steel Mfg.	331492 - Alloy Smelting
331511 - Iron Foundry	332111 - Forging	332322 - Metal Processing	332510 - Metal Hardware
332710 - Machining	332811 - Steel	332812 - Metal Coating	332912 - Hose & Fittings
332999 - Stamping	333111 - Specialized Mfg.	333243 - Wood Mill	333415 - Furnace/HVAC
333514 - Tool & Die	333955 - Fluid Power	334416 - Capacitor and condensers	335311 - transformers Industry
336300 - Motor Parts	336312 - Engine Parts	336370 - Vehicle Metal Stamping	337110 - Cabinetry
339999 - Manufacturing	337122 - Manufactured Furniture	346911 - Stamping	509311 - Scrap Metal Processing

Our District is represented by many different types of industries. The Industrial Survey information reported 63% of the industrial recyclable material is ferrous metals. Large amounts of ferrous metals are commonly reported on our annual survey forms. This is expected with the response from steel processors, foundries and tooling manufacturers.

Chart 3-3: Industrial Percentages



3. Excluded Waste Generated in Reference Year

Exempt or excluded waste is a material such as construction and demolition debris which is not defined as a solid waste. Exempt wastes may be managed in landfills.

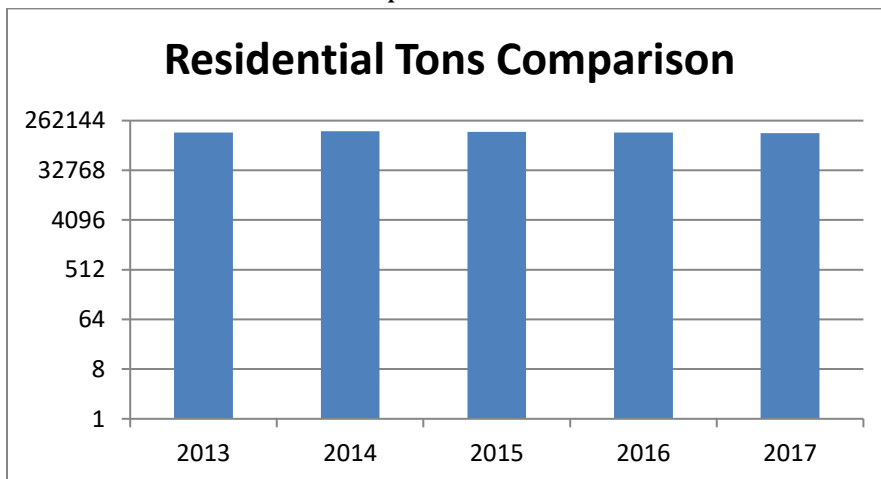
B. Historical Waste Generated

The generation of Residential/Commercial, Industrial and Exempt waste tons were taken from previous survey forms. The historical data shows consistency with very little variations to these wastes.

1. *Historical Residential/Commercial Waste Generated*

Historical residential tons comparison in Chart 3-4 makes the bars of the chart to appear almost even across five years. There is a very slight change; 2013 reported 158,362 tons, 2014 reported 167,340 tons an increase of 8,978 tons. 2015 decreased 4,423 tons with a total reported of 162,917 tons. 2016 continued the decrease with a 4,081 difference (158,836 tons) and our reference year 2017 has the lowest amount reported with 155,759 tons.

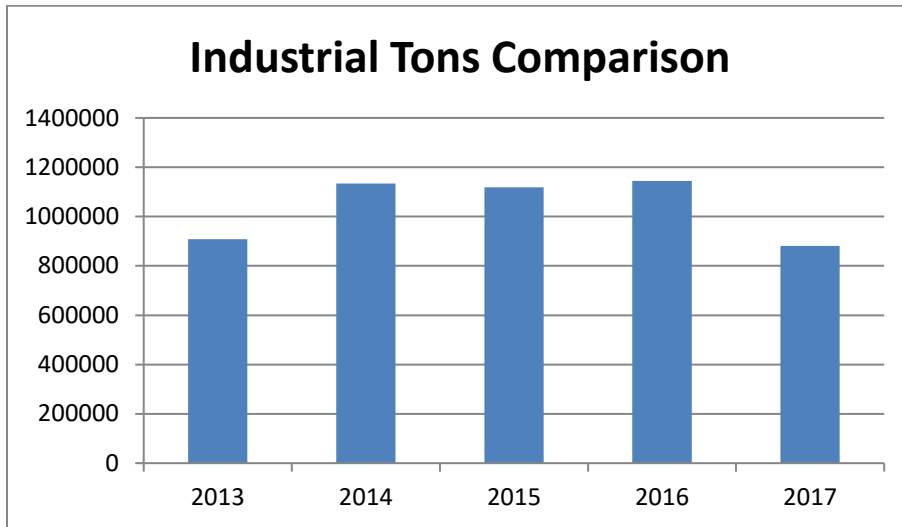
Chart 3-4: Residential Comparison



2. *Historical Industrial Waste Generated*

Industrial tonnages show only a minor fluctuation and a slight decrease in the reference year. The District received 64.23% of the 66 % State Industrial Recycling Goals in 2017. The District did not receive the quantity of survey forms in the reference year and this decrease in survey data reflects the reduction of our recycling percentage.

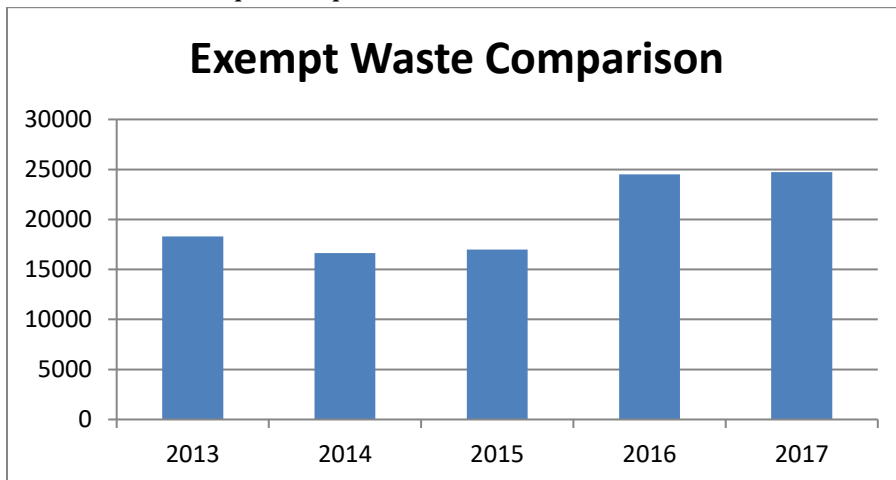
Chart 3-5: Industrial Comparison



3. Historical Excluded Waste Generated

Exempt or excluded waste is material such as construction and demolition debris, which is not defined as a solid waste. Information for Chart 3-6 was generated by the exempt waste generated in the District and disposed in publicly available landfills and reported to the Ohio EPA.

Chart 3-6: Exempt Comparison



C. Waste Generation Projections

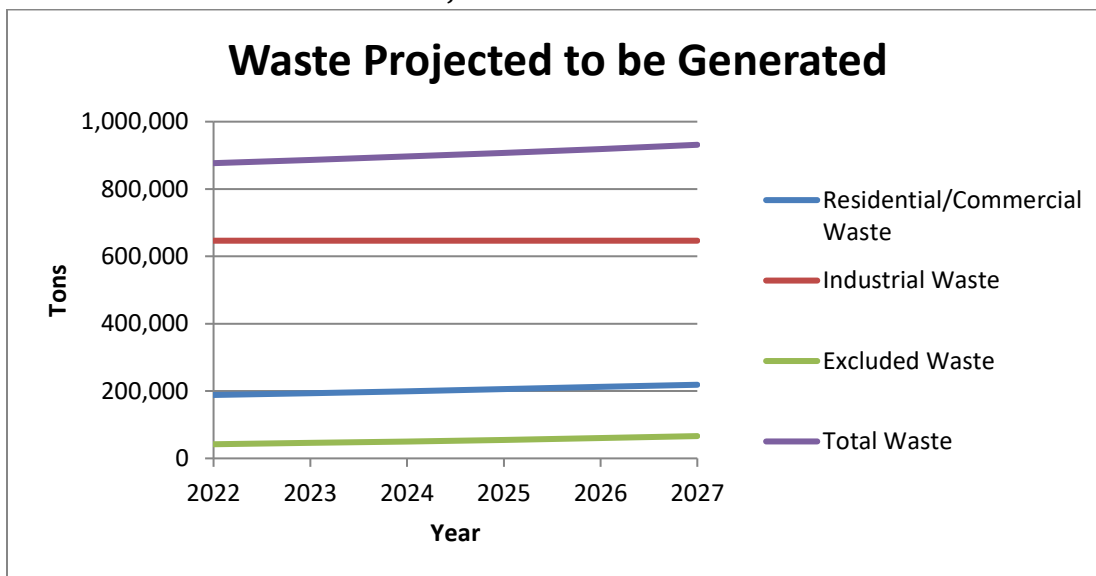
Table 3-2 shown below demonstrates that waste generation within the District is expected to change very little during the planning period.

Table 3-2: Waste Projections

Year	Residential Commercial Waste	Industrial Waste	Excluded Waste	Total
	Waste (tons)	Waste (tons)	Waste (tons)	Waste (tons)
2022	188,324	646,484	41,958	876,766
2023	193,861	646,484	45,967	886,312
2024	199,651	646,484	50,359	896,493
2025	205,703	646,484	55,170	907,357
2026	212,031	646,484	60,442	918,957
2027	218,646	646,484	66,217	931,348

Projections for Residential/Commercial and Industrial solid waste have been developed by first analyzing historical disposal data, determining if a trend for the historical data was apparent and then estimating future disposal amounts.

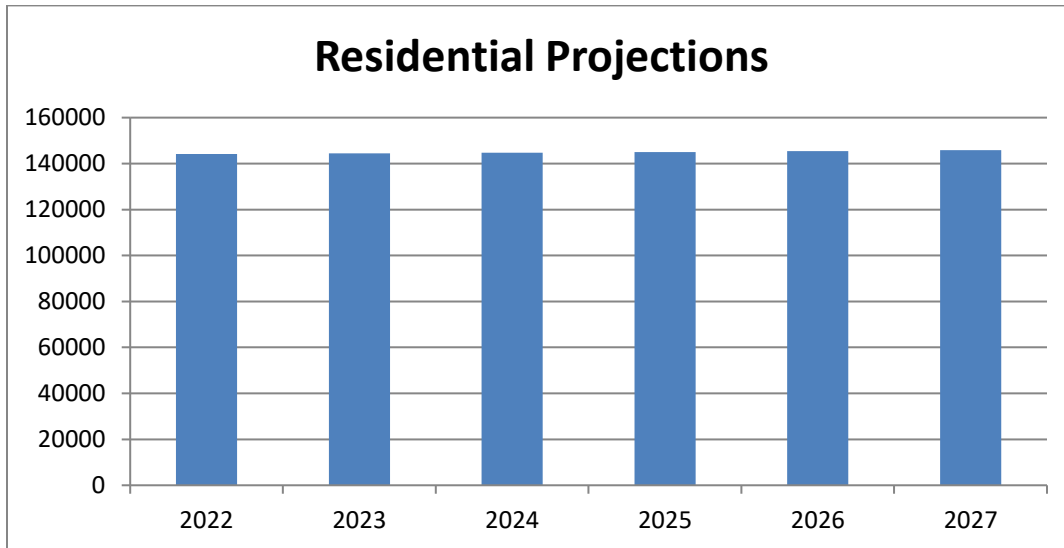
Chart 3-7: Waste Generated Projections



1. Residential/Commercial Waste Projections

The Policy Committee after reviewing historical waste data, predicted population decreases and the current economy has determined that Residential/Commercial waste projections will only increase minimally.

Chart 3-8: Residential Projections



The District will continue with educating all ages that reducing, reusing and recycling provides for a cleaner environment.

2. Industrial Waste Projections

The District had a 40% decrease or 343,294 tons less in 2017 than in 2016. This has been explained due to a significant drop of survey data. The projections are an average of the years 2013 thru 2017 to reflect a more accurate number. The industrial projection was then constant for the planning period.

Chart 3-8: Industrial Projections

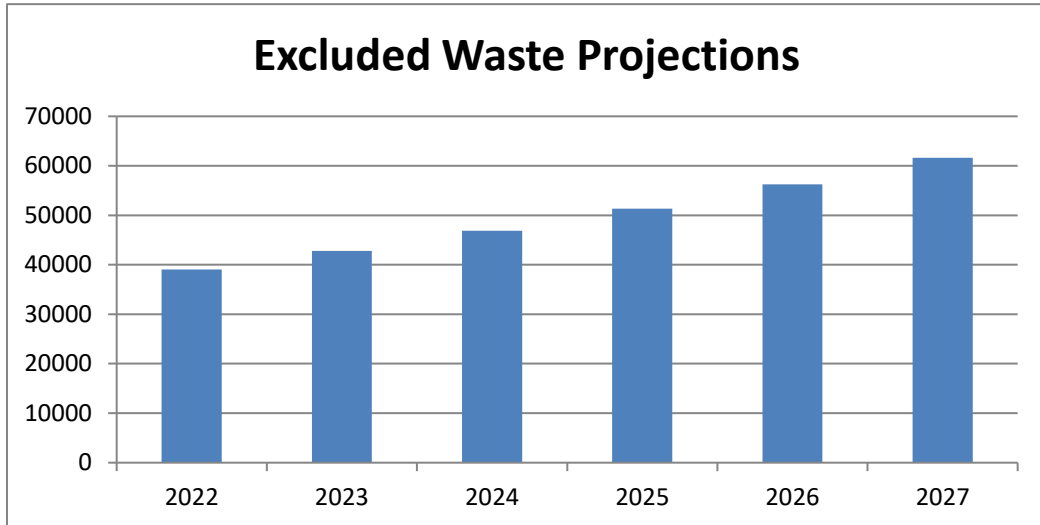


The United States is the second largest manufacturer in the world and a leader in industries such as automobiles, aerospace, machining and chemicals. Agriculture and advanced farming technology are also a huge part of the export market. The District's local manufacturers will continue to decrease waste and scrap materials in an effort to benefit the environment and increase profits.

3. Excluded Waste Projections

Excluded waste such as construction, fluctuates with the housing market and interest rates. The numbers for excluded or exempt waste are reported directly to the Ohio EPA and are projected to increase slightly during the planning period.

Chart 3-9: Excluded Projections



CHAPTER 4 WASTE MANAGEMENT

Chapter 3 provided a summary of how much waste the district generated in the reference year and how much waste the district will generate during the planning period. This chapter summarizes the District’s strategy for how it will manage that waste during the planning period.

A district must have access to facilities that can manage the waste the district will generate. This includes landfills, transfer facilities, composting and facilities to process recyclable materials. This solid waste management plan identifies those facilities and has determined to have adequate capacity. Facilities located within and outside of the district (including out of state) are listed. The District has the ability to control which landfill and transfer facilities can, and by extension cannot, accept waste that was generated within the district. This is established by a designation agreement to designate facilities to take in district waste and is detailed later in this chapter.

A. Waste Management Overview

The solid waste generated within the District is managed through four major categories: recycling, composting, processing at transfer facilities and landfilling. Waste delivered to a transfer facility is ultimately sent to a landfill for disposal. These methods of waste management are anticipated to continue handling the District’s solid wastes throughout the planning period. Table 4-1 shows the projections for each management method for the first six years of the planning period (2022-2027) and indicates that disposal (transfer plus landfill) will continue to comprise the largest method to handle waste.

Table 4-1: Waste Methods

Year	Generate ¹	Recycle ²	Compost ³	Transfer ⁴	Landfill ⁵
2022	1,234,437	667,167	9,800	45,110	512,359
2023	1,301,401	735,645	9,800	49,705	506,252
2024	1,375,993	811,618	9,800	54,795	499,779
2025	1,459,080	895,930	9,800	60,437	492,912
2026	1,551,629	989,521	9,800	66,692	485,617
2027	1,654,720	1,093,436	9,800	73,627	477,858

B. Profile of Waste Management Infrastructure & Solid Waste Facilities used in the Reference Year

1. Solid Waste Management Facilities

Landfills: Municipal Solid Waste (MSW) is generated by a household (including a single or multi-family residence); and generated by a commercial, industrial, or institutional entity

to the extent that the waste material is essentially the same as waste normally generated by a household.

MSW landfills can accept municipal solid waste as well as all other solid waste and exempt wastes (e.g. spent nontoxic foundry sand, nontoxic fly ash and bottom ash and construction and demolition debris). MSW landfills cannot accept hazardous wastes, regulated PCB wastes, bulk liquids or wastes containing free liquids, untreated infectious wastes from a large generator, scrap tires, appliances or yard waste.

The Ohio EPA generates a report called Solid Waste Facility Data Report of our district waste being received at in state and out of state landfills. These are listed below:

Table 4-2: Landfills that Received District Waste

Facility Name	Location		Waste Accepted from SWMD (tons)	Percent of all SWMD Waste Disposed	Remaining Capacity (years)
	County	State			
<i>In-District</i>					
Defiance County Landfill	Defiance	Ohio	78,064	19%	56.8
Williams County Landfill	Williams	Ohio	48,049	12%	174.5
Lafarge North America	Paulding	Ohio	14,172	3%	761
GM Castings Operations	Defiance	Ohio	270,540	65%	29.1
<i>Out-of-District</i>					
Cherokee Run Landfill		Ohio	1	0%	24.1
Wood County Landfill	Wood	Ohio	414	0%	6.6
Evergreen Recycling & Disposal		Ohio	4,569	1%	42
American Landfill		Ohio	24	0%	65
Hancock County Landfill	Hancock	Ohio	613	0%	31.9
<i>Out-of-State</i>					
National Serv-All Landfill	Allen	Indiana	444	0%	27.76
Hoosier Landfill 2	Kosciusko	Indiana	2	0%	23.72
Total			416,893	100%	1,242

The District is fortunate to have two (2) Municipal Solid Waste (MSW) landfills; Defiance County Landfill in Defiance, Ohio and the Williams County Landfill in Bryan, Ohio. The Defiance County Landfill is owned and operated by the Defiance County Commissioners and the facility is available for disposal to all local and out of state waste. Williams County Landfill is a part of Republic Services, Inc. Lafarge North America and GM Castings Operations are Captive Class iii Residual Solid Waste Landfills.

The Defiance County Landfill has 56.8 years of remaining capacity and the Williams County Landfill has 174.5 years. The District will have landfill capacity for over 17 decades.

Additional landfills that have received waste from our district include: the Wood County Landfill, located in Bowling Green, Ohio and is a government owned/public facility, Evergreen R.F.D. is privately owned by Waste Management (WM) also located in Wood County and the Hancock County Landfill which is owned and operated by the Henry County Commissioners.

National Serv All Landfill in Fort Wayne, Indiana, Hoosier Landfill 2 in Claypool, Indiana, Cherokee Run Landfill in Bellefontaine, Ohio and American Landfill in Waynesburg Ohio complete the publicly available landfills that reported receiving waste from the district in the reference year.

Transfer Facilities: A solid waste transfer facility is any site, location, tract of land, installation or building that is used or intended to be used primarily for the purpose of transferring solid wastes that is generated off the premises of the facility, from vehicles or containers into other vehicles or containers for the transportation to a solid waste disposal facility. A transfer facility is required to obtain an annual license to operate. Ohio EPA does not require a permit or license for legitimate recycling facilities.

Table 4-3: Transfer Facilities that Received District Waste

Facility Name	Location		Waste Accepted from District (tons)	Percent of all District Waste Transferred
	County	State		
<i>In-District</i>				
Archbold Refuse Svs SW Transfer	Fulton	Ohio	22,532	86%
Fulton Co. SW Facility	Fulton	Ohio	3,416	13%
<i>Out-of-District</i>				
		Ohio		0%
		Ohio		0%
<i>Out-of-State</i>				
Tradebe Treatment & Recycling	Lake	Indiana	11	0%
Merrell Bros Indy Disposal Sol	Marion	Indiana	9	0%
EQ Ind. Svs Processing Facility	Washtenaw	Michigan	1	0%
Bunn Box Recycling & Transfer	Allen	Indiana	47	0%
Kendallville Iron & Metal	Noble	Indiana	46	0%
Advanced Disposal Services	Allen	Indiana	13	0%
Stericycle Inc.	Allen	Indiana	5	0%
Total			26,081	100%

The District has two (2) licensed transfer facilities: ARS-Archbold Refuse Service, Inc. is an independently-owned, family business and has the flexibility to offer customers immediate solutions to their waste handling and recycling needs. The other facility is the Fulton

County Solid Waste Transfer Station that provides residents with proper disposal options for items that are generally considered inappropriate for municipal solid waste disposal facilities. The mission of the Fulton County Recycling and Solid Waste Department is to reduce overall county waste generation, while increasing recycling throughout the county.

Bunn Box Recycling & Transfer Station and Advanced Disposal Station are in Fort Wayne, Indiana. Kendallville Iron and Metal Transfer Station is in Kendallville, Indiana. The Ohio EPA also receives out of state waste information.

Compost Facilities: Ohio law defines composting as a method of solid waste disposal using controlled biological decomposition. Composting activities occurring at a residence and those activities using less than 500 square feet at a non-residential location are not subject to Ohio's composting regulations. Composting facilities are classified according to the feedstocks they are allowed to accept and are required to obtain a registration, license, and/or permit from the Ohio EPA as applicable. The compost classifications are:

- Class I: Mixed Solid Waste
- Class II: Yard waste, agricultural plant materials, animal waste, dead animals, raw rendering material and food scraps.
- Class III: Yard Waste, agricultural plant materials, animal waste, dead animals and rendering material.
- Class IV: Yard waste and agricultural plant materials.

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

Facility Name	Location (County)	Material Composted	Percent of all Material
<i>In District</i>			
Defiance WWTP	Defiance	882.76	3%
Strait Gate Farms, LLC	Defiance	73.67	0%
Village of Ney	Defiance	6.00	0%
Village of Hicksville	Defiance	649.97	2%
Andre Farms LLC	Fulton	19,166.46	73%
Lammon Brothers	Fulton	2,017.58	8%
Village of Swanton	Fulton	739.33	3%
Village of Metamora	Fulton	13.33	0%
Village of Delta	Fulton	221.40	1%
Village of Archbold	Fulton	433.33	2%
Village of Antwerp	Paulding	57.94	0%
Village of Paulding	Paulding	466.80	2%
Village of Payne	Paulding	17.78	0%
Village of Oakwood	Paulding	1.00	0%
Nothing But Nature	Paulding	3.30	0%
Bryan Recycling Center	Williams	191.92	1%
Edgerton Composting Facility 2	Williams	220.83	1%
Edon Village Composting	Williams	77.00	0%
Montpelier Village	Williams	322.98	1%
Village of Pioneer	Williams	238.67	1%
Village of West Unity	Williams	291.33	1%
<i>Out-of-District</i>			
			0%
Total		26,093	

Defiance County has two (2) registered facilities: Defiance Waste Water Treatment Plant (Class IV) and Strait Gate Farms LLC (Class III). Fulton County has two (2) registered facilities: Andre Farms (Class III) and Lammon Brothers (Class II). Paulding County also has two (2) registered facilities: Village of Antwerp and the Village of Paulding both are (Class IV). Williams County has the most with six (6) registered facilities: Bryan Recycling Center, Edgerton Composting Facility 2, Edon Village Composting, Montpelier Village, Village of Pioneer Composting Facility and the Village of West Unity. The District has been communicating the importance via survey form to track tonnages of local compost material from the local villages/communities of non-registered composts sites.

Processing Facilities: Processing or material handling facilities are places that have recycled a commodity and the tonnage was reported as additional information on the Annual District Report form. This information would include where the material was processed.

Table 4-5: District Processing Facilities

Name of Facility	Location		Facility Type	Recyclables Accepted from District (tons)
	County	State		
In-District				
Exceptional Motorcar LLC	Defiance	OH	Licensed Tire Transport	20
McNaughton-McKay	Defiance	OH	Electronic Supplier	0
Omni Source	Defiance	OH	Scrap Metal Recycling C	2,401
Werlor's Waste Control & Recycling	Defiance	OH	Recycling Center	1,147
Archbold Refuse Services (ARS)	Fulton	OH	Transfer Station	487
Bob's Tire Services LLC	Fulton	OH	Licensed Tire Transport	26
Fulton County Transfer Station	Fulton	OH	Transfer Station	2
Tedrow Auto Wrecking Co	Fulton	OH	Licensed Tire Transport	5
Triangular Processing	Fulton	OH	Recycling Center	1,064
Erie Recycling Center	Paulding	OH	Recycling Center	87
Koharts	Paulding	OH	Recycling Center	0
PC Workshop	Paulding	OH	Processing Center	19,166
Bohner Recycling	Williams	OH	Recycling Center	24
Bryan Recycling	Williams	OH	Recycling Center	3
Oberlin Farms Demolition and Rec.	Williams	OH	Recycling Center	12
Williams County Engineer	Williams	OH	County Facility	1
Out-of-District				
Disc Oil	Hamilton	OH	Oil Recycler	1
EnviroTire	Defiance	OH	Licensed Tire Transport	573
R Willig Tire Distribution Inc.	Defiance	OH	Licensed Tire Transport	57
R&R Tire Disposal	Defiance	OH	Licensed Tire Transport	82
Liberty Tire Service of Ohio	Defiance	OH	Licensed Tire Transport	347
Tedrow Auto Wrecking Co	Fulton	OH	Licensed Tire Transport	5
Bob's Tire Services LLC	Paulding	OH	Licensed Tire Transport	37
Entech Inc.	Williams	OH	Licensed Tire Transport	19
Out-of-State				
E-Paint	Battle Creek	MI	Paint Recycler	0
Battery Solutions	Howell	MI	Business	2
Total				25,567

The Williams County Program recycled paint from a paint collection event with E-Paint out of Battle Creek, Michigan. Disc Oil based in Hamilton, Ohio and other locations reclaim used oil from businesses to be re-used. Tires are recycled by several licensed tire transporters including: Liberty Tire Service, R Willig Tire Distributor, EnviroTire, R & R Tire Disposal, Exceptional Motor Car, Bob's Tire Service and Tedrow Auto Wrecking. McNaughton-McKay processed fluorescent light bulbs. Omni Source and Sims Metal Management recycle scrap metals. Werlor's Waste Control and Recycling, ARS, Triangular Processing, Koharts, PC Workshop, Bohner Recycling, Bryan Recycling, Fulton County Solid

Waste Transfer Station and Oberlin Farms are recycling centers or transfer stations. Battery Solutions out of Howell, Michigan accepted batteries from a Williams's county event. In 2018, the Fulton County Transfer Station contracted with NRG Recycling to transport tires to the Henry County Landfill.

Other Waste Management Facilities: Cleanlites Recycling Inc. is an incorporated business headquartered in Mason, Michigan and has purchased a building in Wauseon, Ohio to be used as a recycling facility. The company plans to install a kiln to aid in the recycling of airbags and shredding equipment to provide e-scrap, solar panel recycling and IT assets disposition services as well as universal waste. Cleanlites is targeting late 2019 as the facility opening.

2. Waste Collection

Subscription curbside allows residents to choose any waste hauler for trash pickup and recycling services if available. Non-subscription curbside contracts a city or a village with a specified hauler and the residents are required to pay and use this service.

The District has a wide choice for waste collection and several of these companies serve multiple counties. In Defiance County: Werlor Waste Control and Recycling (contracted with the City of Defiance), S & S Sanitation, Real Waste, Republic Services and Pike's Refuse. In Fulton County: ARS, Advanced Solutions, Heartland and Pike's Refuse. In Paulding County: Real Waste and S & S Sanitation. Williams County uses the municipal facility in the City of Bryan, Republic Services, ARS and Pike's Refuse.

Yard Waste Management/Collection Programs are offered by curbside pickup or a drop-off location per a community. Leaves and/or brush and/or grass clippings are a part of the Yard Waste Management/Collection Program for the following communities within the District: In Defiance County: the City of Defiance, Hicksville, Ney and Sherwood villages, in Fulton County: Archbold, Wauseon, Delta, Lyons, Metamora, and Swanton Villages. In Paulding County: Paulding, Antwerp and Payne villages and in Williams County: the City of Bryan, Edgerton, Edon, Montpelier, Pioneer and West Unity villages.

C. Profile of Solid Waste Management Infrastructure Used in the Planning Period

In general, the District predicts that facilities which were used to manage District-generated waste during the reference year will continue to provide adequate capacity for Defiance, Fulton, Paulding and Williams Counties. The Defiance County and Williams County Landfills are expected to continue to receive most of their waste from District-generated waste throughout the planning period.

The existing transfer stations used by the District are expected to continue operating and receiving the majority of their transferred waste from within the District. The amount of material composted during the planning period is not expected to change significantly and the District foresees the Yard Waste Management/Collection Programs from communities in the four counties to continue. Processing capacity for recyclables is also expected to be more than sufficient for the District.

D. Siting Strategy

The purpose of the siting strategy is to establish that the District will have access to enough capacity at landfill facilities to accept all of the waste the District will need to dispose of during the planning period. As defined within this plan, the District has a total of 200 years of life left with the two landfills in the district. The District does not foresee any problems or concerns with capacity and will not create a siting strategy for this plan update.

The District would like to be notified of any solid waste landfill, transfer station or resource recovery facility, plans to build new, modify current or expansion of a facility. The Board of Directors do not require plans, permits or building specifications, but would like general information such as: type of facility, address, contact person information, email address, license or permit number and proposed changes or modifications.

This general information request will be communicated with corresponding departments/authorities that may have knowledge of new or improved facilities as defined. This will include but is not limited to: City Economic Development Offices, Village Mayors, Chamber of Commerce, etc. The solid waste landfills, transfer stations or resource recovery facilities owner, operator or developer may submit the requested general information in writing, in person, via email or through the District Coordinator or PMCC.

The District would like to use this general information as an opportunity to share district information with all new facilities and assure that current solid waste landfills, transfer stations, resource recovery facilities understand and utilize the District's resources.

E. Designation

1. Description of the SWMD's Designation Process

Authorization: The Board of Directors is authorized under division E (2)(b) or (c) of section 3734.53 of the Revised Code to be included in the initial solid waste management plan of the District approved under section 3734.55 of the Revised Code, the provision required under division E (1) of section 3734.53 of the Revised Code to be included in the

initial or an amended solid waste management plan of the District approved under section 3734.52 or 3734.56 of the Revised Code, or an amendment to the plan or amended plan adopted and ratified under division (F) of section 3734.56 of the Revised Code, explicitly authorizes the Board of Directors of the Joint Solid Waste Management District of Defiance, Fulton, Paulding and Williams Counties to designate solid waste facilities and recycling activities pursuant to this section.

The Board of Directors of the District at any time after the approval of the initial or amended plan or the amendment to the plan and in accordance with this section may designate solid waste disposal, transfer or resource recovery facilities or recycling activities that are owned by persons, or that are owned by a municipal corporation, county or joint solid waste management district, township or township waste disposal district created under section 505.28 of the Revised Code for which no debt has been issued or is outstanding under Chapters 133,343, or 6123 of the Revised Code where solid wastes generated within or transported into the district shall be taken for disposal, transfer, resource recovery or recycling.

The Board of Directors may modify or add to the list of designated transfer, disposal, recycling or resource recovery facilities authorized to receive solid waste generated within the District and may adopt local District rules for administration and enforcement of such designations.

The existing designations to accept in-district waste will expire in December 2019. The Board of Directors followed the Designating Solid Waste Facilities Process outlined in ORC 343.014 to obtain new signed agreements which will be included with this plan update. The Board of Directors also elected to change the designated agreement from a five year term to a fifteen year term. A copy of this resolution is in Appendix P.

Waiver Process: Any person may request to the Board of Directors to grant a waiver authorizing the delivery of solid waste generated within the District to a solid waste facility other than a facility that has been designated by the District. The waiver request must be submitted to the Board of Directors in writing and shall state the type, amount and origin of material, the facility to be used, the intended duration of the waiver and the reason requesting the waiver.

The District's Board of Directors will review the request and may require additional information if necessary. The Board of Directors shall act on the request for waiver within 90 days after receiving the request. The Board of Directors may grant the request for a waiver if the following has been determined:

1. Issuance of the waiver is not inconsistent with the projections contained in the District's approved plan under ORC section 3434.53(A)(6) and (A)(7); and
2. Issuance of the waiver will not adversely affect implementation and financing of the District's approved plan.

Designating Solid Waste Facilities Process: On November 15, 2018, the Policy Committee authorized the Board of Directors to begin the designation process. A copy of this Resolution is in Appendix P. The existing/current designation agreements will expire December 31, 2019. The intent is to have renewed and/or new agreements signed before the expiration.

1. The Board of Directors may initiate the proceedings to designate a facility by adopting a Resolution Expressing the Intent to Designate.
 - a) On **January 28, 2019** the Board of Directors passed Resolution #2019-01 Expressing the Intent to Designate. A copy of this resolution is in Appendix P.
2. After adopting a Resolution of Intent to Designate, the Board of Directors did the following:
 - a) On **February 1, 2019** a notice of the adoption of the Resolution and the date, time and location of the Public Hearing and a description of the types and scope of services subject to the proposed designation was published in a local newspaper. A copy of this notice is in Appendix P.
 - b) On **February 4, 2019** a notice of the adoption of the Resolution Expressing the Intent to Designate and information of the public hearing was mailed or emailed to 50 Industrial, Commercial and Institutional SW generators; to the legislative authorities of each municipal corporation, county and township in the District. A copy of the notice and a list of the 50 generators and legislative authorities are in Appendix P.
 - c) On **February 5, 2019** after receiving verification that this notice did not need to go certified mail, the notice of the adoption of the Resolution Expressing the Intent to Designate and information of the public hearing was mailed to the Director of the EPA.
 - d) A public hearing was held on **March 21, 2019** on the proposed designation.
3. On **April 22, 2019** the Board of Directors acknowledged that no comments were received from the Public Hearing. The Board adopted a Resolution of Preliminary Designation and reviewed and approved the list of requested Designees. A copy of resolution #2019-02 is in Appendix P.

The Board of Directors discussed and determined to proceed with the designation process and adopted a Resolution Declaring Intent to Establish Designation and the dates of the Public Comment Period. A copy of resolution #2019-03 is in Appendix P.

4. After adopting a Resolution Declaring the Intent to Establish Designation, the Board of Directors did the following:
 - e) On **April 26, 2019** a notice of the adoption of the Resolution, the location where it is available for review, the beginning and end date of the Public Comment Period was published in a local newspaper. A copy of this notice is in Appendix P.
 - f) On **April 29, 2019** a notice of the adoption of the Resolution Declaring the Intent to Establish Designation, a list of facilities requesting designation and beginning and end date of the Public Comment Period was mailed or emailed to 50 Industrial, Commercial and Institutional SW generators; to the legislative authorities of each municipal corporation, county and township in the District; and to the Director of the EPA. A copy of the notice is in Appendix P.
 - g) The Public Comment Period was available **May 1 through May 31, 2019** to accept written comments on the proposed designation.
 - h) On **June 3, 2019** it was determined that no one submitted written comments.

5. On **July 22, 2019** the Board of Directors were informed that no one submitted written comments during the public comment period. The Board of Directors reviewed the designation requests and proceeded to adopt a Resolution of Final Designation. This resolution also contains a list of the designated facilities. A copy of resolution #2019-04 is in Appendix P.
 - a) The designations contained an amended resolution of final designation to become effective for the purposes of division (I) (2) of section 343.01 of the Revised Code sixty day after the adoption of the amended resolution.
 - b) The signed designation agreements will become effective on **September 20, 2019** with a termination date of **December 31, 2034** and will supersede all prior agreements.
 - c) A copy of the District's designation agreement is in Appendix P.

2. List of Designated Facilities

Table 4-6: Designation Facilities

Facility Name	Location		Facility Type
	County	State	
<i>In-District</i>			
Defiance County Landfill	Defiance	Ohio	Landfill
Williams County Landfill	Williams	Ohio	Landfill
Archbold Refuse Service	Fulton	Ohio	Transfer Station
Fulton Co. SW Facility & Transfer	Fulton	Ohio	Transfer Station
<i>Out-of-District</i>			
American Landfill Inc.	Warren	Ohio	Landfill
Celina Sanitary Landfill	Mercer	Ohio	Landfill
Cherokee Run Landfill	Logan	Ohio	Landfill
County Environmental Landfill of Wyandot	Wyandot	Ohio	Landfill
Crawford County Landfill	Crawford	Ohio	Landfill
Evergreen Recycling & Disposal	Wood	Ohio	Landfill
Hancock County Landfill	Hancock	Ohio	Landfill
Noble Road Landfill	Richland	Ohio	Landfill
Pine Grove Landfill	Fairfield	Ohio	Landfill
Stony Hollow Landfill	Montgomery	Ohio	Landfill
Sunny Farms Landfill	Seneca	Ohio	Landfill
Vienna Junction Landfill	Lucas	Ohio	Landfill
Wood County Landfill	Wood	Ohio	Landfill
Marion Transfer Station	Marion	Ohio	Transfer Station
Shelby County Transfer Facility	Shelby	Ohio	Transfer Station
Waste Mgmt. of Ohio - Lima Transfer	Allen	Ohio	Transfer Station
Young's Waste Service	Van Wert	Ohio	Transfer Station
<i>Out-of-State</i>			
National Serv All Landfill		Indiana	Landfill

CHAPTER 5 WASTE REDUCTION AND RECYCLING

A. Solid Waste Management District's Priorities

The District has chosen to prepare strategies to ensure that programs, activities or initiatives are effectively maintaining compliance with the State Plan Goals. The strategy is to maintain the level of performance with its residential/commercial recycling programs by monitoring program performance routinely. If the result of this ongoing monitoring process yields a drop in waste reduction and/or recycling activities or volumes, the District will evaluate the surveying efforts to determine if collected data is accurate and complete.

If all collected data is determined to be accurate and complete, the District will implement additional targeted awareness and education efforts to correct or modify the drop in waste reduction and/or recycling activities or volumes.

The District's priorities are to continue to provide recycling opportunities, litter prevention programs, education and outreach, HHW recycling or safe disposal options, yard management/collection locations, composting availability and instructions and special events to assist our residents within Defiance, Fulton, Paulding and Williams Counties. Serving the public with these opportunities should achieve the State Plan Goals.

The District, its Policy Committee and the Board of Directors are satisfied with the amount of investment, programming and activities dedicated to this plan update as it relates to the required and optional goals in the State Plan. Additional programming has been developed by the PMCC when a need was determined; Christmas Tree Lights event for Williams and Fulton counties, ColorCycle program offered to schools (Defiance, Fulton and Paulding counties), expanding office pick up and allowing businesses to participate (Paulding County), updating brochures, developing Facebook, etc. are some of the updates of the District's programs. The PMCC per County strives to enhance programming within the allocation of funding provided by the District. A map per county with recycling locations is found in Appendix T.

B. Program Descriptions

1. Residential/Commercial Sector Reduction and Recycling Programs

Curbside Recycling Services: In December 2017, Real Waste offered curbside recycling for the residents of the Villages of Payne, Oakwood, Antwerp and Melrose. Real Waste had to discontinue this service in September 2018 and the villages reverted back to using the local drop-off trailers. In October 2018, Republic Services lost their contract with the Village of Edon and ARS acquired it.

In December 2018, Werlor’s Waste and Recycling contracted with the Village of Hicksville to offer curbside waste and recycling services. Prior to this, the Village utilized Village employees to collect waste, but did not offer recycling. The Defiance Program reduced the drop-off trailer availability from two (2) times per month to only one since was contracted with the Village of Hicksville.

The District currently (2019) has twelve (12) curbside recycling opportunities. Curbside recycling services will continue throughout the planning period. The table below reflects information from the reference year (2017).

Table 5-1: Non-Subscription Curbside Recycling

ID#	Name of Curbside Service/Community Served	Service Provider	When Service Was/Will be Available
NSC1	City Of Defiance	Werlor's Waste & Recycle	Weekly
NSC2	Village of Sherwood	Werlor's	Weekly
NSC3	Village of Hicksville	Werlor's	Bi-Weekly
NSC4	Village of Archbold	Archbold Refuse Service	Bi-Weekly
NSC5	Village of Delta	Archbold Refuse Service	1x/month
NSC6	Village of Swanton	Republic Services	2nd & 4th Monday
NSC7	Village of Payne	Real Waste	Weekly
NSC8	Village of Antwerp	Real Waste	Weekly
NSC9	Village of Oakwood	Real Waste	Weekly
NSC10	Village of Melrose	Real Waste	Weekly
NSC11	Village of Blakeslee	Republic Services	Weekly
NSC12	City of Bryan	Bryan City Recycling	Weekly
NSC13	Village of Edgerton	Republic Services	Weekly
NSC14	Village of Edon	Republic Services will chg. to ARS in October 2018	1st and 3rd Mondays
NSC15	Village of Montpelier	Archbold Refuse Service	Every other week
NSC16	Village of Stryker	Archbold Refuse Service	1st & 3rd Fridays

Drop-Off Recycling: The PMCC monitors the drop-off recycling locations continually to assess recycling tonnages, contamination issues, property locations, accessibility, participation or any number of variables. If an issue is determined, the PMCC will take the appropriate action to remediate the issue. This may include moving the location, closing the location, changing the material accepted, manning the site or changing the availability of the trailer access. The PMCC will inform the District office and the Board of Directors of any modifications needed or completed.

The District realizes that consistent locations with consistent hours of availability generate the most use. The District will continue to work with the political subdivisions in the County to assure continued interface with the residential/commercial sector’s recycling requests.

The District’s drop-off recycling program is the heart of each county’s programs. Drop-off trailers at strategic locations allow the District to provide these recycling opportunities to our rural communities and will continue throughout the planning period.

Table 5-2 shows ALL drop-off trailers. (FTU) Full time urban, (PTU) Part time urban, (FTR) Full-Time rural, (PTR) Part time rural.

Table 5 -2: Drop-Off Trailer Availability

ID#	Name of Drop-off/Community Served	Service Provider	When Service was/will be Available
FTU1	Sims Metal Management	Defiance County Program	24/7
FTU2	Triangular Processing	Fulton County Program	Monday - Friday 7:30 am - 4:00 pm and 24/7
FTU3	City of Bryan	Bryan City Recycling	24/7
PTU1	Fulton County Solid Waste Transfer Station	Fulton County Program	Mon, Tues, Thurs, Friday 8:00 am to 4:00 pm, Sat 8:00 am to Noon. Closed Wednesday and Sunday
FTR1	Village of Archbold	Fulton County Program	24/7
FTR2	Pettisville	Fulton County Program	24/7
FTR3	Swan creek Township	Fulton County Program	24/7
FTR4	Erie Recycling	Erie Recycling	24/7
FTR5	Kohart Recycling	Kohart Recycling	M-F 8:00 am to 4:00 pm, Saturday 8:00 am to Noon
FTR6	Northwest Recycling	Northwest Recycling	6/Days per Week M- F 8:00 am to 4:00 pm Sat. 8:00 am to Noon
FTR7	Village of Pioneer	Archbold Refuse Service ARS	24/7
PTR1	Ayersville - Highland Township	Defiance County Program	1st Wednesday of the month Noon to 2:00 pm
PTR2	Power Dam - Defiance Township	Defiance County Program	1st Wednesday of the month 9:00 am to 11:00 am
PTR3	Evansport - Tiffin Township	Defiance County Program	3rd Friday of the month 9:00 am to 11:00 am

PTR4	Farmer - Farmer Township	Defiance County Program	3rd Friday of the month 11:00 am to 2:00 pm
PTR5	Hicksville Transfer Station (HTS)	Defiance County Program	1st Saturday of the month (Jan - Dec) 3rd Saturday of the month (Apr - Nov) 8:00 am to 2:00 pm
PTR6	Village of Hicksville - Hicksville Township	Defiance County Program	1st Friday of the month 9:00 am to 11:00 am
PTR7	Village of Mark Center - Mark Center Township	Defiance County Program	1st Friday of the month Noon to 2:00 pm
PTR8	Ney - Washington Township	Defiance County Program	3rd Wednesday of the month Noon to 2:00 pm
PTR9	Noble - Noble Township	Defiance County Program	2nd and 4th Thursdays of the month 9:00 am to 11:00 am
PTR10	Richland - Richland Township	Defiance County Program	2nd and 4th Thursdays of the month Noon to 2:00 pm
PTR11	Village of Sherwood - Delaware Township	Defiance County Program	3rd Wednesday of the month 9:00 am to 11:00am
PTR12	Village of Delta- York Township	Fulton County Program	3rd Saturday of the month 9:00 am to 11:00 pm
PTR13	Village of Fayette - Gotham Township	Fulton County Program	2nd Saturday of the month 9:00 am to Noon
PTR14	Village of Lyons - Royalton Township	Fulton County Program	Saturday 9:00 am to Noon
PTR15	Village of Metamora - Amboy Township	Fulton County Program	Saturday 9:00 am to Noon
PTR16	Pike Township	Fulton County Program	2nd Saturday of the month 9:00 am to Noon
PTR17	Village of Briceton	Paulding County Program	3rd Saturday of the month 11:15 am to 11:45 am
PTR18	Village of Cecil	Erie Recycling	1st Saturday of the month 8:30 am to Noon
PTR19	Village of Grover Hill	Paulding County Program	1st Saturday of the month 9:00 am to 11:00 am
PTR20	Village of Haviland and Scott	Paulding County Program	1st Saturday of the month 11:15 am to Noon

PTR21	Village of Latty	Paulding County Program	3rd Saturday of the month 11:15 am to 12:30 pm
PTR22	Paulding County Fairgrounds	Erie Recycling	1st Saturday of every month 9:00 am to 11:00 am
PTR23	Village of Payne	Paulding County Program	3rd Saturday of the month 9:00 am to 11:00 am
PTR24	Junction	Paulding County Program	2nd Wednesday of the month 12:30 pm to 1:30 pm
PTR25	Alvordton	Williams County Program	1st Weekend of the month
PTR26	Village of Blakeslee	Williams County Program	3rd Weekend of the month
PTR27	Bridgewater Township	Williams County Program - Discontinued due to excessive trash August 2018	3rd Weekend of the month
PTR28	Jefferson Township	Williams County Program	2nd Weekend of the month
PTR29	Kunkle	Williams County Program	1st Wednesday of the month
PTR30	Northwest Township	Williams County Program- July 2018 -moved to NW Twp. Fire station at 16743 State Rte. 49, Edon	4th Weekend of the month
PTR31	Pulaski Township	Pulaski Township	4th Wednesday of the month
PTR32	Springfield Township	Williams County Program	1st Wednesday of the month
PTR33	Village of West Unity	Williams County Program	3rd Wednesday of the month
PTR34	Superior Township	Williams County Program	1st Weekend of the month
PTR35	Center Township	Williams County Program	2nd Weekend of the month
PTR36	St. Joseph Township	Williams County Program	2nd Wednesday of the month
47			

School Recycling: The District offers school recycling programs either by offering start up advice, literature, facts, presentation materials etc. to create an in-school program or allows the PMCC to implement individual county school recycling programs.

The Williams County Program does not manage the school recycling program but acknowledges and appreciates Wilton Keck, a local recycling company. Wilton Keck picks up paper and cardboard at seven (7) schools within Williams County and includes those tonnages on their annual district survey data.

The Defiance County Program services five (5) rural schools and five (5) in-town schools. Containers are placed outside of the school buildings and recycling is picked up weekly during the school year. Cardboard, pressboard, newspapers, inserts, magazines, paper loose and shredded, steel cans, plastic and aluminum is accepted. In 2017 (reference year) the Defiance Program collected 60,860 pounds of recycling from the schools.

The Paulding County Program also collects from three school systems and recycles paper, newspaper, cardboard, plastics, steel and aluminum cans, glass bottles and jars and magazines. The Fulton County Program contracts with Triangular Processing to pick up paper from area schools. Tonnages are tracked and reported with the quarterly reports to the Board of Directors.

In 2019, a Crayola marker recycling program called ColorCycle was implemented within many of the District's elementary schools. This program requires a container to collect and store the markers (many schools decorated and reused a container or box) and a person to be a ColorCycle Champion. The ColorCycle Champion will organize the collection and shipment of markers and report the weight/quantity of the markers being recycled to their PMCC. The only expense for the school is possibly the marker container.

The District's school recycling programs will continue through the planning period.

Collection Services is our Office Recycling Programs: The District promotes government facility recycling programs, either by offering start up advice, literature, facts, presentation materials, etc. to create a recycling program that will benefit those departments within a government building.

The Defiance County Program serves eight (8) county facilities and Robert Latta, U.S. District 5 Congressional Representative office. Containers are provided for recyclables including paper, cardboard, plastic, newspapers, magazines and aluminum. Recycling is picked up weekly. In 2017, 30,200 pounds of recycling was collected.

The Paulding County Program picks up recycling at county facilities weekly and allows local businesses to bring their recycling to any government building to be included.

Triangular Processing contract by the Fulton County Program picks up paper and cardboard from various county facilities and the Williams County Program has a paper and aluminum cans recycle program at their Courthouse, Soil & Water Conservation and Engineers offices.

The District's Office Recycling programs will continue throughout the planning period.

Large Venue Recycling: The District will assist with large venue recycling opportunities by referring requests to the PMCC for recycling litter options and assistance (if available).

The Defiance County Program provides litter containment barrels and recycling containers if requested, for any events held within the county. The litter containment barrels are thick, plastic, 55 gallon tripled rinsed barrels donated/recycled from a local business; Arps Dairy. The recycled plastic barrels replaced the heavy steel barrels used in the past. One liner is provided per each requested barrel, but the event organizer is responsible to remove and dispose of the waste. Barrels are easily scheduled via a phone call or email and are delivered to the event and picked up afterwards.

Erie Recycling with the Paulding County Program provides containers for plastic bottles at the Paulding County Fair and at the Village of Antwerp's football games. The Williams County Program provides recycling bins for aluminum cans to the Fair Board and Jr. Fair Board and multiple 4H clubs maintain the containers and process the recycling.

The District's large venue recycling will continue throughout the planning period.

Contracting Assistance: The Defiance County Program contracts with the Corrections Center of Northwest Ohio (CCNO) and utilizes inmates working in the Community Public Works Program. This program provides the opportunity for offenders to return a portion of the costs of his incarceration to the public in the form of community service.

The Northwest Ohio Department of Transportation (ODOT) also contracts with CCNO to utilize offenders to pick up roadside litter along State Roads within Defiance, Fulton, Paulding and Williams counties. This benefits the entire District.

The Fulton County Program and activities are contracted with Triangular Processing, Inc. Triangular Processing is a recycling center and also is open to the public. Oberlin Recycling is contracted by the Williams County Program to provide recycling transportation and Erie Recycling is contracted by Paulding County to operate a 24/7 recycling center.

The contracts listed will continue throughout the planning period.

Workgroup/Roundtable: The PMCC will implement, review, develop and manage all programs defined in this plan. The PMCC are also members of the District Advisory

Committee (DAC) and try to meet quarterly to discuss additions, deletions, development of programs or issues their county programs may have. The PMCC report any changes to their programs to the District office and a quarterly report is given to the Board of Directors.

Awards/Recognition: The Paulding County School Recycling Program acquires student assistants who collect and process recycling within their school. These student volunteers are awarded at the end of the year with a trinket made of recycled material and a Green Team T-Shirt. Williams County awards the students that participate in the annual Design-An-Ad contest and recognition is also acknowledged in the local paper.

The Defiance County Program awards appreciation certificates to participants in the annual Great American Cleanup and is an affiliate in good standing of Keep America Beautiful. Keep Defiance County Beautiful has received the KAB's Presidential Circle Award annually for over twenty five years.

Other Programs: The Williams County Program holds an annual Earth Day Event providing presentations, literature, electronic recycling and distribution of tree seedlings provided by the Soil & Water Conservation District. Batteries were also collected through a cooperative effort with the Bryan Recycling Facility and then recycled with Battery Solutions in Howell, MI.

In December 2018, the Williams and Fulton County Programs held a Christmas Tree Light recycling event. Participation was minimal and the programs will expand advertisement to increase awareness for the 2019 event.

The Defiance County Senior Center hosts a community Shred-A-Thon every other year and the Defiance Area Chamber initiated a document destruction event of boxed paper files and hard drives for the public in February, 2019. This may become an annual event.

Other programs such as Adopt-A-Highway, Litter Containment/Recycling (if available) for Defiance County Events and Crayola ColorCycle for schools will continue throughout the planning period.

2. Industrial Sector Reduction and Recycling Programs

Waste Assessments/Waste Audits: The District has continually been available to the Industrial sector to establish or expand waste reduction and recycling programs at their requests. As part of this program, the District can provide industries with information and material regarding the benefits associated with waste reduction, such as reduced disposal costs and greater plant efficiency. The District will meet with industry leaders to establish or update reduction programs, conduct plant reviews and/or assist in conducting a waste audit.

In January 2018 the District distributed the Ohio EPA's Materials Marketplace Brochure with the annual district survey forms. The OMM is a free online platform allowing businesses and organizations to connect and find recycling or reusing solutions for waste and by-product materials. The District office received positive feedback on this information and had several industries utilize this service. The District is also a registered member of the OMM and reviews the commodities weekly to be informed of materials to be recycled.

Collection Services: The District is able to review and assess internal recycling activities of local industries from information provided on the annual district survey forms. Source reduction (generating zero waste) and scrap elimination (no production defects) efforts are common throughout the District's industries. Economic impact is still the common thread for any programs to reduce costs from reducing labor, disposal, transportation and packaging.

3. Restricted/Difficult to Manage Wastes

Yard Waste Management/Collection Program: Leaves and/or brush and/or grass clippings are implemented by individual municipalities. The District office is the centralize location to maintain the current listing to assist residents. The list of municipalities that offer this service in found in Appendix H. The Yard Waste Management/Collection Program will continue throughout the planning period.

Household Hazardous Waste Resource Program: The District reviewed historical HHW events and it was determined the majority of the materials received at these events were not classified as hazardous. The last HHW event took in a total of 58,985 pounds of which only 10,953 pounds were actually categorized as hazardous. The District determined this was not cost effective and decided to promote and educate the district residents on the resources available with current programming and proper disposal of tentative hazardous material from the home, garage, basement or attic.

The District created an in-depth document that lists common household products and where to recycle or how to dispose of them safely. This document is on the District's website, just click on HHW. The District's office is the main contact for any HHW questions and will suggest a resource or provide an answer. The HHW document is reviewed and updated frequently to keep information current. A copy of this publication is found in Appendix L. In addition, the Williams County Program and the Defiance County Program accept mercury from thermostats, switches, thermometers, etc. from local residents. Mercury is then transported or shipped to ERG Environmental Services in Bowling Green, OH. The HHW Resource Program will continue throughout the planning period.

Scrap Tire Disposal: The District conducts annual scrap tire events in Paulding and Williams counties. Residents may bring tires for a minimal fee. A licensed scrap tire hauler will then transport the tires, of which are normally taken to the Henry County Landfill. Fulton County Transfer Station accepts tires throughout the year and is also a licensed transporter. The Defiance County Program takes all tires found during roadside cleanup to the Defiance County Landfill. The Defiance County Landfill accepts all types of tires for a posted fee.

The District Scrap Tire Disposal Program will continue throughout the planning period.

Electronic Equipment Recycling: The Defiance County Program accepts CPU's, laptops, tablets, e-readers and 17" monitors or larger at all drop-off trailer locations. This e-waste is stored until a truckload is collected and then transported to a certified electronics/e-waste recycler. Defiance County is also a certified drop off location for Soldiers for Cell Phones. Soldiers for Cell Phones accepts all types of cell phones, tablets and e-readers to be recycled to benefit and assist military personnel and veterans.

The Paulding County Program holds an annual electronics event for their residents and accepts computers and peripherals. Triangular Processing (Fulton County Program) accepts computers, cell phones and televisions at their processing facility during business hours and the Williams County Program conducts two (2) annual electronic recycling events. One event is in conjunction with Earth Day and accepts computers, electronics and includes cathode ray tube television sets and computer monitors for a fee of \$20.00 each with a limit of two. The fall event is held in cooperation with the Health Department, Soil and Water and Oberlin Recycling and accepts electronics, computers, flat screens, sweepers, motors, radios and similar items.

The District's electronic equipment recycling programs will continue throughout the planning period.

Lead-Acid Batteries: The District provides residents with lead-acid battery recycling locations and responsible disposal via the District website. Many local automobile repair shops NAPA, AutoZone, etc. will accept a battery to be recycled and may pay a small incentive to recycle the battery at their business. The Fulton County Program accepts lead-acid batteries at Triangular Processing and the Fulton County Transfer Station.

The District's lead-acid battery program will continue throughout the planning period.

Appliances: The District recommends that appliances be brought to local metal scrap facilities for proper disposal, or donated via containers for Christmas for Kids. The

Defiance County Program will accept refrigerators, freezers, air conditioners, hot water heaters, dishwashers, washer and dryers for a fee of \$15.00/each at the Gingrich Road location only. The Paulding County Program will accept appliances at Erie Recycling and Koharts during business hours.

Pharmaceuticals Take Back Programs: Law enforcement is an entity legally able to accept medications and process them properly so they do not fall into the wrong hands. Prescription drugs can be a source of abuse and eliminating them from your medicine cabinet when no longer needed, may curtail theft and misuse.

The Paulding County Sheriff has partnered with the National Association of Drug Diversion Investigators (NADDI) program allowing his office to provide county residents a place to dispose prescription drugs that are either no longer needed or outdated. County residents can bring their prescriptions, pill form only to the Paulding County Sheriff's Office during regular business hours, Monday – Friday, 8:00 am to 4:00 pm.

Defiance County Sheriff's office hosts two locations for the national Drug Take-Back event held in the Spring. Unwanted, unneeded or expired medications will be properly disposed if taken to the Defiance County Sheriff's Office and/or the Hicksville Police Department. The Defiance Sheriff's Office is also a drop-off site, seven days a week.

Montpelier Police Department in Williams County is a registered drop-off location for prescriptions drugs. A convenient, secured bin is available 24/7 or hand them directly to the duty officer.

The Fulton County Police Department provided seven (7) locations during the Nation Take-Back day event for anyone to drop-off unwanted medications. The Fulton County PD participates in the Take-Back program annually.

Each County Sheriff's office collects, weighs and disposes of all prescription drugs received. Many report the quantities on their websites or announce on their Facebook pages. Totals are not reported to the District.

Special Events: Special events or special collections are conducted as part of county programming. Items collected during these events have been fluorescent bulbs, latex (water based paint), e-waste, tires, Christmas Lights and electrical cords/wiring. The District will continue having Special Events as needed during the planning period.

Food Recycling: The District offers alternatives for food waste. Andre Farms in Fulton County accepts food waste as a part of their composting facility. Local businesses such as Wal-Mart stores donate soon to be expired food to local food banks and/or churches.

Glass Recycling: The Williams County Program will accept glass bottles and jars (clear and brown) at the Bryan Recycling Center location only. The Fulton County Program will accept clear, brown and green glass jars and bottles at the Fulton County Transfer Station and at Triangular Processing. The Paulding County Program accepts glass and also at PC Workshop and Erie Recycling. The District will continue to offer glass recycling in Bryan, but as of October 1, 2019, Fulton County and Paulding County has suspended all glass collections and will assess the impact.

Grant Opportunities: The District reviews available grant opportunities offered by the Ohio EPA and other organizations. The PMCC apply for grant funding to supplement their county programming. The PMCC will write and submit the application. Type of grant, amount requested, match funding required will be reported to the District office and to the Board of Directors.

If a sponsorship is a requirement, and the District is requested to be the sponsor, the District will verify the applicant is in good standing with the State and has no environmental compliance issues before accepting the sponsorship. Once verified the District will assist the applicant with the application process and if awarded the grant, the Agency (Ohio EPA) will issue a contract with the sponsor (District). The sponsor (District) is required to issue a sub-contract agreement with the grantee/cooperating enterprise. The sub-contract agreement defines how the monies will be disbursed, rules of the grant, reports required, and documents needed. The sponsor (District) is the responsible party to assure all rules are followed and everything is documented through the end of the grant's time line.

Community and Litter Management Grants: Local governments can apply for funding to purchase recycling-related collection and processing equipment. Communities and non-profit organizations can also apply for funding to implement litter collection events and tire amnesty programs. The following is as of 2019 grant criteria but is subject to change: tire amnesty programs require a minimum \$0.50 collection fee per tire. The maximum award for a Community and Litter Grant project is \$200,000 and requires a 25% percent match.

Market Development Grants: Businesses, manufacturers and material processors, through a government sponsor can apply for funding to purchase equipment that creates or expands processing capacity for recyclable materials, including equipment to remanufacture recyclable materials into bulk raw materials or a finished product. The following is as of 2019 but is subject to change: the maximum award for a Market Development Grant project is \$200,000 and requires a 100% match. The District has sponsored several Market Development Grants.

Scrap Tire Grants: This grant program offers businesses, manufacturers and material processors funding to create or expand processing and recycling opportunities for scrap tire. Funds are also available for beneficial use projects that incorporate ground tire rubber and recycle asphalt shingles. Business applications must have a governmental sponsor. The following is as of 2019 and is subject to change: the maximum award for a Scrap Tire Grant project is \$300,000 and requires a 100% percent match.

Other Funding/Grant Programs: Defiance County is an affiliate of Keep America Beautiful and is eligible for grants offered by KAB. These include: Coca Cola Bin Grant, Hefty Energy Bag Grant, Cigarette Litter prevention program (CLPP) grant, Sherwin Williams Paint Grant and the Community Restoration and Resiliency Fund. Grants offered can change annually and are dependent on KAB sponsorships. The Defiance County Program has been awarded the CLPP grant, several different recycle container grants and in 2019, the Sherwin Williams Paint Grant. Keep Ohio Beautiful provides litter supplies such as garbage bags, gloves, litter grabbers, safety vests, water, etc. for KAB affiliates that they purchase through grant funding.

4. *Outreach, Education, Awareness and Technical Assistance*

Web Page: The District's website www.4cswd.com maintains information about the District, the Solid Waste Management Plan, Public Records Request, DEA Pharmaceuticals, Annual District Report, HHW Recycling and Safe Disposal and Contact Information.

The website displays the four county courthouses of the District and directs users to click on a courthouse to obtain individual county program information.

Selecting **the Defiance County Courthouse** will direct you to the Defiance County Environmental and Administrative Services webpage. This web page has contact information and lists the following:

- **Responsibilities:** Explains what Environmental Services does
- **Recycling Trailer:** Lists what can be recycled, with a link to the drop-off recycling trailer schedule.
- **Recycling Programs:** Describes information on other recycling programs offered and a link to HHW recycling and disposal resource.
- **Litter Programs:** Environmental Services approach to roadside litter and a link to Adopt-A-Highway (AAH) details.
- **Litter Containment Program:** Includes some examples of local events that used the litter containment program and how to schedule this program.
- **Great American Cleanup** - Notes the county is an affiliate and how to join in the Great American Cleanup.

- **Illegal Dumping** – Expresses the cooperation with the Sheriff’s Office to address this type of issue.
- **Other Services:** Links for more information on Education and Outreach, Composting and Environmental Alternatives.

The Fulton County Courthouse will direct you to the Fulton County Recycling Page. This page contains the following:

- **Mission:** The missions of the Fulton County Recycling and Solid Waste Department is to reduce overall county waste generation while increasing recycling throughout the county.
- **Responsibilities:** Fulton County Recycling and Solid Waste provides residents with proper disposal options for items that are generally considered inappropriate for Municipal Solid Waste disposal facilities.
- **Items we accept and do not accept:** Complete listing and offers two more selections:
 - **Disposal Rates**
 - **Transfer Station Operating Hours**
- **Recycling Drop-Off Sites and Locations:** Links to the Fulton County Brochure which lists all locations, dates and times.
- **Contact Information:** Triangular Processing and business information.

The Paulding County Courthouse will direct you to the Paulding Waste Management Education and Awareness (WMEA) webpage. This web page can scroll down or select/click the top categories to list the following:

- **About WMEA:** Explains the responsibilities of WMEA.
- **What and How to Recycle:** Lists details.
- **Drop Off Schedule:** Times, dates and locations of drop off trailers.
- **Recycling Round Up:** Information on events
- **Video’s/Pictures:** Program related.
- **Contact Information:** Program Manager information.

The Williams County Courthouse will direct you to the Williams County Health District. This web page offers the following:

- **Solid Waste Reduction and Recycling:** Explains the recycling program and links to the District website.
- **Education:** Describes presentations available to schools and organizations regarding recycling.
- **Awareness:** Lists the approaches used to advertise and promote local programs.

- **Recycling Opportunities:** Provides information on what, where and how to recycle and special events.
- **Online Resource Recycling Guide:** Detailed information with pictures to explain what to do with general items.

Resource Guide: The District uses the individual county resource guides/brochures that offer specific information for that county's programs. In Appendix L, Outreach and Marketing is a copy of the Defiance County Environmental Services Brochure, Defiance County Adopt-A-Highway Program Brochure, Household Hazardous Waste (HHW) document that is listed on the district's webpage, Fulton County Program Brochure, Fulton County Recycling Information Flyer, Paulding County WMEA Program Brochure, Williams County Recycling Drop-Off Flyer and Williams County Resource Guide document.

Education Provider: The Paulding County Program provides annual presentations to local Day Care, Pre-School and Kindergarten on how to distinguish the difference between steel cans and aluminum cans by using magnetic wands and understanding land conservation by using an earth cookie. A variety of presentations on recycling and environmental programs is available and targets different ages and comprehension. Local fourth grade classes are encouraged in participating in the annual poster contest. Students are asked to create a poster with an environmental related message on one of the following topics: Reduce, Reuse, Recycle, Don't Litter, Closing the Loop or the student has the option to select a different environmental focus. Winners of this contest have the artwork displayed in local newspapers; website and the posters becomes a local billboard along Paulding County highways.

The Defiance County Program provides educational presentations to Kindergarten, 2nd and 4th grade classes. In 2017 we did not achieve our program goal of reaching a minimum of 1000 students. To remedy this situation in 2018 we joined with another department and will share expenses of a full-time, dedicated, Education Specialist. This Education Specialist will increase the number of presentations, expand into more classrooms reaching more students and more grades and will develop new programs to teach and reach adults and children. Presentations such as Fred the Fish (water pollution), Vermicomposting, Water Conservation, Who Polluted the Water (bingo game), Components of the Earth (earth bracelet), What is Recycling?, Fishing for Litter Habits and Mining for Resources.

The District will continue to promote environmental education and awareness through presentations, or verbal and written information at schools, organizations, civic and community groups during the planning period.

Outreach and Marketing Plan: The Williams County Program in partnership with The Bryan Times (local newspaper) sponsors a Design-An-Ad contest. Local students submit

artwork to promote the Williams County Solid Waste Reduction and Recycling program. The winning entry will be published in the newspaper and a picture of the student that created it. The Williams County Program provides awareness/advertisements in five (5) area newspapers, six (6) different ads and two (2) radio stations with over sixty audio announcements, to promote their recycling programs and special events held in the spring and the fall.

The Paulding, Defiance and Fulton County Programs promote recycling programs, drop-off trailer schedules, special events, environmental information via local newspapers, radio stations and brochures. The District is reviewing the impact and benefit of adding social media (Facebook and/or Twitter) to the District's Outreach and Marketing Plan.

The District Office at the direction of the Board of Directors and the Policy Committee will write a letter at the beginning of each year, beginning in 2020 to the District's Mayors, Economic Development Offices and Chamber of Commerce to request that they promote the District's resources.

Residential Sector: The District will continue to provide residents an opportunity to recycle a large variety of materials including paper, cans, plastic, cardboard, pressboard, newspapers, electronics, etc. Drop-off trailers are available throughout the district. The District encourages everyone to recycle and create a positive impact on our environment. The District provides resources such as information, brochures, presentations, etc. to assist in waste management decisions.

Commercial/Institutional Sector: The District tries to be current for recycling opportunities from the commercial/institutional sectors that are available to residents/customers. Businesses are contacted to document correct recycling information available and to obtain permission to promote this recycling opportunity. Businesses such as: Wal-Mart stores accept plastic bags from any store, Menards will accept CFL's, Fluorescent Bulbs, Halogen bulbs and LED bulbs, Lowes will take CFL's, plastic bags and rechargeable batteries and many local service stations will take batteries and car fluids, most at no charge. This is an on-going effort for the District to be aware of additional recycling opportunities from local places.

Industrial Sector: The Industrial Sector utilizes recycling opportunities on a larger scale. Materials are reused as often as possible to save money and to eliminate scrap. The District has continually worked with industries to not only promote waste reduction and recycling but also create relationships. The EPA Ohio Materials Marketplace flyer was distributed to all Industries to provide another resource for recycling. The District will continue to be available to all industries to provide any resources available.

Political Leaders: The District will continue to work closely with all political leaders. Commissioners are kept apprised of recycling opportunities, events and program changes. The Board of Director's are given a quarterly report of programs, events and expenses. Township officials and Village Authorities allow drop-off recycling trailers on their property and many events are in cooperation with other leaders in the community.

Schools: The District ensures that recycling is available in the area schools. Educating the younger generation is a key factor for the future and will remain a priority. Educational presentations are geared to the age group, created or changed to assure a positive impact to all years.

Outreach Priority: The District understands the importance of education and outreach to all communities, not just populated areas. The programs are geared to the rural areas to assure recycling opportunities and information is available. The District's priority for this planning period will be communicating to the leaders such as Economic Development, Tourist Bureau, Chamber of Commerce to be aware and promote the District and its resources.

5. Other Programs

Open Dump/Tire Dump Cleanup: The District has a good relationship with local law enforcement and assists with assessment and cleanup of reported sites. Manpower attempts to locate documentation (address on a piece of mail, magazine, prescription bottle, etc.) within the dumped debris to provide to law enforcement. Law enforcement will then proceed accordingly; verification, confrontation, charges, fines, etc. The District encourages proper disposal of tires by offering multiple locations for disposal and special tire amnesty events. Roadside litter programs that recover tires and trash from ditches and roadside make sure the tires and trash are disposed of properly.

C. Waste Reduction and Recycling Rates

1. Residential/Commercial Recycling in the District

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

Year	Projected Quantity Collected (tons)	Residential/ Commercial WRR¹ (%)
2022	70,152	36.67%
2023	70,167	35.64%
2024	70,183	34.63%
2025	70,198	33.64%
2026	70,214	32.65%
2027	70,229	31.69%

The WRR is Waste Reduction and Recycling Rate. The District programs are projected to exceed the State Goal of 25% Residential/Commercial recycling rate.

2. Industrial Recycling in the District

Table 5-4: Industrial Waste Reduction and Recycling Rate

Year	Projected Quantity Collected (tons)	Industrial WRR¹ (%)
2022	646,484	54.21%
2023	646,484	51.49%
2024	646,484	48.77%
2025	646,484	46.05%
2026	646,484	43.35%
2027	646,484	40.70%

The District programs took an average of the past five years to obtain an average to use as the projected quantity.

CHAPTER 6 BUDGET

A. Overview of the SWMD's Budget

The District receives revenues from disposal fees, contract fees, host fees and interest through the bank or investments. The District has determined that sufficient funding will be available throughout the planning period.

B. Revenue

1. *Disposal Fees*

The District receives revenues from disposal fees levied in accordance with ORC section 3734.57 (B). This statute allows for any Solid Waste Management Policy Committee to generate revenue by imposing fees on waste:

(B)(1) At a solid waste disposal facility located in the district of solid wastes generated within the district = In-District Waste

(B)(2) At a solid waste disposal facility within the district of solid wastes generated outside the boundaries of the district, but inside this state = Out-of-District Waste

(B)(3) At a solid waste disposal facility within the district of solid wastes generated outside the boundaries of this state = Out-of-State Waste

The District's fee structure is \$1.00 per ton for In-District Waste, \$2.00 per ton for Out-of-District Waste and \$1.00 per ton for Out-of-State Waste. Any fees levied under ORC 3734.57 (B)(1) shall not be less than one dollar per ton nor more than two dollars per ton, fees levied under division (B)(2) shall not be less than two dollars per ton and not more than four dollars per ton and (B)(3) shall not be more than the fee levied under division (B)(1).

Fees levied under this division also may be established, amended, or repealed by a solid waste management policy committee through the adoption of a new district solid waste management plan, the adoption of an amended plan, or the amendment of the plan or amended plan in accordance with sections 3734.55 and 3734.56 of the Revised Code or the adoption or amendment of a district plan in connection with a change in district composition under section 3734.521 of the Revised Code.

2. *Generation Fees*

The District does not have a generation fee at this time, but reserves the right to implement a generation fee should it be necessary to assure appropriate funding for District programming.

3. Fees Collected via Designation Agreement

In 2014 the District levied a Contract Fee in the amount of \$2.00 per ton on all MSW solid waste generated within the District, that is delivered to a designated solid waste facility pursuant to section 3734.53 (E)(1) of the Ohio Revised Code. The Board of Directors of the District is hereby authorized to continue with facility designations as they are currently and to establish new facility designation per section 343.014. Details of the District's designation agreements are found in Appendix P.

4. Other Funding Availability

Bonds: The District does not participate in bonds, but invests in non-negotiable certificates of deposit.

Grants: The District PMCC may apply for grants to supplement their programs. A district sponsored grant may increase the District's account temporarily as grant monies are awarded and then decreases after the grant monies have been disbursed. This is reflected as a pass-through and is defined by a separate account line.

Rate and Charges: The Defiance County Landfill (operated and owned by Defiance County Commissioners) charges \$6.00 per cubic yard on loose material and \$9.00 per cubic yard on compacted material or a load over 880 pounds. The Williams County Landfill (operated and owned by Republic Services, Inc.) charges a minimum per ton fee. All state and local fee are collected at each landfill.

Contracts: The District has a Host Community Agreement between the District and the (2) two in-district landfill. The District collects an additional \$1.00 per ton on Out-of-State waste disposed of at either landfill. A copy of the Host Community Agreement is in Appendix O.

5. Summary of Revenue

Table 6-1: Revenue Projections per Funding Resource

Year	Disposal Fees	Generation Fees	Designation Fees	Other Revenue		Total Revenue
				Interest	Host Fee	
Reference Year						
2017	\$242,463	\$0	\$274,318	\$2,789	\$31,262	\$550,831
Planning Period						
2022	\$254,224	\$0	\$285,839	\$1,379	\$28,882	\$570,324
2023	\$256,766	\$0	\$288,698	\$1,379	\$28,883	\$575,726
2024	\$259,334	\$0	\$291,585	\$1,379	\$28,885	\$581,182
2025	\$261,927	\$0	\$294,500	\$1,379	\$28,886	\$586,693
2026	\$264,546	\$0	\$297,445	\$1,379	\$28,888	\$592,258
2027	\$267,192	\$0	\$300,420	\$1,379	\$28,889	\$597,880
2028	\$269,864	\$0	\$303,424	\$1,379	\$28,891	\$603,557
2029	\$272,562	\$0	\$306,458	\$1,379	\$28,892	\$609,292
2030	\$275,288	\$0	\$309,523	\$1,379	\$28,893	\$615,083
2031	\$278,041	\$0	\$312,618	\$1,379	\$28,895	\$620,933
2032	\$280,821	\$0	\$315,744	\$1,379	\$28,896	\$626,841
2033	\$283,630	\$0	\$318,902	\$1,379	\$28,898	\$632,808
2034	\$286,466	\$0	\$322,091	\$1,379	\$28,899	\$638,835
2035	\$289,331	\$0	\$325,312	\$1,379	\$28,901	\$644,922
2036	\$292,224	\$0	\$328,565	\$1,379	\$28,902	\$651,070
2037	\$295,146	\$0	\$331,851	\$1,379	\$28,904	\$657,279

Disposal and Designation fees are projected to increase slightly. The Host Fee is estimated to decline over the years as the (2) two in-district landfills are receiving less out of state waste. Interest projections were based on an average and are difficult to forecast. Overall revenue for the District will be adequate to fund plan implementation.

C. Expenses

The expenses and expense categories were taken from the 2017 Fee Summary Report Verification of Financial Information. The Joint Solid Waste Management District of Defiance, Fulton, Paulding and Williams’s counties disperses funding to each PMCC to manage, develop, operate, increase, and amend any existing or new programs for their county, to enable the District to meet or exceed the State’s Recycling Goals.

The amount of the funding is determined by the revenue received. In 2017, each county received \$100,000 for their county programming. This expense was recorded as \$400,000 on [p. Other] on Table 6-2 below:

Table 6-2: Projected Expenses per Categories

Expense Category	Reference	Planning Period					
	2017	2022	2023	2024	2025	2026	2027
1. Plan Monitoring/Prep.	\$419	\$10,000	\$1,000	\$1,000	\$1,000	\$5,000	\$20,000
a. Plan Preparation	\$419	\$10,000	\$1,000	\$1,000	\$1,000	\$5,000	\$20,000
b. Plan Monitoring							
c. Other							
2. Plan Implementation	\$417,618	\$576,519	\$582,284	\$588,107	\$593,988	\$599,928	\$605,927
a. District Administration	\$17,618	\$186,183	\$188,045	\$189,925	\$191,824	\$193,743	\$195,680
Personnel	\$3,060	\$113,277	\$114,410	\$115,554	\$116,709	\$117,877	\$119,055
Office Overhead	\$1,351	\$66,845	\$67,513	\$68,188	\$68,870	\$69,558	\$70,254
Other	\$907	\$6,061	\$6,122	\$6,183	\$6,245	\$6,308	\$6,371
d. Recycling Collection	\$0	\$284,662	\$287,508	\$290,384	\$293,288	\$296,220	\$299,182
Curbside							
Drop-off		\$187,860	\$189,738	\$191,636	\$193,552	\$195,487	\$197,442
Combined Curbside/Drop-off							
Multi-family		\$0	\$0	\$0	\$0	\$0	\$0
Business/Institutional		\$96,802	\$97,770	\$98,748	\$99,736	\$100,733	\$101,740
Other							
e. Special Collections	\$0	\$10,275	\$10,378	\$10,482	\$10,586	\$10,692	\$10,799
Tire Collection		\$429	\$433	\$437	\$441	\$446	\$450
HHW Collection		\$582	\$588	\$594	\$600	\$606	\$612
Electronics Collection		\$3,440	\$3,474	\$3,509	\$3,544	\$3,579	\$3,615
Appliance Collection		\$676	\$683	\$690	\$697	\$704	\$711
Other Collection Drives		\$5,148	\$5,200	\$5,252	\$5,304	\$5,357	\$5,411
f. Yard Waste/Other Organics		\$590	\$596	\$601	\$607	\$614	\$620
g. Education/Awareness	\$0	\$85,585	\$86,440	\$87,304	\$88,177	\$89,059	\$89,950
Education Staff		\$78,240	\$79,022	\$79,812	\$80,610	\$81,416	\$82,231
Advertisement/Promotion		\$7,345	\$7,418	\$7,492	\$7,567	\$7,643	\$7,719
Other		\$0	\$0	\$0	\$0	\$0	\$0
h. Recycling Market Development	\$0	\$830	\$839	\$847	\$856	\$864	\$873
General Market Development Activities		\$830	\$839	\$847	\$856	\$864	\$873
ODNR pass-through grant							
i. Service Contracts							
j. Feasibility Studies							
k. Waste Assessments/Audits							
l. Dump Cleanup		\$428	\$433	\$437	\$441	\$446	\$450
m. Litter Collection/Education		\$7,966	\$8,045	\$8,127	\$8,209	\$8,290	\$8,373
n. Emergency Debris Management							
o. Loan Payment							
p. Other	\$400,000						
Total Expenses	\$418,037	\$586,519	\$583,284	\$589,107	\$594,988	\$604,928	\$625,927

In 2019, the expense review form was modified to resemble the Quarterly Fee Report to categorize county programming expenses. The PMCC estimates program expenses per the categories listed in Table 6-2, this will include; Contracts, Personnel, HHW, School and Office Recycling Programs, Education, Advertisement, etc. This will assist the District to have a better understanding of what is being spent on specific programs. Monies not spent during the year, called carryover funds will be recorded on the quarterly form given to the Board of Directors. A copy of these forms is in Appendix O. Projections were determined by estimated program expenses previously reported to the EPA as an addendum and actual reported expenses for 2019. Work sheets for this information are also in Appendix O.

D. Budget Summary

Table 6-3: Projected Revenue

Year	Revenue	Expenses	Net Difference	Ending Balance
Reference Year				
2017	\$550,831	\$418,037	\$132,794	\$572,848
Planning Period				
2022	\$570,324	\$586,519	-\$16,195	\$659,540
2023	\$575,726	\$583,284	-\$7,558	\$651,982
2024	\$581,182	\$589,107	-\$7,925	\$644,057
2025	\$586,693	\$594,988	-\$8,295	\$635,762
2026	\$592,258	\$604,928	-\$12,669	\$623,093
2027	\$597,880	\$625,927	-\$28,047	\$595,046
2028	\$603,557	\$633,986	-\$30,429	\$564,617
2029	\$609,292	\$638,106	-\$28,814	\$535,802
2030	\$615,083	\$619,105	-\$4,022	\$531,781
2031	\$620,933	\$619,105	\$1,828	\$533,609
2032	\$626,841	\$619,105	\$7,736	\$541,345
2033	\$632,808	\$619,105	\$13,703	\$555,048
2034	\$638,835	\$618,215	\$20,620	\$575,668
2035	\$644,922	\$637,215	\$7,707	\$583,375
2036	\$651,070	\$640,105	\$10,965	\$594,340
2037	\$657,279	\$638,105	\$19,174	\$613,514

The District expenses fluctuate during the plan update years. Pass through grants were not included in this projection.

APPENDIX A: MISCELLANEOUS INFORMATION

- A. Reference Year – The reference year for this solid waste management plan update is 2017.
- B. Planning Period (first and last) – The fifteen year planning period for this solid waste management plan is 2022 to 2037.
- C. Goal Statement: The District will continue to achieve Goal 1 by ensuring that there is adequate infrastructure to give residents and commercial businesses opportunities to recycle solid waste. Defiance County offers 127% recycling opportunity, Fulton County 91%, Paulding 140% and Williams County 133%.

The District also strives to reduce and recycle at least 25% percent of the solid waste generated by the residential/commercial sector and has achieved this percentage goal since the first plan was approved. The industrial sector percentage of 66% was not achieved in 2014 and 2017. The District restructured the survey process to obtain accurate reporting of industrial recycling numbers, with the result predicting to meet the State Goal of 66%.

- D. Explanation of the Differences Previously Reported and in Plan
 - a. Difference in quantities of materials recovered between the annual district report and the solid waste management plan.

The annual district report for the reference year 2017 was not a good representation of our Industrial recycling. In 2017, the District did not achieve their goal of 66%.

During review and clarification of the non-binding comments it was established that there were many errors on the 2017 ADR Survey Data, which was used for this Plan Update. Changes were discussed with the EPA and the corrected numbers will be used. These are documented below:
ADR in 2017 noted 18 Curbside Programs – Corrected is 16 Curbside
ADR in 2017 had a total of 44 Drop-Off Locations – Corrected is 47 Drop-Off

Other Errors and Corrections:

Defiance County (1) FTU, (11) PTR = **12**

- 1. Sims Metal Management should be added as FT Urban Drop Off

Fulton County (1) FTU, (3) FTR, (1) PTU, (5) PTR = **10**

1. Wauseon, Triangular Processing should be Urban (over 5000) FT, not Rural
2. Clinton Township, Pettisville and Swancreek Township should Rural (under 5000) FT, not Urban
3. Fulton County Transfer Station should be added as PT Urban Drop Off

Paulding County (2) FTR, (8) PTR = **10**

1. Antwerp is actually eerie Recycling and should be marked as FT Rural (only FT was marked)

Williams County (2) FTR, (1) FTU, (12) PTR = **15**

1. St. Joseph Township should be added to PT Rural Drop-Off.
2. West Unity is listed without any definition and should PT Rural.

Total Drop-Off for the District = 12+10+10+15 = **47**

NOTE: The Ohio Material Recovery Facility and Commercial Recycling Data report on the EPA Solid Waste Management has a total of 3450.60 tons, however, a total was missing from the Defiance Dollar General Corporation for an additional 102.48 tons that were not included in the total of the report. New corrected total should be 3450.60 tons.

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

None, the quarterly fee reports contain the financial data used.

E. Material Change In Circumstances/Contingencies

The District has not seen or expects to see a change in the material being recycled or disposed of.

APPENDIX B: RECYCLING INFRASTRUCTURE INVENTORY

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

1. Non Subscription Curbside Recycling

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)
NSC1	City Of Defiance	Werlor's Waste & Recycle	Defiance	Contract w/City & Private Hauler	Weekly	CB, PB, News, Mags, Plastic, Alum and Steel Cans	Single Stream - Automated and Manual	N	0	Y
NSC2	Village of Sherwood	Werlor's	Defiance	Private Hauler does 90% of Village, no contract	Weekly	CB, PB, News, Mags, Plastic, Alum and Steel Cans	Single Stream - Manual	N	0	Y
NSC3	Village of Hicksville	Werlor's	Defiance	Contract with Village and a private hauler	Bi-Weekly	CB, PB, News, Mags, Plastic, Alum and Steel Cans	Single Stream - Automated	N	0	Y
NSC4	Village of Archbold	Archbold Refuse Service	Fulton	Contract with Village and a private hauler	Bi-Weekly	Paper, CB, Plastic #1 & #2, Alum and Steel Cans	Single Stream - Manual	N	0	Y
NSC5	Village of Delta	Archbold Refuse Service	Fulton	Contract with Village and a private hauler	1x/month	Paper, CB, Plastic #1 & #2, Alum and Steel Cans		N	0	Y

NSC6	Village of Swanton	Republic Services	Fulton	Contract with Village and a private hauler	2nd & 4th Monday	Plastic #1- #7, Glass Bottles and Jars, Alum and Steel Cans, News., Mags, Paper, CB, Brown Paper Sacks, Office/School paper and Shredded.	Single Stream - Manual	N	0	Y
NSC7	Village of Payne	Real Waste	Paulding	Contract with Village* began Dec-2017 and a private hauler and will end Sept 2018 for recycling	Weekly	CB, PB, News, Mags, Plastic 1 & 2's, Alum and Steel Cans	Single Stream - Manual	N	0	N
NSC8	Village of Antwerp	Real Waste	Paulding	Contract with Village* began Dec-2017 and a private hauler and will end Sept 2018 for recycling	Weekly	CB, PB, News, Mags, Plastic 1 & 2's, Alum and Steel Cans	Single Stream - Manual	N	0	N
NSC9	Village of Oakwood	Real Waste	Paulding	Contract with Village* began Dec-2017 and a private hauler and will end Sept 2018 for recycling	Weekly	CB, PB, News, Mags, Plastic 1 & 2's, Alum and Steel Cans	Single Stream - Manual	N	0	N
NSC10	Village of Melrose	Real Waste	Paulding	Contract with Village* began Dec-2017 and a private hauler and will end Sept 2018 for recycling	Weekly	CB, PB, News, Mag, Plastic 1 & 2's, Alum and Steel Cans	Single Stream - Manual	N	0	N

NSC11	Village of Blakeslee	Republic Services	Williams	Contract with Village and a private hauler	Weekly	Plastic #1- #7, Glass Bottles and Jars, Alum and Steel Cans, News., Mags, Paper, CB, Brown Paper Sacks, Office/School paper and Shredded.		N	0	Y
NSC12	City of Bryan	Bryan City Recycling	Williams	City Department	Weekly	CB, PB, News, Mag, Plastic, Alum, Steel Cans and Glass	Single Stream - Manual	N	0	Y
NSC13	Village of Edgerton	Republic Services	Williams	Contract with Village and a private hauler	Weekly	Plastic #1- #7, Glass Bottles and Jars, Alum and Steel Cans, News., Mags, Paper, CB, Brown Paper Sacks, Office/School paper and Shredded.		N	0	Y
NSC14	Village of Edon	Republic Services will chg. to ARS in October 2018	Williams	Contract with Village and a private hauler	1st and 3rd Mondays	Plastic #1- #7, Glass Bottles and Jars, Alum and Steel Cans, News., Mags, Paper, CB, Brown Paper Sacks, Office/School paper and Shredded.	Single Stream - Automated	N	0	Y
NSC15	Village of Montpelier	Archbold Refuse Service	Williams	Contract with Village and a private hauler	Every other week	Paper, CB, Plastic #1 & #2, Alum and Steel Cans	Single Stream - Automated	N	0	Y
NSC16	Village of Stryker	Archbold Refuse Service	Williams	Contract with Village and a private hauler	1st & 3rd Fridays	Paper, CB, Plastic #1 & #2, Alum and Steel Cans		N	0	Y

Text of Non-Subscription Curbside Recycling Services Available in the Reference Year

- The City of Defiance contracts this service every 5 to 7 years. Werlor's is located within the city limits, but has other curbside contracts as well.
- Archbold Refuse Service is located in Archbold and services local communities close to them.
- Republic Services is based out of Williams County but services everywhere within our District.
- Real Waste is a smaller company servicing Paulding county with waste and recycling. Recycling opportunities were discontinued as of September 2018 due to expenses.
- The City of Bryan is the only community servicing their residents with in-city waste pick-up.

2. Drop-Off Recycling Locations

Table B-2a: Full-Time Recycling Locations

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)	Service will Continue Throughout Planning Period
FTU1	Sims Metal Management	Defiance County Program	Defiance	Container Provided - 2 locations 1- at Sims Metal Management 2 - Baltimore Road (Clemens Welding)	24/7	Scrap metals, aluminum, appliances	No	Yes
FTU2	Triangular Processing	Fulton County Program	Fulton	Business open to public and also containers available 24/7	Monday - Friday 7:30 am - 4:00 pm and 24/7	Computers, Detergent Bottles, Glass (Brn, Cl and Grn), Mags, Milk Cartons, News, Paper, Plastic, Steel and Metal	Yes	Yes
FTU3	City of Bryan	Bryan City Recycling	Williams	Container is provided	24/7	Mags & Catalogs, Steel and Alum cans, Cl and Brn Glass, Plastic Containers, News	Yes	Yes
3								

Text of Full-Time Recycling

- The definition of Urban is a location that has a population over 5,000 people. The City of Defiance, Wauseon and Bryan exceed 5,000.
- Sims Metal Management provides two containers available 24/7 for scrap metal and appliances: one (1) is located in front of their business at 27063 State Route 281 and the other at 1910 Baltimore Street, Defiance.
- The Fulton County Program provides a trailer at Triangular Processing (TP) located in the City of Wauseon for 24/7 recycling availability in addition to the business hours provided by TP.
-

Table B-2b: Part-Time Urban Recycling Locations

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)	Service will Continue Throughout Planning Period (Y/N)
PTU1	Fulton County Solid Waste Transfer Station	Fulton County Program	Fulton	Business -open to public	Mon, Tues, Thurs, Friday 8:00 am to 4:00 pm, Sat 8:00 am to Noon. Closed Wednesday and Sunday	Ferrous and Non-Ferrous Metals	No	Yes
1								

Text of Part-Time Urban Recycling

- The definition of Urban is a location that has a population over 5,000 people. The Fulton County Solid Waste Transfer Station is located outside the City of Wauseon and is considered urban.
- The transfer station is not considered as a full time opportunity as the facility is only opened 32 hours per week.

Table B-2c: Full-Time Rural Drop-Off Locations

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)	Service will Continue Throughout Planning Period (Y/N)
FTR1	Village of Archbold	Fulton County Program	Fulton	Trailer Provided	24/7	Alum, Books, CB, Cell Phones, Computers, Detergent Bottles, Glass (Brn, Cl, and Grn) Mags, Metal Hangers, Milk Cartons, News, Paper, Plastic (#1 and #2) Plastic Coffee Cans, Steel Cans.	Yes	Yes

FTR2	Pettisville	Fulton County Program	Fulton	Trailer Provided	24/7	Alum, Books, CB, Cell Phones, Computers, Detergent Bottles, Glass (Brn, Cl, and Grn) Mags, Metal Hangers, Milk Cartons, News, Paper, Plastic (#1 and #2) Plastic Coffee Cans, Steel Cans.	Yes	Yes
FTR3	Swancreek Township	Fulton County Program	Fulton	Trailer is placed in community	24/7	Alum., Books, CB, Cell Phones, Computers, Detergent Bottles, Glass (Brn, Cl, and Grn) Mags, Milk Cartons, News, Plastic (#1 and #2) Plastic Coffee Cans, Steel Cans and Metal Hangers	Yes	Yes

FTR4	Erie Recycling	Erie Recycling	Paulding	Business - trailers available 24/7	24/7	Paper, CB, Plastic, Steel, Alum, News, Glass (Brn, CL and Grn), Mags	Yes	Yes
FTR5	Kohart Recycling	Kohart Recycling	Paulding	Business - Open to Public	M-F 8:00 am to 4:00 pm, Saturday 8:00 am to Noon	News, CB, Steel Cans and Alum Cans, Paper, appliances, scrap metal	Yes	Yes
FTR6	Northwest Recycling	Northwest Recycling	Williams	Business - open to public	6/Days per Week M- F 8:00 am to 4:00 pm Sat. 8:00 am to Noon	Ferrous and Non-Ferrous Metals, CB, Batteries, Copper, Appliances	No	Yes
FTR7	Village of Pioneer	Archbold Refuse Service ARS	Williams	Trailer Provided	24/7	Paper, CB, Plastic #1 & #2, Alum and Steel Cans	Yes	Yes
7								

Alum is Aluminum, CB is Cardboard, Mags is Magazines, News is Newspapers

Text of Full-Time Rural Drop-Off Recycling

- Rural is defined as an area with a population less than 5,000 people.
- The Fulton County Program provides trailers within their communities of Archbold, Pettisville and Swancreek Township. These trailers are available 24/7 and unmanned.
- Kohart Recycling (Paulding County) and Northwest Recycling (Williams County) services the public during a business 40 hour work week.
- Real Waste offers a recycling container at their business. They began this service when they needed to stop curbside pickup.
- The Village of Pioneer has worked a partnership with ARS to provide a recycling trailer for their community. The trailer is picked up and emptied by ARS every two (2) weeks or sooner if filled.
- As of October 1, 2019 glass has been suspended from the Fulton County Program. The impact of removing glass will be assessed.

Table B-2d: Part-Time Drop-Off Rural Recycling Locations

ID#	Name of Drop-off Site	Service Provider	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected⁽¹⁾
PTR1	Ayersville - Highland Township	Defiance County Program	Defiance	SWMD	1st Wednesday of the month Noon to 2:00 pm	CB, PB, News, Mags, Loose, Shred Paper, Steel, Alum Cans, Plastic ¹ , PCs, Cell Phones
PTR2	Power Dam - Defiance Township	Defiance County Program	Defiance	SWMD	1st Wednesday of the month 9:00 am to 11:00 am	CB, PB, News, Mags, Loose, Shred Paper, Steel, Alum Cans, Plastic ¹ , PCs, Cell Phones

PTR3	Evansport - Tiffin Township	Defiance County Program	Defiance	SWMD	3rd Friday of the month 9:00 am to 11:00 am	CB, PB, News, Mags, Loose, Shred Paper, Steel, Alum Cans, Plastic ¹ , PCs, Cell Phones
PTR4	Farmer - Farmer Township	Defiance County Program	Defiance	SWMD	3rd Friday of the month 11:00 am to 2:00 pm	CB, PB, News, Mags, Loose, Shred Paper, Steel, Alum Cans, Plastic ¹ , PCs, Cell Phones
PTR5	Hicksville Transfer Station (HTS)	Defiance County Program	Defiance	SWMD	1st Saturday of the month (Jan - Dec) 3rd Saturday of the month (Apr - Nov) 8-2:00 pm	CB, PB, News, Mags, Loose, Shred Paper, Steel, Alum Cans, Plastic ¹ , PCs, Cell Phones
PTR6	Village of Hicksville - Hicksville Township	Defiance County Program	Defiance	SWMD	1st Friday of the month 9:00 am to 11:00 am	CB, PB, News, Mags, Loose, Shred Paper, Steel, Alum Cans, Plastic ¹ , PCs, Cell Phones
PTR7	Village of Mark Center - Mark Center Township	Defiance County Program	Defiance	SWMD	1st Friday of the month Noon to 2:00 pm	CB, PB, News, Mags, Loose, Shred Paper, Steel, Alum Cans, Plastic ¹ , PCs, Cell Phones
PTR8	Ney - Washington Township	Defiance County Program	Defiance	SWMD	3rd Wednesday of the month Noon to 2:00 pm	CB, PB, News, Mags, Loose, Shred Paper, Steel, Alum Cans, Plastic ¹ , PCs, Cell Phones

PTR9	Noble - Noble Township	Defiance County Program	Defiance	SWMD	2nd and 4th Thursdays of the month 9:00 am to 11:00 am	CB, PB, News, Mags, Loose, Shred Paper, Steel, Alum Cans, Plastic ¹ , PCs, Cell Phones
PTR10	Richland - Richland Township	Defiance County Program	Defiance	SWMD	2nd and 4th Thursdays of the month Noon to 2:00 pm	CB, PB, News, Mags, Loose, Shred Paper, Steel, Alum Cans, Plastic ¹ , PCs, Cell Phones
PTR11	Village of Sherwood - Delaware Township	Defiance County Program	Defiance	SWMD	3rd Wednesday of the month 9:00 am to 1:00am	CB, PB, News, Mags, Loose, Shred Paper, Steel, Alum Cans, Plastic ¹ , PCs, Cell Phones
PTR12	Village of Delta- York Township	Fulton County Program	Fulton	SWMD	3rd Saturday of the month 9:00 am to 1:00 pm	Alum, Books, CB, Cell Phones, Computers, Detergent Bottles, Glass (Brn, Cl, and Grn) Mags, Metal Hangers, Milk Cartons, News, Paper, Plastic ² , Steel Cans.
PTR13	Village of Fayette - Gotham Township	Fulton County Program	Fulton	SWMD	2nd Saturday of the month 9:00 am to Noon	Alum, Books, CB, Cell Phones, Computers, Detergent Bottles, Glass (Brn, Cl, and Grn) Mags, Metal Hangers, Milk Cartons, News, Paper, Plastic ² , Steel Cans.

PTR14	Village of Lyons - Royalton Township	Fulton County Program	Fulton	SWMD	Saturday 9:00 am to Noon	Alum, Books, CB, Cell Phones, Computers, Detergent Bottles, Glass (Brn, Cl, and Grn) Mags, Metal Hangers, Milk Cartons, News, Paper, Plastic ² , Steel Cans.
PTR15	Village of Metamora - Amboy Township	Fulton County Program	Fulton	SWMD	Saturday 9:00 am to Noon	Alum, Books, CB, Cell Phones, Computers, Detergent Bottles, Glass (Brn, Cl, and Grn) Mags, Metal Hangers, Milk Cartons, News, Paper, Plastic ² , Steel Cans.
PTR16	Pike Township	Fulton County Program	Fulton	SWMD	2nd Saturday of the month 9:00 am to Noon	Alum, Books, CB, Cell Phones, Computers, Detergent Bottles, Glass (Brn, Cl, and Grn) Mags, Metal Hangers, Milk Cartons, News, Paper, Plastic ² , Steel Cans.
PTR17	Village of Briceton	Paulding County Program	Paulding	SWMD	3rd Saturday of the month 11:15 am to 11:45 am	Paper, News, Office Paper, Mags, CB, Glass, Alum and Steel Cans, Plastic ³
PTR18	Village of Cecil	Erie Recycling	Paulding	Business - Open to Public	1st Saturday of the month 8:30 am to Noon	Paper, CB, Plastic, Steel, Alum, News, Glass (Brn, CL and Grn), Mags
PTR19	Village of Grover Hill	Paulding County Program	Paulding	SWMD	1st Saturday of the month 9:00 am to 11:00 am	Paper, News, Office Paper, Mags, CB, Glass, Alum and Steel Cans, Plastic ³

PTR20	Village of Haviland and Scott	Paulding County Program	Paulding	SWMD	1st Saturday of the month 11:15 am to Noon	Paper, News, Office Paper, Mags, CB, Glass, Alum and Steel Cans, Plastic ³
PTR21	Village of Latty	Paulding County Program	Paulding	SWMD	3rd Saturday of the month 11:15 am to 12:30 pm	Paper, News, Office Paper, Mags, CB, Glass, Alum and Steel Cans, Plastic ³
PTR22	Paulding County Fairgrounds	Erie Recycling	Paulding	SWMD	1st Saturday of every month 9:00 am to 11:00 am	Paper, CB, Plastic, Steel, Alum, News, Glass (Brn, CL and Grn), Mags
PTR23	Village of Payne	Paulding County Program	Paulding	SWMD	3rd Saturday of the month 9:00 am to 11:00 am	Paper, News, Office Paper, Mags, CB, Glass, Alum and Steel Cans, Plastic ³
PTR24	Junction	Paulding County Program	Paulding	SWMD	2nd Wednesday of the month 12:30 pm to 1:30 pm	Paper, News, Office Paper, Mags, CB, Glass, Alum and Steel Cans, Plastic ³
PTR25	Alvordton	Williams County Program	Williams	SWMD	1st Weekend of the month	Plastics ₄ , News, Steel and Alum Cans
PTR26	Village of Blakeslee	Williams County Program	Williams	SWMD	3rd Weekend of the month	Plastics ₄ , News, Steel and Alum Cans
PTR27	Bridgewater Township	Williams County Program - Discontinued due to excessive trash August 2018	Williams	SWMD	3rd Weekend of the month	Plastics ₄ , News, Steel and Alum Cans
PTR28	Jefferson Township	Williams County Program	Williams	SWMD	2nd Weekend of the month	Plastics ₄ , News, Steel and Alum Cans

PTR29	Kunkle	Williams County Program	Williams	SWMD	1st Wednesday of the month	Plastics ₄ , News, Steel and Alum Cans
PTR30	Northwest Township	Williams County Program- July 2018 - moved to NW Twp. Fire station at 16743 State Rte. 49, Edon	Williams	SWMD	4th Weekend of the month	Plastics ₄ , News, Steel and Alum Cans
PTR31	Pulaski Township	Pulaski Township	Williams	SWMD	4th Wednesday of the month	Plastics ₄ , News, Steel and Alum Cans
PTR32	Springfield Township	Williams County Program	Williams	SWMD	1st Wednesday of the month	Plastics ₄ , News, Steel and Alum Cans
PTR33	Village of West Unity	Williams County Program	Williams	SWMD	3rd Wednesday of the month	Plastics ₄ , News, Steel and Alum Cans
PTR34	Superior Township	Williams County Program	Williams	SWMD	1st Weekend of the month	Plastics ₄ , News, Steel and Alum Cans
PTR35	Center Township	Williams County Program	Williams	SWMD	2nd Weekend of the month	Plastics ₄ , News, Steel and Alum Cans
PTR36	St. Joseph Township	Williams County Program	Williams	SWMD	2nd Wednesday of the month	Plastics ₄ , News, Steel and Alum Cans
36						

Plastic¹ = Milk Jugs, Water Bottles, Juice Bottles, Detergent Bottles, Bleach Bottles and Pop Bottles / Plastic² = #1 and #2 Plastic and plastic Coffee Cans

Plastic³ = Soda Bottles, Milk Jugs, Detergent Bottles, rinsed and caps left on / Plastic₄ = #1 and #2 on Bottom (Milk Jugs, Shampoo Bottles, Detergent Bottles, Soda Bottles) rinsed and caps removed.

Text of Part-Time Rural Drop-Off Recycling

- Rural is defined as an area with a population of less than 5,000.
- Part-Time Drop-Off trailers, manned or unmanned are the largest opportunity for the county programs to reach our residents in rural settings.
- CB is cardboard, PB is pressboard, News is newspapers, Mags is magazines, Alum is aluminum, PC's is computers, Plastic¹ is only Milk Jugs, Pop Bottles, Juice Bottles, Laundry Detergent, Bleach Bottles and Water Bottles, Plastic² = #1 & #2 and plastic coffee containers. Plastic³ is Soda Bottles, Milk Jugs, Detergent Bottles, rinsed and caps left on. Plastic⁴ is #1 and #2 on bottom (Milk Jugs, Shampoo Bottle, Detergent Bottles, and Soda Bottles) rinsed and caps removed.
- Problems have existed with excessive trash at unmanned trailer locations. PMCC have placed signs at the location site, re-labeled containers for what should go inside, created pictures of the recycling allowed and worked with law enforcement when needed. Attempts to correct the excessive trash at Bridgewater Township in Williams County did not succeed and the trailer was removed. Williams County hopes to find an alternate location and try again in the near future.
- As of October 1, 2019 glass has been suspended from the Fulton County Program. The impact of removing glass will be assessed.

3. Mixed Solid Waste Material Recovery Facilities

- The District does not have any mixed MRF facilities.

A. Curbside Recycling and Trash Collection Service Providers

Table B-4: Curbside Recycling and Trash Collection Services in Reference Year

Name of Provider	Counties Served	Trash Collection Services			Curbside Recycling Services			
		PAYT (Y/N)	Residential	Commercial	Industrial	Residential2	Commercial2	Industrial 2
Werlor's Real Waste	Defiance, Williams, Fulton, Paulding	N	Y	Y	Y	Y		
Republic Services	Williams, Defiance, Fulton, Paulding	N	Y	Y	Y	Y		
Bryan City Recycling	Williams	N	Y			Y		
Archbold Refuse Service (ARS)	Williams, Defiance, Fulton, Paulding	N	Y	Y	Y	Y		
Porter's Sanitation	Paulding	N	Y					
S&S Sanitation	Paulding, Defiance	N	Y					
Advance Sanitation	Fulton	N	Y					
Pikes Refuse Service	Williams, Defiance and Fulton	N	Y					

Text of Curbside Recycling and Trash Collection

- Werlor's Waste and Recycling services all four counties within the District, but primary is Defiance County.

- Real Waste and Porter's Sanitation are only in Paulding County at this time.
- Republic Services has select contracts with residential communities in the District and multiple contracts with industries.
- The City of Bryan is serviced by municipal employees.
- ARS is a transfer facility and services all four counties.
- Advanced Sanitation has contracts within Fulton County and several in a neighboring district.
- Pike's Refuse Service and S&S Sanitation both service rural communities.

B. Composting Facilities

Table B-5: Composting Facilities Used in Reference Year

Facility Name	Compost Facility Classification	Publicly Accessible (Y/N)	Location	Food Waste (tons)	Yard Waste (tons)	Total
Defiance WWTP	20-C4R-0915	Y	26273 SR 281 E Defiance, OH 43512 Defiance County		882.76	882.76
Strait Gate	20-C3R-08485	Y	2298 Arrowsmith Rd. Hicksville, OH 43526 Defiance County			0.00
Andre Farms LLC	26-C3R0461	Y	13529 CR L Wauseon, OH 43567 Fulton County	13141.50	1826.59	14968.09
Lammon Brothers	20-C4R-1005	Y	7520 RD 5-2 Delta, OH Fulton County		2017.58	2017.58
Village of Antwerp	63-C4R-07449	Y	Paulding County		57.94	57.94
Village of Paulding	63-C4R-0370	Y	Paulding County		1653.35	1653.35
Bryan Recycling Center	86-C4R-0135	Y	1200 Buffalo Rd. Bryan, OH 43509 Williams County		191.53	191.53
Edgerton Village Composting	86-C4R-0455	Y	County Rd 5 Edgerton, OH Williams County		520.33	520.33
Edon Village Composting	86-C4R-0598	Y	Williams County		77.00	77.00
Village of Montpelier	86-C4R-0052	Y	Co Rd K14 E of Co Rd 10 Montpelier , OH Williams County		322.67	322.67
Village of West Unity	86-C4R-0405	Y	319 S. Liberty Street West Unity, OH Williams County		291.33	291.33
Village of Pioneer Composting Facility	86-C4R-0806	Y	County Rd R Pioneer, OH Williams County		238.67	238.67
Total				13141.50	8079.75	21221.25

Text of Compost Facilities

- The compost facilities listed above are registered with the EPA.
- The tonnages reported were obtained by the Compost Report submitted to the EPA.

C. Other Food Waste and Yard Waste Management Programs

Table B-6: Other Food and Yard Waste Management/Collection Programs

Facility or Activity Name	Activity Type	Location	Food Waste (tons)	Yard Waste (tons)
Village of Ney	Community Yard Waste Drop-Off	230 East Main Street, Ney, OH 43549		6
Frozen Specialties	Used to make feed for animals	720 Barre Rd Archbold, OH 43502 Fulton County	847.01	
Village of Archbold	Community Yard Waste Drop-Off	519 Short-Buehrer Road Archbold, OH		433
Village of Delta	Community Yard Waste Drop-Off	401 Main Street Delta, OH Fulton County		273
Village of Swanton	Community Yard Waste Drop-Off	219 Chestnut Street Swanton, OH 43558 Fulton County		739
Village of Metamora	Community Yard Waste Drop-Off	114 E. Main Street, Metamora, OH 43540		87
Nothing But Nature	Land Application	9780 RD 171 Oakwood, OH 45873 Paulding County		3
Village of Oakwood	Community Yard Waste Drop-Off	9780 RD 171 Oakwood, OH 45873 Paulding County		1
Village of Payne	Community Yard Waste Drop-Off	119 N Main Street, Payne, OH 45880		196
Haviland Digester	Land Application	151 West Main Street Haviland, OH 45851	0	
Total			847	1,739

Text of Other Food and Yard Programs

- Most of the information for Table B-6 was obtained by the 2017 ADR. Many local villages have community programs to pick up residential leaves and/or brush and process by mulching to be used for gardens or in fields. If a pick-up program is not available, a drop off location may be.

- The food tonnage was reported by a business that takes outdated food product and turns it into animal feed. Haviland Digester accepts food wastes from many area businesses and turns it into a liquid for fields.

E. Material Handling Facilities Used in Reference Year

Table B-7: Material Handling Facilities

Facility Name	County	State	Type of Facility	Weight of Material Accepted from SWMD (tons)
E-Paint	Battle Creek	MI	Paint Recycler	0
Disc Oil	Hamilton	OH	Oil Recycler	1
EnviroTire	Defiance	OH	Licensed Tire Transport	35
Exceptional Motorcar LLC	Defiance	OH	Licensed Tire Transport	20
Liberty Tire Service of Ohio	Defiance	OH	Licensed Tire Transport	275
McNaughton-McKay	Defiance	OH	Electronic Suppler	0
Omni Source	Defiance	OH	Recycling Center	2,401
R Willig Tire Distribution Inc.	Defiance	OH	Licensed Tire Transport	20
R&R Tire Disposal	Defiance	OH	Licensed Tire Transport	30
Werlor's Waste Control & Recycling	Defiance	OH	Recycling Center	1,147
Archbold Refuse Services (ARS)	Fulton	OH	Recycling Center	487
Bob's Tire Services LLC	Fulton	OH	Licensed Tire Transport	26
EnviroTire	Fulton	OH	Licensed Tire Transport	135
Fulton County Transfer Station	Fulton	OH	Licensed Tire Transport	2
Liberty Tire Service of Ohio	Fulton	OH	Licensed Tire Transport	49
R Willig Tire Distribution Inc.	Fulton	OH	Licensed Tire Transport	14
Tedrow Auto Wrecking Co	Fulton	OH	Licensed Tire Transport	5
Triangular Processing	Fulton	OH	Material Recovery Facility	1,064
Battery Solutions	Howell	MI	Business	2
Bob's Tire Services LLC	Paulding	OH	Licensed Tire Transport	3
EnviroTire	Paulding	OH	Licensed Tire Transport	1
Erie Recycling Center	Paulding	OH	Recycling Center	87
Koharts	Paulding	OH	Recycling Center	0
PC Workshop	Paulding	OH	Processing Center	19,166
R & R Tire Disposal	Paulding	OH	Licensed Tire Transport	52
Bob's Tire Services LLC	Williams	OH	Licensed Tire Transport	8
Bohner Recycling	Williams	OH	Recycling Center	24
Bryan Recycling	Williams	OH	Recycling Center	3
Entech Inc.	Williams	OH	Licensed Tire Transport	19
EnviroTire	Williams	OH	Licensed Tire Transport	402
Liberty Tire Service of Ohio	Williams	OH	Licensed Tire Transport	72
Oberlin Farms Demolition and Rec.	Williams	OH	Recycling Center	12
R Willig Tire Distribution Inc.	Williams	OH	Licensed Tire Transport	23
Williams County Engineer	Williams	OH	County Facility	1
Total				25,587

Text for Material Handling Facilities

- This information comes from the ADR survey form. The form requests that if any recyclable material is sent elsewhere to be process, that the location be defined. The material handler may be the same used per county. Tires were transported by several licensed transporters. If these tire transporters also reported directly to the EPA, the tons were adjusted to avoid any duplication.
- In 2018 the Fulton County Transfer Station discontinued transportation of tires collected and has NR&G Recycling transport the tires to the Henry County Landfill. NR&G Recycling is also a licensed tire transporter.

APPENDIX C: POPULATION DATA

A. Reference year (2017) Population

	Defiance
Before Adjustment	38,156
Additions	
Community 1	
Community 2	
Community 3	
Subtractions	
Community 1	
Community 2	
Community 3	
After Adjustment	38,156
Fulton	
Before Adjustment	42,289
Additions	
Village of Swanton - Lucas County	153
Community 2	
Community 3	
Subtractions	
Community 1	
Community 2	
Community 3	
After Adjustment	42,442
Paulding	
Before Adjustment	18,845
Additions	
Community 1	
Community 2	
Community 3	
Subtractions	
Village of Scott - Van Wert County	114
Community 2	
Community 3	
After Adjustment	18,731

	Williams
Before Adjustment	36,784
Additions	
Community 1	
Community 2	
Community 3	
Subtractions	
Community 1	
Community 2	
Community 3	
After Adjustment	36,784

- Population was determined by the Population Estimates Division of the U.S. Census Bureau, developed by the Ohio Development Services Agency Office of Research.
- The Village of Swanton is partly into Lucas County and the Village of Scott is partly into Van Wert County. Lucas County and Van Wert County is a different Solid Waste District and per Ohio law, the entire population of a municipality located in more than one solid waste management district should be added to the solid waste management district containing the largest portion of the jurisdiction’s population.
- The majority of the Village of Swanton resides in Fulton County therefore the portion of the Village of Swanton that is in Lucas County is added to the Fulton County population. Likewise, portions of the Village of Scott reside in Van Wert County and are subtracted from the Paulding County population.

Table C-1b: Total Reference Year Population

Unadjusted Population	Adjusted Population
136,074	136,113

- The reference year population is determined by unadjusted population per the U.S. Census Bureau and the adjustments made for Fulton and Paulding Counties.
- The adjusted population is the number used throughout the plan for projections.

B. Population Projections

Table C-2: Population Projections

Year	Defiance	Fulton	Paulding	Williams	Total District Population
2017	38,156	42,442	18,731	36,784	136,113
2018	38,290	42,413	19,024	36,398	136,125
2019	38,190	42,383	18,980	36,234	135,787
2020	38,090	42,353	18,936	36,070	135,449
2021	37,912	42,213	18,840	35,864	134,829
2022	37,734	42,079	18,744	35,658	134,215
2023	37,556	41,933	18,648	35,452	133,589
2024	37,378	41,793	18,552	35,246	132,969
2025	37,200	41,653	18,456	35,040	132,349
2026	37,058	41,501	18,386	34,862	131,807
2027	36,916	41,349	18,316	34,684	131,265
2028	36,774	41,197	18,246	34,506	130,723
2029	36,632	41,045	18,176	34,328	130,181
2030	36,490	40,893	18,106	34,150	129,639
2031	36,404	40,803	18,052	34,010	129,269
2032	36,318	40,713	17,998	33,870	128,899
2033	36,232	40,623	17,944	33,730	128,529
2034	36,146	40,533	17,890	33,590	128,159
2035	36,060	40,310	17,950	33,450	127,770
2036	36,026	40,447	17,866	33,416	127,755
2037	35,992	40,451	17,896	33,382	127,721

- Projections were obtained from the Ohio Development Services Agency Population Projections and include the population adjustments for Fulton and Paulding Counties.
- 2017 is the reference year and the planning period is 2022-2037.

C. Documents

- County Township/Towns Population
- 2017 Population Estimates

APPENDIX D: DISPOSAL DATA

A. Reference Year Waste Disposed

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

Facility Name	Location		Waste Accepted from the SWMD			
	County	State	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Cherokee Run Landfill		OH	1			1
Wood County Landfill	Wood	OH	387		27	414
Evergreen Recycling & Disposal	Wood	OH	989	2,492	1,088	4,569
Williams County Landfill	Williams	OH	34,771	8,719	4,559	48,049
American Landfill		OH		24	0	24
Hancock Sanitary Landfill	Hancock	OH	604	0	9	613
Defiance County Landfill	Defiance	OH	43,032	18,063	16,969	78,064
Total			79,784	29,299	22,651	131,734

¹The 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 3734.53 (13)(a) was provided by Ohio EPA Solid Waste Management Waste Flows Reports. The District anticipates that these facilities will be used throughout the planning period. Excluded or Exempt waste is a material such as C&DD which is not defined as a SW.

Table D-1b: Waste Disposed in Captive Landfills¹

Facility Name	Location		Waste Accepted from the District		
	County	State	Industrial (tons)	Excluded (tons)	Total (tons)
Lafarge North America	Paulding	OH	14,172		14,172
GM Castings Operation	Defiance	OH	270,540		270,540
Total			284,712	0	284,712

¹The 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 3734.53 (13)(a) was provided by Ohio EPA Solid Waste Management Waste Flows Reports. The District anticipates that these facilities will be used throughout the planning period. Excluded or Exempt waste is a material such as C&DD which is not defined as a SW.

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

Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total
79,784	314,011	22,651	416,447

Information in Table D-1c was provided by reporting Residential/Commercial tons reported in D-1a, Industrial tons from Tables D-1a and D-1b, Excluded tons from Table D-1a equals total tons.

Table D-2: Waste Transferred in the Reference Year¹

Facility Name	Location		Waste Received from the SWMD			
	County	State	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
ARS Archbold Refuse Service	Fulton	OH	22,532			22,532
Fulton County SW Facility	Fulton	OH	1,419		1,996	3,416
DFPW Additions	Marion	IN	186	1,026	94	1,306
Total			24,137	1,026	2,090	27,253

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 3734.53 (13)(a) was provided by Ohio EPA Solid Waste Management Waste Flows Reports. The District anticipates that these facilities will be used throughout the planning period. Excluded or Exempt waste is a material such as C&DD which is not defined as a SW.

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

Facility Name	Facility Type	Location		Waste Accepted from the SWMD			
		County	State	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Stericycle, Inc.	Incinerator	Allen	IN				0
Sauder Mfg Archbold	Furniture	Fulton	OH		855		855
S-W Mills		Fulton	OH		18,073		18,073
Total				0	18,928	0	18,928

Information for Table D-3 was obtained from the ADR survey data. Residential tonnages reflect companies that reported burning wood for heat.

Table D-4: Total Waste Disposed in the Reference Year

	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Direct Hauled	79,784	314,011	0	393,795
Transferred	24,137	1,026	0	25,163
Incinerated	0	0	0	0
Total	103,921	315,037	0	418,958

Percent of Total	25%	75%	0%	100%
------------------	-----	-----	----	------

Table D-4 combines all direct-haul, and transferred waste by each sector to determine a total for waste disposed per sector without incineration number or excluded/exempt waste.

Table D-4s: Supplemental Table

	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Direct Hauled	79,784	314,011	22,651	416,447
Transferred	24,137	1,026	2,090	27,253
Incinerated	0	18,928	0	18,928
Total	103,921	333,965	24,742	462,628
Percent of Total	22%	72%	5%	100%

Table D-4s is a supplement to Table D-4 and calculates the percentages including Incinerated and Excluded waste.

B. Historical Waste Analysis

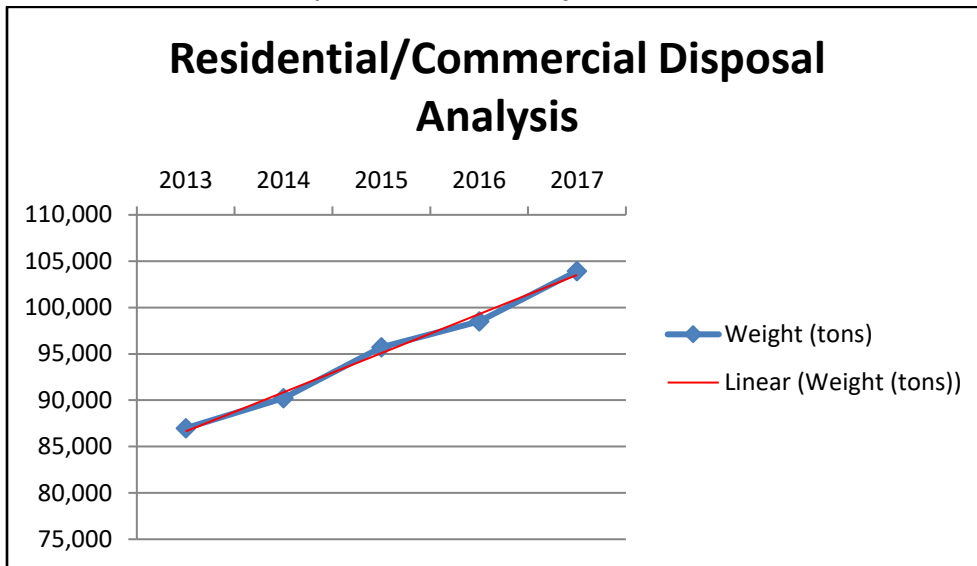
Table D-5: Historical Disposal Data

Year	Population	Residential/ Commercial Solid Waste		Industrial Solid Waste	Excluded Waste	Total Waste
		Rate (ppd)	Weight (tons)	Weight (tons)²	Weight (tons)³	Weight (tons)⁴
2013	137,774	3.46	86,979	239,525	18,295	344,799
2014	137,370	3.60	90,226	391,418	16,647	498,291
2015	136,985	3.83	95,722	369,281	17,002	482,005
2016	136,554	3.95	98,523	284,299	24,504	407,326
2017	136,113	4.18	103,921	333,965	24,742	462,628

Population, residential/commercial, industrial and excluded waste numbers were taken from ADR report information that was submitted to the Ohio EPA. 443,700 tons is the number recorded for Disposal Recycling and Generation Summary for 2017 it does not include Incineration 18,928 tons. [443,700 + 18,928 tons = 462,628 tons].

1. Residential/Commercial Waste Analysis

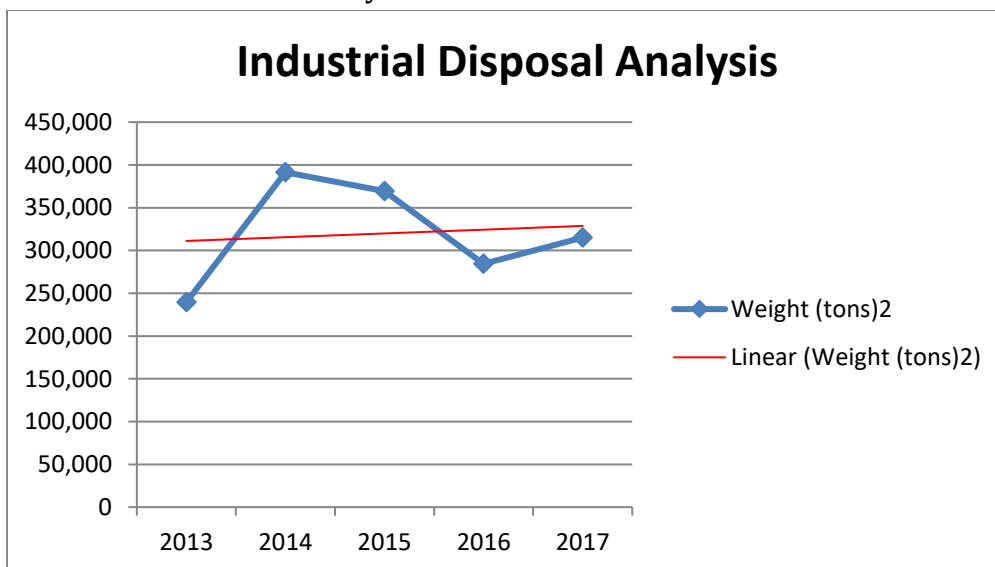
Chart D-1: Residential/Commercial Analysis



This chart reflects slight increases over the years.

2. Industrial Waste Analysis

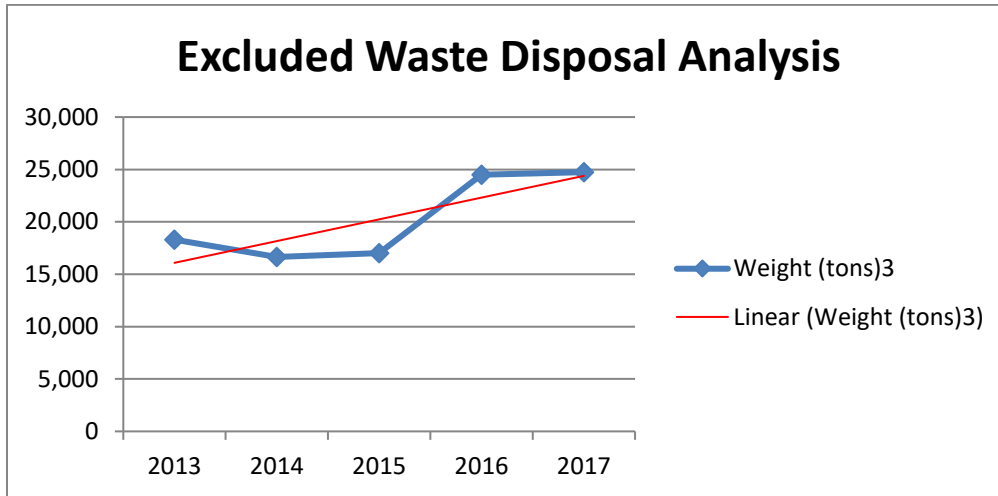
Chart D-2: Industrial Analysis



In 2017 the reference year, the District did not achieve the State Goal of 66% for the Industrial Sector.

3. Excluded Waste Analysis

Chart D-3: Excluded Analysis



Excluded waste decreased in 2014 & 2015 and then started climbing. This may be due to using Re-Trac (software program) for reporting and obtaining data.

C. Disposal Projections

Table D-6: Waste Projections

Year	Residential/ Commercial Solid Waste	Industrial Solid Waste	Excluded Waste	Total Waste
	Weight (tons)	Weight (tons)	Weight (tons)	Weight (tons)
2017	103,921	315,037	24,742	443,700
2018	101,387	381,915	29,126	512,428
2019	106,008	425,413	31,909	563,330
2020	110,839	473,865	34,958	619,662
2021	115,890	527,835	38,298	682,024
2022	121,172	587,953	41,958	751,082
2023	126,694	654,917	45,967	827,578
2024	132,468	729,509	50,359	912,335
2025	138,505	812,596	55,170	1,006,271
2026	144,817	905,145	60,442	1,110,405
2027	151,417	1,008,236	66,217	1,225,871
2028	158,318	1,123,069	72,544	1,353,931
2029	165,533	1,250,980	79,476	1,495,989
2030	173,077	1,393,459	87,070	1,653,606
2031	180,965	1,552,166	95,389	1,828,520
2032	189,212	1,728,949	104,504	2,022,665
2033	197,835	1,925,866	114,489	2,238,191
2034	206,851	2,145,211	125,429	2,477,491
2035	216,278	2,389,538	137,414	2,743,230
2036	226,135	2,661,693	150,543	3,038,371
2037	236,441	2,964,844	164,928	3,366,213

Projections for Residential/Commercial solid waste used the average annual percent change of 4.56% to show a slight increase in R/C Solid Waste. Industrial projects used the average annual percent change of 11.39% and Excluded 9.56%.

APPENDIX E: RESIDENTIAL/COMMERCIAL RECYCLING DATA

A. Reference Year Recovery Data

The District conducts a survey of commercial and institutional businesses within the four counties. Table E-1 presents the results of the survey for the reference year 2017. In some instances, the amount reported by a business was known to be collected and reported by another business as shown in Table E-2 or in one of the programs listed in Table E-4. To avoid double counting, these amounts were subtracted from the total tonnages in Table E-1, as noted in the adjustments row and column.

Table E-1: Residential/Commercial Survey Data

NAICS	Appliances/ "White Goods"	Electronics	Lead-Acid Batteries	Food	Glass	Ferrous Metals	Non-Ferrous Metals	Corrugated Cardboard	All Other Paper	Plastics	Textiles	Wood	Rubber	Yard Waste	Other	Tires	Motor Oil	Co-Mingled
112340 - Poultry Hatchery (1)			1.05	0.00		7.00											16.43	
311613 - Food Rendering (1)				766.67														
424820 - Beverage Distributor (1)								4.50	1.00	4.00		2.00						
423210 - Furniture (2)	100.00							0.10	0.03	2.00	1.50							
423930 - Scrap Metal Recyclers (6)	71.00	1.00	25.00			11026.79	354.07	697.00	113.00								11.87	
424910 - Farm Supplies (1)			20.00									10.00					20.00	
441310 - Auto Parts (3)			20.47					3.90				31.20					51.98	
444210 - Power Equipment (1)			1.00			2.05	0.30	0.30				2.00					0.20	
442210 - Carpet Wholesale (1)											70.00							
445110 - Grocery (4)				5.00				339.48										
441120- Auto Dealerships (9)			61.60			5.00	5.00	10.00			2.00	1.00				0.92	105.30	
441210 - Recreational Equipment (1)			2.00														1.75	
441320 - Tire Dealers (3)			2.00										2515.57				22.75	
444110 - Home Improvement Store (1)								657.00										
453310 - Used Merchandise (4)	4.00	33.40																
452111 - Department Store (1)			0.12					64.55		9.93								
453210 - Office Supplies (1)						1.66	1.98	3.38	58.80									
484230 - Transportation (1)			1.00			5.68	0.51					2.00					4.70	
491110 - USPS (4)								23.00	197.00	8.00								
511110 - Newspaper/Publishing (2)								1.06	137.88									
522110 - Banking (1)									8.10	0.09								
563314 - Compost				467.11										13107.30				
562111 - Solid Waste Collection (4)	0.00	11.50	0.00			0.00	200.13	196.33	135.77	17.93		10.90		191.48			27.54	
562212 - Landfill (6)						386.68		231.42				400.46						
624110 - Youth Services (2)								2.52	16.95									
622310 - Hospital (2)		2.08	0.00			4.42	0.42	14.63	40.70			1.20					0.54	
811120 - Auto Repair (2)			177.85			3.00											8.21	
811111 - Auto Service (1)																	27.38	
813100 - Church (1)																		

Appendix E

921110 - Government (21)		0.00	0.50		136.10	97.39	59.55	48.70	0.00	27.22		184.00		11837.81	2.00	0.00	1.19	2515.07	
EPA Defiance WWTP														882.76					
EPA Food				515.32															
EPA Retail						5.99	0.06	3109.95	151.82	68.35		8.44			208.47		0.00		
EPA Strait Gate														73.67					
EPA Tires																1201.89			
Unadjusted Total	175.00	47.98	312.59	1754.10	136.10	11545.66	622.02	5407.82	861.05	137.52	73.50	653.20	2515.57	26093.02	210.47	1202.81	299.84	2515.07	54563.32
Adjustments	0.00	222.00	30.00	13657.00		8695.17	443.06	3109.95	625.82	68.35		8.44		8080.00	208.47	1216.00		758.04	37122.30
Adjusted Total	175.00	-174.02	282.59	-11902.90	136.10	2850.49	178.96	2297.87	235.23	69.17	73.50	644.76	2515.57	18013.02	2.00	-13.19	299.84	1757.03	17441.02

The scrap yards which accepted the District’s recyclables during the reference year are shown in Table E-2. These tonnages were adjusted on Table E-1 to avoid double counting.

Table E-2: Data from Other Recycling Facilities

Program and/or Source of Materials/Data	Appliances/ "White Goods"	Electronics	Lead-Acid Batteries	Food	Glass	Ferrous Metals	Non- Ferrous Metals	
Buybacks								
Scrap Yards								
Sims Metal Management						3,729	317	
Omni Source			28			2,236	126	
Brokers								
Processors/MRF's								
Unadjusted Totals	0	0	28	0	0	5,965	443	6,436
Adjustments								0
Adjusted Totals	0	0	28	0	0	5,965	443	6,436

The Ohio EPA routinely obtains recycling reports from certain large commercial businesses each year and the tonnages from those reports are reflected in Table E-3. This information was obtained from the Ohio Material Recovery Facility and Commercial Recycling Report for 2017. The total of this report was 3450.60 tons. Table E-3 reflects a corrected total of 3553.08 tons as the total was not inserted for Defiance Dollar General Corporation which was 102.48 tons.

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

Ohio EPA Data Source	Plastic	Cardboard	Mixed Paper	Nonferrous	Ferrous	Wood	Commingled	Other	
Walmart Recycling in Ohio - Defiance County	13.13	489.03	1.12					39.21	
Lowe's Companies, Inc.	0.54	60.30			5.99	8.44			
Meijer Corporation		370.09	3.78						
Dollar General Corporation - Defiance County		100.45	2.03						
Big Lots Corporation		20.74							
Aldi Inc. Hinckley Division	1.21	131.79							
Kohl's Corporation*	9.93	64.55					0.04		
Kroger - Defiance County	4.49	153.65						0.84	
United Postal Service - Defiance County *	0.80	2.29	37.94						
Walmart Recycling in Ohio - Fulton County	13.20	508.26	2.23	0.06				114.89	
Dollar General Corporation - Fulton County		114.31	2.03						
Kroger - Fulton County	3.41	247.01						0.93	
United States Postal Service - Fulton County	0.89	2.54	42.05						
Dollar General Corporation - Paulding County		93.53	1.22						
United States Postal Service - Paulding County	0.39	1.13	18.74						
Walmart Recycling in Ohio - Williams County	19.59	617.32	1.67					52.56	
Dollar General Corporation - Williams County		130.75	2.44						
United States Postal Service - Williams County	0.77	2.21	36.57						
Unadjusted Total	68.35	3109.95	151.82	0.06	5.99	8.44	0.04	208.43	3553.08
Adjustments									0.00
Adjusted Total	68.35	3109.95	151.82	0.06	5.99	8.44	0.04	208.43	3553.08

Table E-4 lists the programs of the District for which specific tonnages of recyclables were tracked and EPA numbers that were reported for yard waste and scrap tires. All totals were adjusted on Table E-1 to avoid double counting.

Table E-4: Other Sources of Data

Other Programs or Sources of Data	Electronics	Scrap Tires	Dry Cell Batteries	Lead-Acid Batteries	Food	All Other Paper	Rubber	Commingled Recyclables (Mixed)	Yard Waste	Unadjusted Total	Adjustments	Adjusted Total
Curbside Recycling Services										0		0
Drop-off Recycling Locations								758		758		758
Electronics Collection Event	222									222		222
Appliance Collection										0		0
Battery Collection			2							2		2
Paper Shredding Event										0		0
Yard Waste Composted EPA Report									8,080	8,080		8,080
Land Applied Yard Waste									0	0		0
Food Waste Reported by Food Waste Haulers					13,657					13,657		13,657
Government Office Recycling Program						28				28		28
School Recycling Program						446				446		446
Scrap Tire Collection incl EPA report		1,216								1,216		1,216
Scrap Tires Reported to EPA										0		0
										0		0
Unadjusted Total	222	1,216	2	0	13,657	474	0	758	8,080	24,408		24,408
Adjustments										0		0
Adjusted Total	222	1,216	2	0	13,657	474	0	758	8,080	24,408		24,408

Table E-5 below combines the tonnages from Tables E-1, E-2, E-3 and E-4, resulting in a grand total of approximately 51,838 tons recycled in the reference year.

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

Material	Quantity (tons)
Appliances/ "White Goods"	175
Household Hazardous Waste	0
Used Motor Oil	300
Electronics	48
Scrap Tires	1,202
Dry Cell Batteries	2
Lead-Acid Batteries	313
Food	1,754
Glass	136
Ferrous Metals	11,546
Non-Ferrous Metals	622
Corrugated Cardboard	5,408
All Other Paper	861
Plastics	137
Textiles	74
Wood	653
Rubber	0
Commingled Recyclables (Mixed)	2,515
Other	0
Yard Waste	26,093
Other (Aggregated)	0
Total	51,838

Table E-6 also combines the tonnages from Tables E-1, E-2, E-3 and E-4 but lists the total amount recycled by program or source of the data.

Table E-6: Quantities Recovered by Program Source

Program/Source of R/C Recycling Data	Quantities (Tons)
Commercial Survey	17,441
Data from Other Recycling Facilities	6,436
Ohio EPA Commercial Retail Data	3,553
Curbside Recycling Services	0
Drop-off Recycling Locations	758
Electronics Collection Event	222
Appliance Collection	0
Battery Collection	2
Paper Shredding Event	0
Yard Waste Composted EPA Report	8,080
Land Applied Yard Waste	0
Food Waste Reported by Food Waste Haulers	13,657
Government Office Recycling Program	28
School Recycling Program	446
Scrap Tire Collection	1,216
	51,838

B. Historical Recovery

The historical data totals are the amounts reported to the Ohio EPA. Program events such as Drop-Off recycling, Battery Collection and EPA reported information was added to present an overall review. The District has requested that each PMCC provide tonnages to the District office for all special events, drop-off recycling, and institutional programs. This directive was issued in 2019 to obtain a better understanding of the tonnages recycled. The Historical Data presented in Table E-7 for special events, drop-off recycling and institutional programs are estimates. The EPA data was taken from posted EPA reports. The commercial survey number was reduced to assure the reported total remained as recorded.

Table E-7: Historical Residential/Commercial Data

Year	Commercial Survey	Data from Other Recycling Facilities	Ohio EPA Commercial Retail Data	Drop-off Recycling Locations	Electronics Collection Event	Battery Collection	Yard Waste Composted EPA Report	Land Applied Yard Waste	Food Waste Reported by Food Waste Haulers	Government Office Recycling Program	School Recycling Program	Scrap Tire Collection	Totals
2013	57,533	3,800	7,441	500	175	2		197		15	475	1,245	71,383
2014	45,281	4,200	9,827	681	309	2	9,235	377	4,437	24	423	2,317	77,113
2015	46,186	0	2,930	737	232	2	10,004	317	4,975	20	445	1,340	67,190
2016	30,504	5,500	3,059	783	221	4	9,668	299	8,594	18	489	1,174	60,313
2017	17,441	6,436	3,553	758	222	2	8,080	0	13,657	28	446	1,216	51,838

C. Residential/Commercial Projections

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

Year	Commercial Survey	Data from Other Recycling Facilities	Ohio EPA Commercial Retail Data	Curbside Recycling Services	Drop-off Recycling Locations	Electronics Collection Event	Battery Collection	Yard Waste Composted EPA Report	Food Waste Reported by Food Waste Haulers	Government Office Recycling Program	School Recycling Program	Scrap Tire Collection	Totals
2017	17,441	6,436	3,553	0	758	222	2	8,080	13,657	28	446	1,216	51,838
2018	35,248	5,000	3,634	0	850	280	2	13,117	11,436	120	480	2,643	72,810
2019	35,248	6,200	3,634	0	858.50	246	2	9,800	12,000	121	485	1,512	70,108
2020	35,248	6,200	3,634	0	867.09	246	2	9,800	12,000	122	490	1,512	70,123
2021	35,248	6,200	3,634	0	875.76	246	2	9,800	12,000	124	495	1,512	70,137
2022	35,248	6,200	3,634	0	884.51	246	2	9,800	12,000	125	499	1,512	70,152
2023	35,248	6,200	3,634	0	893.36	246	2	9,800	12,000	126	504	1,512	70,167
2024	35,248	6,200	3,634	0	902.29	246	2	9,800	12,000	127	510	1,512	70,183
2025	35,248	6,200	3,634	0	911.32	246	2	9,800	12,000	129	515	1,512	70,198
2026	35,248	6,200	3,634	0	920.43	246	2	9,800	12,000	130	520	1,512	70,214
2027	35,248	6,200	3,634	0	929.63	246	2	9,800	12,000	131	525	1,512	70,229
2028	35,248	6,200	3,634	0	929.63	246	2	9,800	12,000	131	525	1,512	70,229
2029	35,248	6,200	3,634	0	929.63	246	2	9,800	12,000	131	525	1,512	70,229
2030	35,248	6,200	3,634	0	929.63	246	2	9,800	12,000	131	525	1,512	70,229
2031	35,248	6,200	3,634	0	929.63	246	2	9,800	12,000	131	525	1,512	70,229
2032	35,248	6,200	3,634	0	929.63	246	2	9,800	12,000	131	525	1,512	70,229
2033	35,248	6,200	3,634	0	929.63	246	2	9,800	12,000	131	525	1,512	70,229
2034	35,248	6,200	3,634	0	929.63	246	2	9,800	12,000	131	525	1,512	70,229
2035	35,248	6,200	3,634	0	929.63	246	2	9,800	12,000	131	525	1,512	70,229
2036	35,248	6,200	3,634	0	929.63	246	2	9,800	12,000	131	525	1,512	70,229
2037	35,248	6,200	3,634	0	929.63	246	2	9,800	12,000	131	525	1,512	70,229

Projections for Data from other recycling facilities were projected to be an estimated half of what was recorded in 2017, however 2018 is actual data. EPA retail data and Commercial Survey data was held at the reported 2018 number per the EPA request. Drop-Off recycling was projected to increase a small amount for ten years and then remain flat. Electronics is an average and is realistic with the current technology trends (less large computers, more tablets, less weight of electronics), Battery recycling also is constant from one event, Yard Waste, Food Waste and tires are averages and Government Office and School recycling is projected to increase a small amount. 2018 Drop-Off increased slightly due to trailers being weighed in the last quarter for a more accurate tonnage.

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

Year	Recycle (tons)
2017	51,838
2018	72,810
2019	67,851
2020	68,806
2021	69,786
2022	70,792
2023	71,824
2024	72,882
2025	73,969
2026	75,083
2027	76,227
2028	77,400
2029	78,604
2030	79,839
2031	81,107
2032	82,407
2035	86,515
2036	87,956
2037	89,435

APPENDIX F: INDUSTRIAL SURVEY RESULTS

A. Reference Year Recovery Data
Information recorded from 2017 ADR.

Table F-1: Industrial Survey Data

NAICS	Food	Glass	Ferrous Metals	Non-Ferrous Metals	Corrugated Cardboard	All Other Paper	Plastics	Textiles	Wood	Rubber	Comingle	Flue Gas	Other
238150 - Glass (2)		866.67			3.50								
326191 - Plastic Plumbing Mfg.					46.20	0.10	3.00		0.85				
311340 - Candy Mfg (1)			36.10	0.23	64.20	3.75	6.11		110.00				
311411 - Frozen Foods (1)	847.01												
319999 - General Mfg. (1)					42.73								
321991 - Mfg. Housing				8.10	13.32								
322211- Packaging (3)			71.35		2347.27	0.12	38.44		52.20				
323111 - Toy Mfg (1)				170.00	4.00		2.00		0.50				
325314 - Compost/rendering	13141.50		328.75		15.00								
325412 - Pharmaceutical (1)					0.08	0.96	2.48						
325991 - Mfg. Compounding (2)			6.10	0.35	80.00				131.00				
326199 - Plastic Mfg. (1)			43.67	0.32	106.48	0.16	831.63	586.73	105.72				
326211 - Tire Mfg. (1)			96.24	1.80					13.77	1070.54			
327120 - Refractory (1)					24.00		28.00						
327215 - Tempered Glass (1)		2995.00	11.40	28.00	4.96	2.36	0.75						19000.00
327320 - Concrete Mfg. (1)												2169.00	
329611 - Fiberglass Mfg. (1)			207.30	9.23	75.39	0.15	10.50		35.59				5.20
331110 - Iron Steel Mfg.			0.00	5164.55									
331111 - Steel Mfg. (1)			183573.00	1710.21	29.73				31.42				
331492 - Alloy Smelting (1)	1.00	1.00	448.00	8000.00				1.00		3.00	29.73		
331511 - Iron Foundry (2)		0.40	29305.30	24844.37	10.71		20.85		163.10	68.57			
332111 - Forging (1)			335.00										
332322 - Metal Processing (1)			2133.00	296.00									
332510 - Metal Hardware (1)			75.16						7.41				
332710 - Machining (7)			1025.00	34.02	22.00	8.15				0.03			
332811 - Steel			325.00										
332812 - Metal Coating (3)		0.38	16.24	0.04			5272.98						353.00
332912 - Hose & Fittings (1)			0.30	0.10	56.00	9.50	8.00						
332999 - Stamping (3)			8414.17	11.27									

333111 - Specialized Mfg. (1)			61.00	27.00					1.00					
333243 - Wood Mill (1)			199.73						4203.00					0.00
333415 - Furnace/HVAC (1)			6747.00	16.55	54.44									
333514 - Tool & Die (2)			27002.00											
333955 - Fluid Power (1)			44.24	20.46	61.99		2.30							
334416 - Capacitor and condensers (1)			10.00	44.00										
335311 - transformers Industry (1)			59.50	30.30	8.50									
336300 - Motor Parts (1)			1082.50	0.36	21.71	3.30	0.20		0.70					
336312 - Engine Parts (1)			1651.00											
336370 - Vehicle Metal Stamping (1)					5391.45	1.84	1.39		1.37					
337110 - Cabinetry									4.00					
337122 - Manufactured Furniture		22.90	352.50	1.47	929.00	106.50	353.00	1.20	73014.30	0.70				0.00
339999 - Manufacturing			6239.91	4.47	28.00	1.00	15.00		25.50					306.31
346911 - Stamping (1)			39.00	1267.00					22.24					
509311 - Scrap Metal Processing			0.00	0.00	0.00		0.00		5.00					103.19
Unadjusted Total	13989.51	3886.35	269939.46	41690.20	9440.66	137.89	6596.63	588.93	77928.67	1142.84	29.73	2169.00	19767.70	447307.57
Adjustments														0.00
Adjusted Total	13989.51	3886.35	269939.46	41690.20	9440.66	137.89	6596.63	588.93	77928.67	1142.84	29.73	2169.00	19767.70	447307.57

The District conducts a survey of Industrial businesses within the four counties. Table F-1 presents the results of the survey for the reference year 2017. To avoid double counting tonnages defined on Table F-2 were not included in Table F-1.

Table F-2: Data from Other Recycling Facilities

Program and/or Source of Materials/Data	Ferrous Metals	Non-Ferrous Metals	Corrugated Cardboard	Plastics	
Buybacks					
Scrap Yards					
Sims Metal Management	68,244	694			
NR&G	200	31	107	16	
Brokers					
Processors/MRF's					
Unadjusted Totals	68,444	725	107	16	69,292
	0	0	0	0	0
Adjusted Totals	68,444	725	107	16	69,292

Two scrap yards reported totals for industrial and is reflected here and will be a part of the grand total.

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

Other Recycling Programs or Other Sources of Data	Wood	Unadjusted Total	Adjustments	Adjusted Total
Incineration	18,928	18,928		18,928
		0		0
		0		0
		0		0
		0		0
		0		0
Unadjusted Total	18,928	18,928		18,928
Adjustments		0		
Adjusted Total	18,928	18,928		

This is material burned and was not included in Table F-1 to avoid double counting.

Table F-4: Industrial Material Recovered

Material	Quantity (tons)
Food	13,990
Glass	3,886
Ferrous Metals	338,383
Non-Ferrous Metals	42,415
Corrugated Cardboard	9,548
All Other Paper	138
Plastics	6,613
Textiles	589
Wood	96,857
Rubber	1,143
Commingled Recyclables (Mixed)	30
Ash	0
Non-Excluded Foundry Sand	0
Other	19,768
Flue Gas Desulfurization	2,169
Other (Aggregated)	
Total	535,528

Table F-4 reflects the combined total for Tables F1, F-2 and F-3.

Table F-5 Quantities by Program Source

Program/Source of Industrial Recycling Data	Quantity (Tons)
Industrial survey	516,600
Data from other recycling facilities	0
Incineration	18,928
0	0
0	0
0	0
0	0
0	0
Total	535,528

Table F-5 reflects quantities by program source, reported information and incineration amounts.

B. Historical Recovery

Table F-6 Historical Industrial Recovery by Program Source

Year	Industrial survey	Data from other recycling facilities	Incineration	Totals
2013	669,206			669,206
2014	742,536		0	742,536
2015	622,938		126,071	749,009
2016	859,894		0	859,894
2017	516,600	0	18,928	535,528

Table F-6 shows the historical data reported from the ADR Surveys to the EPA.

C. Recovery Projections

Table F-7 Industrial Recovery Projections

Year	Industrial survey	Data from other recycling facilities	Incineration	Totals
2017	447,308	69,292	18,928	535,528
2018	543,022	0	0	543,022
2019	646,484	0	0	646,484
2020	646,484	0	0	646,484
2021	646,484	0	0	646,484
2022	646,484	0	0	646,484
2023	646,484	0	0	646,484
2024	646,484	0	0	646,484
2025	646,484	0	0	646,484
2026	646,484	0	0	646,484
2027	646,484	0	0	646,484
2028	646,484	0	0	646,484
2029	646,484	0	0	646,484
2030	646,484	0	0	646,484
2031	646,484	0	0	646,484
2032	646,484	0	0	646,484
2033	646,484	0	0	646,484
2034	646,484	0	0	646,484
2035	646,484	0	0	646,484
2036	646,484	0	0	646,484
2037	646,484	0	0	646,484

Table F-7 Projections are based on the average of 2013-2018. 2018 numbers are factual and used to create the projections. Historical incineration was only reported in 2 of that last 6 years so a projection was not relevant.

APPENDIX G: WASTE GENERATION

A. Historical Year Waste Generated

Table G-1: Historical Waste Generated in Reference Year

Year	Population	Residential/ Commercial				Industrial			Excluded (tons)	Total (tons)
		Disposed (tons)	Recycled (tons)	Generated (tons)	Per Capita Generated (ppd)	Disposed (tons)	Recycled (tons)	Generated (tons)		
2013	137,774	86,979	57,585	144,564	5.75	239,525	669,206	908,731	18,295	1,071,590
2014	137,370	90,226	77,106	167,332	6.67	391,418	742,536	1,133,954	16,647	1,317,933
2015	136,985	95,722	67,190	162,912	6.52	369,281	749,009	1,118,290	17,002	1,298,204
2016	136,554	98,523	60,215	158,738	6.37	284,299	859,894	1,144,193	24,504	1,327,435
2017	136,113	103,921	51,838	155,759	6.27	315,037	535,528	850,565	24,742	1,031,066

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)		
2017	136,113	103,921	51,838	155,759	6.27	315,037	535,528	850,565	24,742	1,031,066
2018	136,125	101,387	72,810	174,197	7.01	381,915	543,022	924,937	29,126	1,128,260
2019	135,787	106,008	70,108	176,116	7.11	425,413	646,484	1,071,897	31,909	1,279,921
2020	135,449	110,839	70,123	180,961	7.32	473,865	646,484	1,120,349	34,958	1,336,268
2021	134,829	115,890	70,137	186,027	7.56	527,835	646,484	1,174,319	38,298	1,398,645
2022	134,215	121,172	70,152	191,324	7.81	587,953	646,484	1,234,437	41,958	1,467,718
2023	133,589	126,694	70,167	196,861	8.07	654,917	646,484	1,301,401	45,967	1,544,229
2024	132,969	132,468	70,183	202,651	8.35	729,509	646,484	1,375,993	50,359	1,629,002
2025	132,349	138,505	70,198	208,703	8.64	812,596	646,484	1,459,080	55,170	1,722,953
2026	131,807	144,817	70,214	215,031	8.94	905,145	646,484	1,551,629	60,442	1,827,102
2027	131,265	151,417	70,229	221,646	9.25	1,008,236	646,484	1,654,720	66,217	1,942,584
2028	130,723	158,318	70,229	228,547	9.58	1,123,069	646,484	1,769,553	72,544	2,070,644
2029	130,181	165,533	70,229	235,762	9.92	1,250,980	646,484	1,897,464	79,476	2,212,702
2030	129,639	173,077	70,229	243,306	10.28	1,393,459	646,484	2,039,943	87,070	2,370,319
2031	129,269	180,965	70,229	251,194	10.65	1,552,166	646,484	2,198,650	95,389	2,545,233
2032	128,899	189,212	70,229	259,441	11.03	1,728,949	646,484	2,375,433	104,504	2,739,378
2033	128,529	197,835	70,229	268,064	11.43	1,925,866	646,484	2,572,350	114,489	2,954,904
2034	128,159	206,851	70,229	277,080	11.85	2,145,211	646,484	2,791,695	125,429	3,194,204
2035	127,770	216,278	70,229	286,507	12.29	2,389,538	646,484	3,036,022	137,414	3,459,943
2036	127,755	226,135	70,229	296,364	12.71	2,661,693	646,484	3,308,177	150,543	3,755,084
2037	127,721	236,441	70,229	306,670	13.16	2,964,844	646,484	3,611,328	164,928	4,082,926

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

APPENDIX H: STRATEGIC EVALUATION

1. Residential Recycling Infrastructure Analysis

The Policy Committee reviewed the District’s Residential Programs and Industrial Programs and completed an evaluation for each program considering the strengths, weakness and area(s) for improvement. A copy of the form used is located in documents of this appendix. The compilation of this evaluation was used to determine the success, failure or recommendations for the current programs. It was determined that the largest recycling efforts would be with the Curbside Recycling where available and the District Drop-Off Trailers.

A. Evaluation

Curbside Recycling

What do we know or assume?

The District has sixteen (16) Non Subscription Curbside opportunities and 0 Subscription Curbside. Comparing with other four (4) county districts, we have the most curbside opportunities and less population.

Curbside Recycling	Population	NSC	SC
OSS – Ottawa-Sandusky-Seneca	164,743	8	2
DKMM – Delaware-Knox-Marion-Morrow	167,204	11	4
CCH-Carroll-Columbiana-Harrison	149,185	2	0
DFPW-Defiance-Fulton-Paulding-Williams	136,113	16	0

What did we learn?

Curbside reaches the most people, it costs money and usually is contracted, we are mostly rural and it isn’t available to rural, it is difficult to obtain recycling information from private businesses. To evaluate Curbside Recycling we reviewed the Pounds per Person. Curbside is normally collected weekly.

Defiance County

Defiance County	Population	Service Provider	Reported Tons	PPW (Weekly Pickup)
City of Defiance	16,687	Werlor		
Village of Sherwood	806	Werlor		
Village of Hicksville	3,445	Werlor		
			12074.53	77.85%

--	--	--	--	--

Defiance’s three (3) communities were serviced by one Service Provider, but only a total of tons were reported for the county. The reported tons were multiplied by 2000, divided by 52 and divided by the total population noted to create a pound per person per week.

Fulton County

Fulton County	Population	Service Provider	Reported Tons	PPW (Weekly Pickup)
Village of Archbold	4,305	ARS	5766.68	29.82%
Village of Delta	3,132	ARS		
Village of Swanton	3,746	Republic	None	

Fulton’s had (2) communities serviced by one Service Provider with only a total of tons being reported for the county. The reported tons were multiplied by 2000, divided by 52 and divided by the total population of the two villages served by ARS. The Village of Swanton was serviced by Republic and they did not return a survey form.

Paulding County

Paulding County	Population	Service Provider	Reported Tons	PPW (Weekly Pickup)
Village of Payne	1,147	Real Waste		
Village of Oakwood	595	Real Waste		
Village of Antwerp	1,685	Real Waste		
Village of Melrose	264	Real Waste		
			32.5	0.18%

Paulding had all 4 communities serviced by one Service Provider with only a total of tons being reported for the county. The reported tons were multiplied by 2000, divided by 52 and divided by the total population noted. Real Waste discontinued curbside in September 2018.

Williams County

Williams County	Population	Service Provider	Reported Tones	PPW (Weekly Pickup)
City of Bryan	8,357	City of Bryan	386.22	1.80%
Village of Edgerton	2,000	Republic	None	None
Village of Edon	814	Republic	None	None
Village of Blakeslee	94	Republic	None	None

Village of Montpelier	3,949	ARS		
Village of Stryker	1,300	ARS	3690.6	26.88%

Williams had the City of Bryan serviced by one Service Provider with only a total of tons being reported for the county and divided by the City’s population. Three (3) Service Providers with a total of tons being reported for the county. The reported tons were multiplied by 2000, divided by 52 and divided by the total population of the three villages served by ARS. The Villages of Edgerton and Blakeslee were serviced by Republic and they did not return a survey form.

What could we do?

To truly evaluate curbside recycling we need more numbers to review. It is difficult to determine if curbside is making an impact if only a portion of the Service Providers complete a survey form. We will continue to work with the local Service Providers to assure that they understand the importance of collecting and reporting accurate data to determine the recycling impact in our District.

The Policy Committee feels curbside is the best way to recycle and reaches the largest percentage of the District. It would be wonderful if rural curbside was available, but the Policy Committee understands it is not economical.

What will we do?

The District is not directly involved with the development of municipalities recycling contracts with Service Providers and as such has little involvement. The District PMCC’s will continue to obtain information of any changes to curbside services within their county.

How will we do this?

The District will continue to work with Service Providers to obtain an annual ADR survey form to understand the quantities of households served and amounts of recycling collected. The PMCC’s will report all changes and updates regarding curbside recycling program within their county to the District office to compile all information for an annual review.

Drop-Off Recycling

A. Evaluation

What do we know or assume?

The District has 10 Full Time Drop-Off locations 36 Part Time Rural and 1 Part Time Urban for a total of 47 Drop-Off Opportunities. Comparing to other (4) four county districts it appears from the data that OSS and DKMM maintains more full time locations and the District focuses more on part time. DFPW is very similar to CCH.

Drop-Off Recycling	Full Time	Part Time
OSS-Ottawa-Sandusky-Seneca	41	3
DKMM-Delaware-Knox-Marion-Morrow	52	0
CCH-Carroll-Columbiana-Harrison	11	25
DFPW- Defiance-Fulton-Paulding-Williams	10	37

What did we learn?

The District attempted to review numeric data of each Drop-Off location, but the information for the reference year is sparse. Defiance noted that Noble and Richland recycling generally collects the most recycling. Fulton county program trailers are transported by a contractor. Paulding gets a great turnout at the Paulding County Fairgrounds which collect from the Village of Paulding residents and surrounding areas. Williams County also uses a contractor for their Drop-Off trailers.

Defiance County	Trailer Available	Population	Tonnages	PP at Drop-Off
Power Dam/Ayersville	11	2284	8	0.64%
Noble/Richland	24	3576	19.1	0.45%
Sherwood/Ney	12	1150	8.54	1.24%
Evansport/Farmer	11	1256	6.8	0.91%
Hicksville/Mark Center	12	4320	7.4	0.29%
HTS	19	1088	6.6	0.64%

The Defiance County recycling program has been weighing and tracking tonnages for drop-off trailers since 2015. Drop-off trailers are scheduled at two locations per a date. The individual location is not weighed separately; the two scheduled locations are processed and weighed together.

Fulton County	Trailer Available	Population	Tonnages	PP at Drop-Off
Delta	12	3132		
Fayette	12	1250		
Lyons	12	552		
Metamora	12	611		

Pike Township	12	1821		
		7366	1001.36	4.53%

Fulton County recycling program was not able to weigh trailers after each recycling schedule in the reference year and only a total was reported for the year.

Paulding County	Trailer Available	Population	Tonnages	PP at Drop-Off
Briceton	12	98		
Cecil	12	180		
Grover Hill	12	383		
Haviland/Scott	12	322		
Latty	12	183		
Payne	12	1147		
Paulding Fairgrounds	12	3463		
Junction	12	85		
		5861	76	0.27%

Paulding County recycling program was not able to weigh trailers after each recycling schedule in the reference year and only a total was reported for the year.

Williams County	Trailer Available	Population	Tonnages	PP at Drop-Off
Alvordton	12	305		
Bridgewater Township	12	1442		
Jefferson Township	12	1870		
Kunkle	12	200		
NW Township	12	1207		
Pulaski Township	12	2292		
Springfield Township	12	1782		
West Unity	12	1633		
Superior Township	12	1356		
Center Township	12	2807		
St. Joe Township	12	791		
		15685	27.02	0.26%

Williams County recycling program was not able to weigh trailers after each recycling schedule in the reference year and only a total was reported for the year.

What could we do?

To compare information as suggested for v4.0 Format we need to collect better volume information. Evaluating recycling volumes from Drop-Off trailer locations and recording that data will allow the PMCC's to assess the location to determine if anything changes or if any updates need to happen. Comparing volumes, we can track whether consolidation or expansion would better serve communities or target advertisement and communication.

What will we do?

When the ADR went to Re-Trac reporting in 2018, it was required to record the programs tonnages from the overall ADR reported quantities to assess what the programs are collecting. The District will analyze program recycling numbers obtained using the historical data from 2018 on. The historical data for this plan update 2013-2017 does not exist and does not help with our assessment.

What did we learn?

Annually the PMCC's present and overview of problems, changes and updates to the Policy Committee for comment and review. Unmanned drop off locations have experienced some problems with contamination. In 2018 and currently, PMCC's are getting trailers weighed and tracking the tonnages for better accuracy in reporting and future evaluating.

How will we do this?

The PMCC's will continue to evaluate their Drop-Off recycling locations and determine if the location is sufficient, is it visible and labeled well (if unmanned), is the schedule available with what to recycle, how to recycle and where to recycle. These evaluations are then presented to the Policy Committee annually. The PMCC's also submit any changes to their county programs to the District office within 2 weeks after a change was initiated. The District will continue to publicize Drop-Off recycling opportunities via brochures to local businesses or government facility's, ads in the newspapers, website and posted on the new Facebook outlet.

2. Commercial/Institutional Sector Analysis

A. Evaluation

What do we know or assume?

The majorities of Commercial Businesses are located within the larger Cities within the District and recycle through local Service Providers such as Republic, Werlor's and ARS.

These Service Providers contract with the businesses to obtain recycling such as plastic, cardboard and paper.

Franchise businesses such as Auto Zone or Advanced Auto have been very good at submitting recycling information via the ADR survey form. Below is a look at some of the commercial businesses per county that generally participate in the annual survey and provide accurate recycling numbers.

Commercial Businesses

Defiance	Fulton	Paulding	Williams	ADR Received
Auto Zone	Auto Zone	Chief Supermarket	Chief Supermarket	Yes
Advanced Auto	Miller & Sons	Don & Perry's	Dietsch Sales	Yes
Tractor Supply	Dave Sand & Stone	PC Workshop	Buehrer Equip	Yes

The EPA receives recycling data from large corporations such as Walmart (Defiance & Fulton), Dollar General (Defiance, Fulton, Paulding and Williams), Meijer (Defiance), Kroger (Defiance and Fulton), Big Lots (Defiance), Aldi (Defiance), Kohls (Defiance) and the USPS.

The District also realizes the counties have many restaurants and fast food chains. These types of businesses normally recycle cooking oil and cardboard with a local service provider. Restaurants do not normally participate in the ADR survey.

School Recycling Program

Institutions would include schools and universities, government agencies, office buildings, stadiums, amusement parks, event venues, hospitals and non-profit organizations. The District has several school districts and most are utilizing District programs.

Schools	Defiance	Fulton	Paulding	Williams	Program	Internal	Unknown
Defiance	✓				✓		
Fairview	✓				✓		
Tinora	✓				✓		
Ayersville	✓				✓		
Hicksville	✓				✓		
Holy Cross	✓				✓		
Pettisville		✓			✓		
Archbold		✓			✓		
Wauseon		✓			✓		

Fayette		✓			✓	✓	
Swanton		✓			✓	✓	
Delta		✓			✓		
Paulding			✓		✓		
Oakwood			✓		✓		
Antwerp			✓		✓		
Wayne Trace			✓		✓		
Bryan				✓	✓		
Edgerton				✓	✓		
Edon				✓	✓		
Montpelier				✓	✓		
NW State				✓		✓	
Defiance College	✓					✓	

Office Recycling Program: Office recycling includes office buildings usually government agencies and some commercial businesses. The District has been very effective with county facilities. Paulding has allowed close businesses to bring recycling to a county facility and get picked up. Hospitals should be looked at and maybe something new could be established.

What did we learn?

The District has good participation with the ADR survey to provide recycling data. This is proven by looking at other comparable District’s ADR percentages for Residential/Commercial and the State Wide percentages. The District has exceeded the State’s Goal of 25% for Residential/Commercial recycling.

	2016 R/C	2017 R/C	2018 R/C
State Wide	28.35%	29.06%	29.70%
DPFW-Defiance-Fulton-Paulding-Williams	37.97%	33.28%	41.80%
OSS-Ottawa-Sandusky-Seneca	24.74%	24.33%	24.43%
DKMM-Delaware-Knox-Marion-Morrow	24.39% ⁶	21.86%	28.15%
CCH-Carroll-Columbiana-Harrison	18.17%	9.93%	7.70%

The District does not receive very much data from restaurants. The District programs are reaching the schools, but not all schools such as parochial and colleges. The office recycling program did not include any hospitals or non-profits.

What could we do?

The District could work with the schools and institutions to create new recycling programs.

What will we do?

The District will contact local hospitals to determine if a need exists for recycling opportunities. Many hospitals have internal programs, but it would benefit the District to have an understanding of what is being done and also promote the participation in the ADR survey form

3. Industrial Sector Analysis

A. Evaluation

What do we know or assume?

County demographics and profiles show the following:

County	Manufacturing	Health Care & Social Assistance	Retail
Defiance	5413 people	2302 people	2126 people
Fulton	5118 people	3185 people	1913 people
Paulding	2523 people	1194 people	966 people
Williams	5854 people	1942 people	1952 people

Williams County leads for manufacturing, Fulton Health Care & Social Assistance and Defiance for retail.

Who are the biggest industries in the District?

County	Industry	Industry	Industry	ADR Received
Defiance	GM Powertrain	Johns Manville	Defiance Metal Products	Y-Y-NO
Fulton	North Star Blue Scope Steel	Sauder Woodworking	Con Agra	Y-Y-NO
Paulding	LaFarge/Holcium	NASG Alex Products	H.E. Orr	Y-Y-Y
Williams	Spangler Candy Corporation	Titan Tire	Chase Brass	Y-Y-Y

The businesses listed are not necessarily the biggest, but the ones reviewed for this evaluation.

What did we learn?

Common sense assumption is that industrial businesses recognize the economic impact recycling may have on their operations and profit. This would include scrap and waste disposal reductions/recycling.

North Star Blue Scope Steel and two other smaller steel mills represent a very large percent of Ferrous and Non-Ferrous metal being reported on our ADR form. Industrial participation is very good with 10 of the 12 industries listed above submitting data.

What could we do?

The District offers resources such as operational (scrap, recycling) reviews, input for waste audits, local recycling availability and grant opportunities.

What will we do?

The District wants to assure all industries are aware of the District resources.

How will we do this?

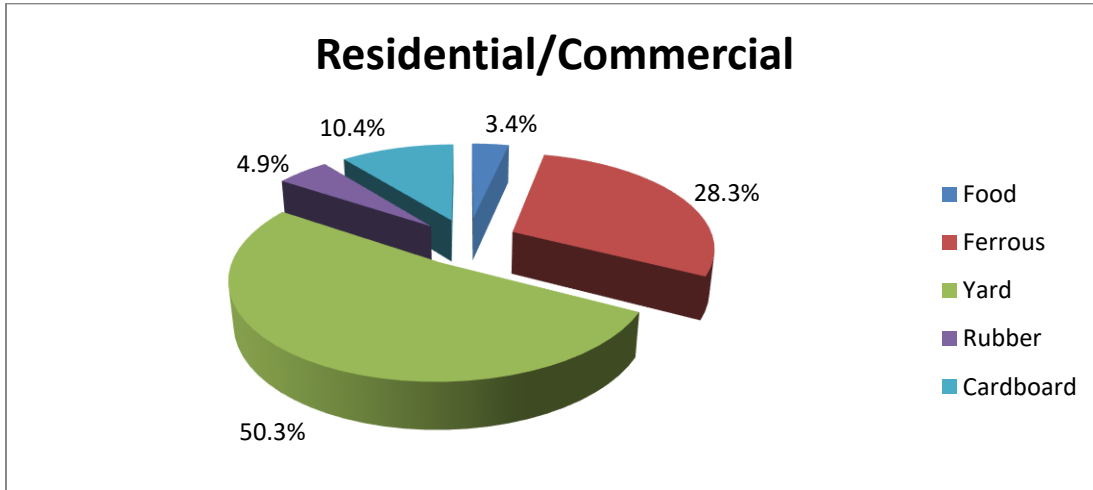
The District will reach out to all industries annually with an informational letter regarding the resources of the District and contact information. The District Office works with the local Chamber of Commerce's to obtain all new business information. The Ohio Material Marketplace flyer and brochure is also mailed out to give industries another recycling outlet.

4. Residential/Commercial Waste Composition Analysis

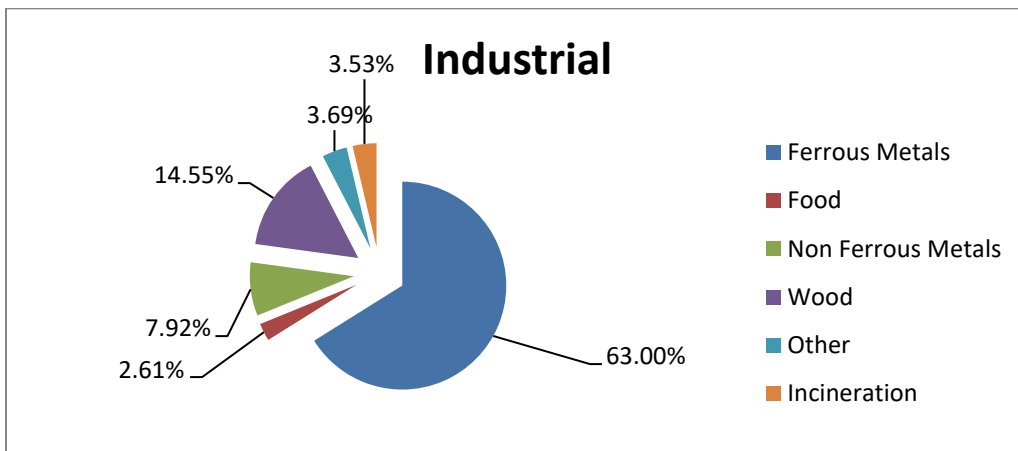
A. Evaluation

What do we know?

The District knows that the Waste Composition for R/C waste (chart below) shows that yard waste is over 50% of what is being recycled.



The District knows that the Waste Composition for Industrial wastes (chart below) shows that ferrous metals is over 60% of what is being recycled.



What did we learn?

The District understands the large percent for ferrous metals (steel) and reviewed historical yard waste management tonnages:

- 2015 – 32,789 Tons
- 2016 – 28,840 Tons
- 2017 – 26,093 Tons

What could we do?

Although the numbers have reduced slightly 2015 to the reference year 2017, the District feels this does not reflect a decline in yard waste. The Villages participation in the ADR form and better tracking of tonnages will be part of the annual program review.

What will we do?

The District will be available to all communities to assist with yard waste management programs, recycling needs and questions. The District will continue to solicit correct data and tracking for the ADR survey forms and assist municipalities with major challenges such as contamination, placement, collection, etc.

How will we do this?

The District Office contacts every village, community in the first quarter of a new year to review and discuss Village yard waste management programs and offer assistance. The District Office is the central contact to provide information to the public. The Industrial composition is not expected to change.

5. Economic Incentive Analysis

A. Evaluation

What do we know or assume?

The Service Providers within the District does not have a pay-as-you-throw (PAYT) program.

6. Restricted and Difficult to Manage Waste Streams Analysis

A. Evaluation

What do we know or assume?

Restricted and Difficult Waste Streams for our District include:

- Scrap Tires
- Yard Waste (Covered in Waste Composition)
- Household Hazardous Waste (HHW)
- Lead Acid Batteries
- Glass
- Appliances
- Food

Special Events for our District include:

- Scrap Tires
- Electronics
- Dry Cell Batteries

Additional Difficult Waste Streams:

- Pharmaceuticals

What did we learn?

- The four counties within our District have individual local effective solutions to the restricted and difficult waste streams including:
- Scrap tires can be taken to the Defiance County Landfill or the Fulton County Transfer Station. Paulding and William's counties hold scrap tire recycling events to collect tires from the public for a fee.
- HHW events used to be held, but after an analysis years ago, it was determined it is more efficient to provide individual safe disposal solutions. These safe disposal solutions are found on our website.
- Lead acid batteries can be returned to most places that sells them.
- Battery information is also found in the District's HHW Resource Guide.
- The Bryan recycling center is the only location within our District that will accept glass.
- Appliances can be dropped off at most scrap yards.
- Food banks, churches, perishables, restaurants all would be a type of food recycling.

What could we do?

The four counties will continue to share best practices.

Tires – Continue to offer a variety of methods to collect tires.

HHW – Educate the public of what is truly classified as a HHW.

Lead Acid Batteries – Promote businesses that offer a recycling incentive for batteries.

Glass – Try to find another outlet to recycle glass in the District.

Appliances – Promote taking to scrap dealers.

Food – Work with local restaurants and groceries about supplying extra or outdated food to local food banks or churches. Determine who is responsible for community gardens and where the produce goes.

What will we do?

The District will continue to communicate how to handle these difficult waste streams. The special events will advertise who, what, where, when, why and any fees associated with that event. Tonnages will be collected and reported for special events and any program related recycling. The District Office will provide information for safe disposal or recycling locations.

How will we do this?

The District will continue promoting safe disposals for HHW materials and keep the HHW Resource updated and current. The District will hold trial events in those counties to provide recycling for unique items. The District will promote donating appliances to be recycled for Christmas for Kids. The District will face the possibility that soon glass recycling will be suspended from all counties. This impact may need to be discussed, reviewed at a future date. The District will advertise via our website, brochures, flyers, ads, radio and soon Facebook of where, what and how to recycle or dispose of restricted or hard to handle wastes.

7. Diversion Analysis

A. Evaluation

What do we know or assume?

The District did achieve Goal 1 in 2017; ensuring adequate infrastructure to give residents and commercial businesses opportunities to recycle.

Residential/Commercial Tonnages:

2013	71,383 tons
2014	77,113 tons
2015	67,190 tons
2016	60,313 tons
2017	51,838 tons

The historical tonnages reported via the ADR survey show a slight decrease. The reference year 2017 shows the lowest. It has been determined and noted in this Plan Update that 2017's ADR had very little response and follow up, resulting in low numbers. In 2018, forms were changed; list of prospective residential/commercial and industrial was updated and increased.

Industrial Tonnages:

2013	669,206 tons
2014	742,536 tons
2015	749,009 tons
2016	859,894 tons
2017	535,528 tons

The District also strives to achieve Goal 2; reduce and recycle 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. The District has exceeded the 25% goal since the beginning of the district. The industrial percentage was only 1.77% less than the state goal, but did not meet the goal.

What did we learn?

The District learned that the State’s Goal of 66% Industrial was not achieved when averaged from all received ADR’s. The District did not achieve the goal in 2017 or 2018, but was comparable to other joint Districts listed.

	2016 R/C	2017 R/C	2018 R/C
State Wide	57.01%	55.19%	50.25%
DPFW-Defiance-Fulton-Paulding-Williams	75.15%	62.96%	58.71%
OSS-Ottawa-Sandusky-Seneca	80.11%	81.49%	76.49%
DKMM-Delaware-Knox-Marion-Morrow	86.92%	87.50%	84.46%
CCH-Carroll-Columbiana-Harrison	35.22%	35.19%	23.57%

What could we do?

The District will continue to stay updated on new Commercial Businesses and Industries to assure they are included in the ADR Survey distribution. The District will continue to work with local municipalities.

What will we do?

The District will increase survey distribution and awareness.

The District will continue mailing a letter to all Municipal Authorities annually communicating district resources. The District will continue to distribute, follow-up and validate survey information. The District will increase awareness by adding social media – Facebook and will post District information regularly.

8. Special Program Needs Analysis

A. Evaluation

What do we know or assume?

ORC 3734.57(G) gives SWMDs the authority to fund a number of activities that are not related to achieving the goals of the state solid waste management plan. The District did not fund or provide any additional activities such as:

1. Cleaning up Solid and scrap tire dumps
2. Health Dept. and/or Enforcement Agency Support
3. Disaster Debris Management/disaster response.

The District did not fund these activities and doesn't anticipate funding these types of activities during this planning period, but actively participates at the individual county level with these efforts if needed.

9. Financial Analysis

A. Evaluation

What do we know or assume?

The District does not directly own or operate solid waste management facilities; this makes a huge difference in expenses.

The District realized at the last Plan Update (2015 Plan) that additional funding would be needed. The District implemented a Contract Fee in 2014 to assure future funding.

Year	Disposal Fees	Generation Fees	Designation Fees	Other Revenue	Total Revenue
2013	\$191,545	\$0	\$0	\$20,264	\$211,810
2014	\$215,325	\$0	\$48,733	\$32,501	\$296,559
2015	\$236,625	\$0	\$254,766	\$31,109	\$522,500
2016	\$229,823	\$0	\$271,145	\$32,361	\$533,328
2017	\$242,463	\$0	\$274,318	\$34,051	\$550,831
2018	\$235,498	\$0	\$271,264	\$38,907	\$545,669

What did we learn?

The District initiated a \$2.00 Contract Fee in 2014 on waste generated within the District and this has provided sufficient funding to maintain or increase programming.

What could we do?

The District could raise fee's to generate more money. The District could decrease expenses.

What will we do?

The District will continue to finance programs per the current Disposal Fees, Designation/Contract Fees, Host Agreement and Interest collected.

How will we do this?

Each county ORLP (Office of Recycling and Litter Prevention) is budgeted \$100,000 annually to manage/implement the strategies and programs set forth in the plan. The District estimates annual revenues of \$440,000 is needed for plan implementation and projections show this is feasible. Designation Agreements and Host Agreements were

updated for this Plan Update. In the table above, 2015 nearly doubled in total revenue. The District would prefer to continue to manage well rather than increase again so soon.

10. Regional Analysis

A. Evaluation

What do we know or assume?

The District has adequate facilities and will continue to focus on any rural challenges. The District reviewed what could have a regional impact such as:

1. Does the Policy Committee intend for the SWMD to designate where waste can go?
2. Does the Policy Committee recommend changing the District's funding?
3. Does the Policy Committee know of any recycling centers/MRF or solid waste facility closing or opening within the District?
4. Does the Policy Committee want to regulate the flow of waste to collect fees?

What did we learn?

1. The District does not intend to designate where waste can go. District waste may go anywhere, we just ask that the SW facility that accepts District waste has been designated/contracted to do so and pays the Contract Fee to the District.
2. The District feels funding is sufficient and in 2018 changed the way the funding is being reported to comply with the EPA District's Fee reporting in Re-Trac.
3. The District does not own or operate any recycling centers/MRF or solid waste facilities. The District feels should any recycling center/MRF or SW facilities need to close or new facilities open, the District's siting plan asks that the District be notified.
4. The District does not regulate the flow of waste.

The District did learn that during the COVID pandemic that Solid Waste Facilities are deemed essential and were required to remain open.

What could we do?

The District will continue to communicate with the public on what is available and share any resources.

What will we do?

The District will network with other Districts to be aware of any changes that may have an impact on our District.

How will we do this?

The District will continue to be as knowledgeable as possible of recycling resources near our district to share with the public.

11. Population Analysis

A. Evaluation

What do we know or assume?

2016	2017	2018
136,554	138,981	135,577

The District's population has been consistent and will not affect our programs. The landfills within the District projected capacity will last for decades.

12. Data Collection Analysis

A. Evaluation

What do we know or assume?

The District mails or emails the Annual District Survey form annually to collect Residential/Commercial, Institutional, and Industrial, Scrap Facilities and Licensed and non-licensed compost locations. The District, as mentioned, initiated changes to this process with the intent to increase the Industrial percentages and reach the State Industry Goal.

What did we learn?

The District received great feedback on the new ADR survey forms.

What could we do?

Meet with industries, businesses, organizations to discuss survey data. Drop off forms in person to industries, businesses, organizations.

What will we do?

The District will continue to send out survey forms, cover letters and OMM flyers annually and collect data.

How will we do this?

The District Office confirms and updates distribution lists for the survey and mails or emails the forms. Once data is received and documented, the District collects EPA reports for scrap tires, composting and big corporations to compare and assure double counting is avoided. The District will then input the information into the Re-Trac system and await the review and analysis by the EPA to receive the analytics of our recycling percentages.

13. Education/Outreach Analysis

A. Evaluation

What do we know or assume?

The 2009 State Plan requires all SWMD's to provide at minimum the following four programs: (1) Web Site, (2) Comprehensive Resource Guide, (3) Infrastructure Inventory and a (4) Speaker/presenter. The District met these requirements in the reference year and will throughout the planning period.

Target Audiences are:

1. Residents - living in single family homes, apartments, mobile homes, assisted living facilities and/or condos.
2. Schools – K-12 students, teachers, administrators, support staff, etc.
3. Industries – Manufacturers
4. Institutions and Commercial Business – Government offices, non-profits, hospitals, churches, campgrounds, nursing homes, retail and service businesses.
5. Communities and Elected Officials – policy makers, authorities, community leaders and groups.

What did we learn?

1. Residents targeted have access to recycling opportunities with curbside and drop off trailers.
2. Schools targeted have access to recycling opportunities with internal programs such as EPA's E4, Crayola Crayons/Marker recycling and District programs.
3. Industries targeted have access to recycling opportunities, normally established within the industry.
4. Institutions and Business – Business are reflected with District programs with Residential. Residential/Commercial. Institutions or institutional recycling programs include the District School Recycling Programs and Office Recycling Programs.
5. Communities and Elected Officials – The District provides information of all Districts programming and resources to these targets.

The District has evaluated and reviewed all programs effectiveness used in the District and feel we understand the target audiences and what is required and needed within our communities.

14. Processing Capacity Analysis

A. Evaluation

What do we know or assume?

The District does not lack processing capacity as represented by material processing facilities used in the reference year and projected for the planning period. The District understands the challenges the processors face with poor markets and small volumes.

Facility Name	County	State	Type of Facility
E-Paint	Battle Creek	MI	Paint Recycler
Disc Oil	Hamilton	OH	Oil Recycler
EnviroTire	Defiance	OH	Licensed Tire Transport
Exceptional Motorcar LLC	Defiance	OH	Licensed Tire Transport
Liberty Tire Service of Ohio	Defiance	OH	Licensed Tire Transport
McNaughton-McKay	Defiance	OH	Electronic Suppler
Omni Source	Defiance	OH	Recycling Center
R Willig Tire Distribution Inc.	Defiance	OH	Licensed Tire Transport
R&R Tire Disposal	Defiance	OH	Licensed Tire Transport
Werlor's Waste Control & Recycling	Defiance	OH	Recycling Center
Archbold Refuse Services (ARS)	Fulton	OH	Recycling Center
Bob's Tire Services LLC	Fulton	OH	Licensed Tire Transport
EnviroTire	Fulton	OH	Licensed Tire Transport
Fulton County Transfer Station	Fulton	OH	Licensed Tire Transport
Liberty Tire Service of Ohio	Fulton	OH	Licensed Tire Transport
R Willig Tire Distribution Inc.	Fulton	OH	Licensed Tire Transport
Tedrow Auto Wrecking Co	Fulton	OH	Licensed Tire Transport
Triangular Processing	Fulton	OH	Material Recovery Facility
Battery Solutions	Howell	MI	Business
Bob's Tire Services LLC	Paulding	OH	Licensed Tire Transport
EnviroTire	Paulding	OH	Licensed Tire Transport
Erie Recycling Center	Paulding	OH	Recycling Center
Koharts	Paulding	OH	Recycling Center
PC Workshop	Paulding	OH	Processing Center
R & R Tire Disposal	Paulding	OH	Licensed Tire Transport
Bob's Tire Services LLC	Williams	OH	Licensed Tire Transport
Bohner Recycling	Williams	OH	Recycling Center
Bryan Recycling	Williams	OH	Recycling Center
Entech Inc.	Williams	OH	Licensed Tire Transport
EnviroTire	Williams	OH	Licensed Tire Transport
Liberty Tire Service of Ohio	Williams	OH	Licensed Tire Transport
Oberlin Farms Demolition and Rec.	Williams	OH	Recycling Center
R Willig Tire Distribution Inc.	Williams	OH	Licensed Tire Transport
Williams County Engineer	Williams	OH	County Facility

A. Documents:

- Strategic Evaluation Summary
- Strategic Evaluation Form

APPENDIX I: ACTIONS, PRIORITIES, AND PROGRAMS

A. Actions and Priorities

1. Actions – Taken from Appendix H

What could we do?

- To truly evaluate curbside recycling we need more numbers to review.
- To compare information as suggestion for v4.0 Format we need to collect volume information consistently per county.
- Volume information from Drop-Off trailer locations and recording that data will allow the PMCC's to assess the location to determine if anything changes or updates need to happen.
- Having statistical facts will assist in the planning for Drop-Off trailers and possible increase in quantities collected.
- The District could work with the schools to create a recycling program during sporting events, at the football stadiums or the gymnasiums.
- The District could meet with local institutions to get an understanding of what is recycled and what is needed.
- The District wants to assure all industries are aware of the District resources.
- The District could propose changing local contracts with Service Providers to allow more bags at no additional cost.
- The District could educate the public of what is truly classified as a HHW.
- The District could promote businesses that offer an incentive for batteries.
- The District could try to find another outlet to recycle glass in the District.
- The District could promote taking appliances to scrap dealers.
- The District could work with local restaurants and groceries about supplying extra or outdated food to local food banks or churches. Determine who is responsible for community gardens and where the produce goes.
- The District could raise fee's to generate more money. The District could decrease expenses.
- The District could communicate with the public on what is available and share any resources through social media, Facebook.
- Meet with industries, businesses, organizations to discuss survey data.
- Drop off survey forms in person to industries, businesses, organizations.

2. – *Priorities*

The District needs to maintain access and communicate resources.

1. To truly evaluate curbside recycling we need more numbers to review.
 - We need to collect volume information consistently per county.
 - We need to obtain recycling volumes from Drop-Off trailer locations, Events, School Recycling, Office Recycling record data, track data and submit data to District Office. PMCC's need to evaluate Drop-Off Trailers usage.
 - Determine if recycling has increased what could we do?
 - Determine if recycling has decreased what could we do?
2. The District could review high volume events such as school sporting events held at football stadiums or gymnasiums.
 - The PMCC's could look into this.
3. The District could review recycling needs with local institutions such as hospitals, clinics, urgent care and medical offices.
 - The PMCC's could look into this.
4. The District wants to assure all industries are aware of the District resources.
 - The District will continue to submit annual information letter to all Districts and promote resources on Facebook.
5. The District could propose changing local contracts with Service Providers to allow more bags at no additional cost.
 - The District will assist Municipal Authorities only if requested.
6. The District could have more events to collect scrap tires.
 - The PMCC's assesses and calculates if the funding is available and if this provides a need to the community.
7. The District could educate the public of what is truly classified as a HHW.
 - The District will promote the HHW Resource further, by posting on Facebook.
8. The District could promote businesses that offer an incentive for batteries.
 - The District will promote this as another HHW Resource, by posting on Facebook.
9. The District could try to find another outlet to recycle glass in the District.
 - The District does not feel recycling glass is of economic value.
10. The District could promote taking appliances to scrap dealers.

- The District will promote this by posting on Facebook.
11. The District could work with local restaurants and groceries about supplying extra or outdated food to local food banks or churches.
 - The District could gain some insight on this for future evaluation.
 12. Determine who is responsible for community gardens and where the produce goes.
 - The District could gain some insight on this for future evaluation.
 13. The District could raise fee's to generate more money
 - The District has projected that there is sufficient funding during the planning period.
 14. The District could decrease expenses
 - The District is constantly frugal and looks to other means such as grants for additional funding.
 15. The District could communicate with the public on what is available and share any resources through social media, Facebook
 - The District hopes to utilize Social Media soon.
 16. Meet with industries, businesses, organizations to discuss survey data.
 - The District will meet with various businesses and organizations during the ratification process.
 17. Drop off survey forms in person to industries, businesses, organizations
 - The District feels email or regular mail is more productive.

B. Programs

1. Residential Recycling Infrastructure

Curbside

Curbside remains competitive and the District has a wide variety of haulers/recyclers to choose from. When the result is not satisfactory to a community, the carrier can be replaced. The Village of Edon switched from Republic Services to ARS to provide recycling and waste services at a better price.

The City of Defiance contracts curbside waste and recycling every 5 to 7 years, Werlor Waste & Recycling has held that contract for decades. Defiance also provided city residents with new Mity Tidy containers at no cost to the consumer. Archbold Refuse Service (ARS) is located in Fulton County and provides waste and recycling to local communities. Republic Services is based out of Williams County, but holds contracts throughout the District. The City of Bryan is the only community servicing their residents with in-city waste pickup and have not contracted this out.

Table I-1: Non Subscription Curbside Recycling Goals

ID	NAME	START DATE	END DATE	GOAL(S)
NCS1	City of Defiance	1993	On-Going	Goals 1 & 2
NCS2	Village of Sherwood	1996	On-Going	Goals 1 & 2
NCS3	Village of Hicksville	2018	On-Going	Goals 1 & 2
NCS4	Village of Archbold	1995	On-Going	Goals 1 & 2
NCS5	Village of Delta	1994	On-Going	Goals 1 & 2
NCS6	Village of Swanton	1995	On-Going	Goals 1 & 2
NCS7	Village of Payne	2017	2018	Goals 1 & 2
NCS8	Village of Antwerp	2017	2018	Goals 1 & 2
NCS9	Village of Oakwood	2017	2018	Goals 1 & 2
NCS10	Village of Melrose	2017	2018	Goals 1 & 2
NCS11	Village of Blakeslee	2012	On-Going	Goals 1 & 2
NCS12	City of Bryan	1993	On-Going	Goals 1 & 2
NCS13	Village of Edgerton	1993	On-Going	Goals 1 & 2
NCS14	Village of Edon	2012	On-Going	Goals 1 & 2
NCS15	Village of Montpelier	1993	On-Going	Goals 1 & 2
NCS16	Village of Stryker	1993	On-Going	Goals 1 & 2

Real Waste contracted with the Villages of Payne, Antwerp, Oakwood and Melrose to provide waste services and recycling in December 2017 but discontinued this service in September 2018. The market did not allow them to increase their profit line by including recycling, but expenses did grow. Real Waste offered a trailer at their facility, with 24/7 access to give those residents an opportunity to still recycle.

Hicksville Village contracted in December 2018 with Werlor Waste & Recycling to replace the village program for waste pickup. Werlor Waste & Recycling also offered recycling bi-weekly and provided new 55 gallon 'Mity Tidy' containers for waste and a 55 gallon "Mity

Tidy' with a yellow lid for recycling. The village has over 3500 residents that now have curbside and monthly drop-off opportunities.

NCS7	Village of Payne
NCS8	Village of Antwerp
NCS9	Village of Oakwood
NCS10	Village of Melrose

These four (4) curbside contracts have permanently ended. The other curbside contracts are expected to continue unchanged throughout the planning period.

Drop-Off Locations

Fulton County SW Transfer Station is considered a part time facility as it is only open 32 hours/week. They will accept aluminum cans, cardboard, computers including monitors, PC's and peripherals, books, newsprint, #1 and #2 Plastic, steel cans, batteries, clothing, magazines, office paper and shoes.

Table I-2: Part Time Urban Recycling Goals

ID	NAME	START DATE	END DATE	GOAL(S)
PTU1	Fulton County SW Transfer Station	2010	On-Going	Goals 1 & 2

Sims Metal Management supplies containers at two (2) locations within the City of Defiance to allow anyone to donate any time of steel for their Christmas for Kids campaign. Sims Metal Management has donated thousands of dollars to local charities to provide Christmas presents and staples to families in need.

Triangular Processing is a recycling center for Fulton County and is contracted with the Fulton Program. Triangular Processing accepts computers, detergent bottles, magazines, milk cartons, newspapers, paper, #1 and #2 plastics, plastic coffee cans, steel cans and metal hangers. They offer confidential documentation destruction, confidential paper shredding for a fee and computer dismantling for a fee.

The Bryan Recycling Center has containers available 24/7 and accepts magazines, steel cans, aluminum cans, clear and brown glass, plastics, newspapers and cardboard. This center is currently the only recycling center that will accept glass.

Table I-3: Full Time Urban Recycling Goals

ID	NAME	START DATE	END DATE	GOAL (S)
FTU1	Sims Metal Management	2000	On-Going	Goals 1 & 2
FTU2	Triangular Processing	2000	On-Going	Goals 1 & 2
FTU3	Bryan Recycling Center	2000	On-Going	Goals 1 & 2

Kohart Recycling is available during business hours. Northwest Recycling and Triangular Processing are available during business hours and each has a trailer/container that is accessible 24/7. The other locations have trailers for recycling available 24/7.

Table I-4: Full Time Rural Recycling Goals

ID	NAME	START DATE	END DATE	GOAL(S)
FTR1	Village of Archbold	2000	On-Going	Goals 1 & 2
FTR2	Pettisville	2000	On-Going	Goals 1 & 2
FTR3	Swan creek Township	2000	On-Going	Goals 1 & 2
FTR4	Erie Recycling	2010	On-Going	Goals 1 & 2
FTR5	Kohart Recycling	1993	On-Going	Goals 1 & 2
FTR6	Northwest Recycling	1988	On-Going	Goals 1 & 2
FTR7	Village of Pioneer	1995	On-Going	Goals 1 & 2

The District's drop-off recycling program is the heart of each county's programs. Drop-off trailers at strategic locations allow the District to provide recycling opportunities to our communities. Our District has four counties consisting of twelve townships each, which are mostly rural. County programming strives to provide recycling opportunities to each township.

The District has committed itself to promoting drop-off recycling as one of the primary ways to reduce waste. Drop-off recycling provides access to a large percentage of the population. The District's demographic is mostly rural farmland and most of our recycling

sites are located at township lots or government owned property. The recycling locations are easily accessible and per capita are performing accordingly. Monies allocated from the District to the PMCC reflect that the largest expense is for drop-off recycling

Table I-5: Part Time Rural Recycling Goals

ID	NAME	START DATE	END DATE	GOAL(S)
PTR1	Ayersville – Highland Township	2009	On-Going	Goals 1 & 2
PTR2	Power Dam – Defiance Township	2003	On-Going	Goals 1 & 2
PTR3	Evansport – Tiffin Township	1994	On-Going	Goals 1 & 2
PTR4	Farmer – Farmer Township	1994	On-Going	Goals 1 & 2
PTR5	Hicksville – Transfer Station (HTS)	1994	On-Going	Goals 1 & 2
PTR6	Village of Hicksville – Hicksville Township	2003	On-Going	Goals 1 & 2
PTR7	Mark Center – Mark Township	1994	On-Going	Goals 1 & 2
PTR8	Village of Ney – Washington Township	1994	On-Going	Goals 1 & 2
PTR9	Noble – Noble Township	1994	On-Going	Goals 1 & 2
PTR10	Richland – Richland Township	1994	On-Going	Goals 1 & 2
PTR11	Village of Sherwood – Delaware Township	1994	On-Going	Goals 1 & 2
PTR12	Village of Delta – York Township	1993	On-Going	Goals 1 & 2
PTR13	Village of Fayette – Gotham Township	1993	On-Going	Goals 1 & 2
PTR14	Village of Lyons – Royalton Township	1993	On-Going	Goals 1 & 2
PTR15	Village of Metamora – Amboy Township	1993	On-Going	Goals 1 & 2
PTR16	Pike Township	1993	On-Going	Goals 1 & 2
PTR17	Village of Briceton – Briceton Township	1993	On-Going	Goals 1 & 2
PTR18	Village of Cecil – Crane Township	1993	On-Going	Goals 1 & 2

PTR19	Village of Grover Hill – Latty Township	1993	On-Going	Goals 1 & 2
PTR20	Villages of Haviland & Scott – Blue Creek Township	1993	On-Going	Goals 1 & 2
PTR21	Village of Latty – Paulding Township	1993	On-Going	Goals 1 & 2
PTR22	Paulding County Fairgrounds	2010	On-Going	Goals 1 & 2
PTR23	Village of Payne – Harrison Township	1993	On-Going	Goals 1 & 2
PTR24	Junction – Auglaize Township	1993	On-Going	Goals 1 & 2
PTR25	Alvordton – Mill Creek Township	1993	On-Going	Goals 1 & 2
PTR26	Village of Blakeslee – Florence Township	1993	On-Going	Goals 1 & 2
PTR27	Bridgewater Township	1993	On-Going	Goals 1 & 2
PTR28	Jefferson Township	1993	On-Going	Goals 1 & 2
PTR29	Kunkle – Madison Township	1993	On-Going	Goals 1 & 2
PTR30	Northwest Township	1993	On-Going	Goals 1 & 2
PTR31	Pulaski Township	1993	On-Going	Goals 1 & 2
PTR32	Springfield Township	1993	On-Going	Goals 1 & 2
PTR33	Village of West Unity – Brady Township	1993	On-Going	Goals 1 & 2
PTR34	Superior Township	1993	On-Going	Goals 1 & 2
PTR35	Center Township	1993	On-Going	Goals 1 & 2
PTR36	St. Joseph Township	1993	On-Going	Goals 1 & 2

Defiance County drop off trailers accepts corrugated cardboard cut into pieces, flattened or placed inside a box, pressboard flattened or placed inside a paper sack, magazines placed in a box or tied with string, paper should be bagged with shredded and loose separated, steel cans should be rinsed, aluminum cans should be rinsed, plastic should be rinsed and only milk jugs, pop bottles, water bottles, juice containers, detergent containers and bleach bottles will be accepted. Defiance also will accept CPU's, 17" or larger monitors, laptops, tablets, e-readers and cell phones at all trailer locations.

The Defiance County Program established Hicksville as one of the busiest locations and the recycling trailer was available on the 1st Friday and the 4th Wednesday to the Village. The residents also could access the recycling trailer on the 1st Saturday (December – March) and 1st & 3rd Saturday (April – November) at the Gingrich road location which is 2-1/2 miles from the center of town. Many rural residents who would not have the curbside opportunity called and voiced concerns if the recycling trailer ended the Hicksville location. To resolve this concern, the program continued for two months after curbside recycling was in full swing and evaluated the amount of recycling received. It was determined that the 1st Friday would continue and the access on Gingrich road, but the 4th Wednesday would be eliminated. This resolution was well received.

Fulton County drop off trailers will take aluminum cans, books, cardboard, cell phones, computers, detergent bottles, glass (clear, brown and green), magazines, metal hangers, milk cartons, newspapers, paper, plastic #1 & #2, plastic coffee containers and steel cans. As of October 1, 2019 glass has been suspended from the Fulton County Program. The impact of removing glass will be assessed.

Paulding County recycles paper, newspaper, office paper, magazines, cardboard, aluminum cans (rinsed), steel cans (rinsed), glass bottles and jars (rinsed and remove caps) and plastic soda bottles, milk jugs, detergent bottles (rinsed with caps left on). As of October 1, 2019 glass has been suspended from the Paulding County Program.

Williams County program will take plastic #1 and #2 on Bottom (Milk Jugs, Shampoo Bottles, Detergent Bottles, Soda Bottles) rinsed and caps removed, newspapers bundled in paper sacks (no telephone books or magazines), steel cans must be rinsed, aluminum cans should be drained and can be crushed to save space, but it is not required.

Manned drop off locations experienced problems with people dropping off bags of recycling before the trailer was scheduled to be at the site. This created ripped bags, blowing litter, strewn recycling and a general mess. It was estimated that half of the bags or items dropped off early was not recycling, but trash. To correct these problems, signs were posted, brochures and website recycling schedule updated to now say No Early Drop Off or subject to Litter Fines per ORC 3767.32. Local law enforcement was asked to watch the location prior to the scheduled time of the trailer and speak with the person or persons that were dropping off their waste/recycling early. The Sheriff's Office did confront a person and explained to them that early drop off is not acceptable and could generate a litter fine, the problem seemed to be resolved.

Unmanned drop off locations have experienced some problems with contamination; trash, food or liquids residue. Signs were created and posted with what is to be recycled and what

is not recyclable and cameras were considered, but the monetary value was not justified. In one instance a recycling trailer location was closed and in another the trailer was moved to a more populated area. The removal of the recycling trailer did not generate any calls or concern which demonstrated that the removal was the correct option. Those residents that did use the trailer correctly had other options/locations to bring their recycling.

These drop off opportunities are expected to remain unchanged during the planning period.

Special Events

Table I-6: Other Residential Recycling Programs Goals

NAME	COUNTY	START DATE	END DATE	GOALS(S)
Earth Day Event	Williams	Annual	Event	Goals 1 & 4
Design An Ad Contest	Williams	Annual	Event	Goals 1 & 4
Dry Cell Battery Collection Event	Williams	Annual	Event	Goals 1 & 4
Fluorescent Bulb Program	Williams	On-Going	On-Going	Goals 1,4 & 5
Electronic Recycling Event	Williams	Annual	Event	Goals 1,4 & 5
Latex Paint Event	Williams	Annual	Event	Goals 1,4 & 5
Tire Recycling Event	Paulding	Annual	Event	Goals 1 & 5
Billboard / Poster Contest	Paulding	Annual	Event	Goals 1 & 4
Christmas Lights Recycling Event	Paulding	Annual	Event	Goals 1,4 & 5

A special event may be held to offer a resource to recycle specific material(s) that may not be included in a program or not available in an area. These types of events may change as a need arises or is resolved. The Policy Committee understands management and/or implementation of programs is at the discretion of the PMCC and that each county is different and the current special events are successful.

Earth Day Event: Williams County works with Soil & Water Conservation District for the annual Earth Day Celebration. The event is set up at the fairgrounds with free tree seedlings being distributed as well as recycling and conservation information. An electronics recycling event is concurrent and they accept all types of electronics such as computers, keyboards, scanners, printers, speakers, small appliances and other types of

electronics. Cathode Ray Tube televisions sets and computer monitors will be accepted for a fee of \$20.00 each (limit two). The Williams County program provided awareness in five local newspapers and two radio stations to promote this event. It was also posted on the Williams County Health Department Facebook and Twitter media.

Design an Ad Contest: Is a joint effort with the Williams County Program and The Bryan Times, a local newspaper. Local students submit artwork to promote the Williams County Solid Waste Reduction & Recycling Program. The program will select one winning ad and the winner will receive a gift certificate from The Bryan Times. The ad, along with a picture of the winning student will also be in the newspaper.

Dry Cell Battery Collection: Dry Cell batteries are the most commonly used battery and commonly thrown in the trash. Although dry cell batteries are no longer considered hazardous, the Williams County Program has an outlet for these batteries and encourages residents to bring them to be recycled. The batteries were delivered to Battery Solutions in Howell, Michigan for proper disposal and recycling. This event delivered 1003 pounds in 2017. The District promotes local businesses such as Lowe's and Menards who will recycle dry cell batteries, free to anyone.

Fluorescent Bulbs Program: CFLs contain mercury, a toxic metal which is bad for the environment and people and should be recycled properly. Williams County works with a local business to collect and recycle fluorescent bulbs and fluorescent tubes. The District promotes local businesses such as Lowe's and Home Depot that will accept limited fluorescent bulbs from residents.

Electronics Recycling Events: Defiance and Fulton County Programs accept electronic items throughout the year at TP and/or recycling trailers. Williams County holds an electronics recycling event during their Earth Day Celebration and also in the fall. The 2017 fall event collected 14,000 pounds of electronics. Paulding County holds annual electronics events for specific electronic components and recycled 7,200 pounds with Erie Recycling. The District has perceived that cell phone recycling has decreased within our programs as cell suppliers now offer rebates or exchange programs for new phones and computers and peripherals are/may be wireless, creating less material to be recycled.

Latex Paint Event: Latex paint is not hazardous and safe disposal is listed in the District's HHW resource guide. The Williams County Program has established that an annual Latex Paint event is desired and utilized by local residents. Only water based paint is accepted for recycling at a cost of \$2.00 per gallon can, \$8.00 per bucket. No oil based paint, spray paint or lead based paint is accepted. The collection service is

provided through E-Paint Recycling of Warren, MI. Workers will be provided through the Williams County JOBS program and the Soil & Water Conservation department. In 2017, 48 gallons of paint were collected during this four hour event. The collected paint is re-processed and then distributed through Habitat for Humanity Resale Stores.

Tire Recycling/Collection Events: Tires are accepted year round at the Fulton County Transfer Station and at the Defiance County Landfill, fees are applicable. The Williams County Program offers two tire recycling events during the spring and fall. The fall event collected 963 tires during the one-day special event compared to 773 tires in 2016. Paulding County holds a tire collection event annually. Only passenger car and light tires are accepted and a nominal fee of \$2.00 per tire is required. Tires are then transported to the Henry County Landfill.

Billboard Poster Contest: The Paulding County Program works with the Paulding County Elementary schools for participation in a poster contest. The posters provide insight into environmental issues such as litter prevention, recycling closing the loop and saving the world. 4th graders enter posters for a chance to have their message and artwork display on one of four billboards across Paulding County. The poster/billboard contest is a part of the environmental presentations given to all 4th grades in Paulding County.

Christmas Light Recycling Event: This is a new event that was requested by the general public in Fulton and Williams counties. Williams and Fulton counties joined together and created this event and have received a lot of positive feedback. It will continue with additional advertising.

These Special Events are evaluated after each event to determine if the participation and collection of recycling provided value to the community. If it is determined that it does not provide a productive resource, then it could be reduced or eliminated.

Litter Prevention

Table I-7 Litter Prevention

NAME	START DATE	END DATE	GOAL
Adopt-A-Highway	1990	On-Going	Goals 1 & 4
Litter Containment	1990	On-Going	Goals 1 & 4

Keep America Beautiful	1988	On-Going	Goals 1 & 4
Dumping's	1990	On-Going	Goals 1 & 4

Adopt-A-Highway: The Adopt-A-Highway program has been a part of litter prevention since the District was created. Contracts are issued to organizations, groups, in memory of a person, county departments, etc. Contracts are usually for a two year commitment with a requirement to pick up litter on that contracted road at least a minimum of 4 times per year. The Defiance Program has over thirty-five active groups covering over 78 miles of roads and the Williams County Program has 45 contracts covering township and county roads. In 2017, ODOT contracted with CCNO to pick up litter on state roads within our District. The other counties within the District have other departments such as Job and Family Services and Juvenile Probation that perform roadside litter activities instead of a formal AAH program.

Litter Containment: A positive opportunity to assist communities to control unsightly litter at events is to offer containment barrels for additional waste. The barrels are triple rinsed by a local manufacturer and distributed to the Defiance program to be recycled. Liners are donated barrels are distributed and picked up after the scheduled event. Event organizers are responsible for disposal of all trash. If recycling containers are available and utilized, Defiance County Environmental Services will pick up and process the recycling. Litter and recycling amounts are tracked per event and are a part of the Great American Cleanup. The other counties within the District offer recycling containers, when available at area events.

Keep America Beautiful: In 2018, the Defiance County Commissioners passed a resolution changing our KAB Affiliate name from Defiance County Environmental Services/KAB to Keep Defiance County Beautiful. Annually the Defiance affiliate participates and promotes the Great American Cleanup. Each AAH contracted road requires one of the four schedule litter pick up events to be completed during the GAC dates. A letter requesting participation and registration is sent to all AAH contract holders, schools, organizations, churches, etc. Consistency has been found to be the key to a successful event and multiple GAC events have been held over the past twenty years and still continue to have outstanding volunteers and participation. Keep Defiance County Beautiful has been the recipient of the KAB President's Circle Recognition for several decades.

Dumping's: The District Hot Line is a number that will be answered by the District Office. Dumping, litter problems, litter questions, recycling concerns and questions, may be handled by calling this number. Dump site cleanups are handled by the PMCC's who will work with their local law enforcement. The Sheriff Office also receives calls regarding any dumping and will notify the District Office with details and location. The Defiance program will clean up the area and dispose at the landfill. The workers will sift thru the debris to attempt to find a name or address that would be turned over to the Sheriff's Office for possible further action. The Defiance program works continually with the Sheriff's office on litter enforcement issues as well.

The Paulding County Program assists with the annual Maumee River clean up, done annually by the Horseman Club. Categorized under dumping, this club also goes through debris to provide a name or address to the Sheriff's Office to assert the law.

These programs will continue during the plan update with the possibility of increased participation in Adopt-A-Highway contracts, Litter Containment events, Great American Clean Up participation and a decrease in reported dumping.

2. Commercial/Institutional Sector Reduction and Recycling

School Recycling Program

The Defiance County School Recycling program picks up at nine (9) public and one (1) parochial school weekly during the school season. Cardboard, paper, pressboard, magazines, newspapers, steel and aluminum cans are accepted. The schools have students collect the recycling and bring to an established pickup location. Recycling is to be bagged separately to be transported. Schools recycling the large cafeteria steel cans have found that the cans are easily cleaned by running them thru the dishwasher. This saves space and money for the school by not filling up the waste dumpster with bulky cans. The school recycling program supports internal recycling initiatives as well, with programs such as collecting caps to turn into a school bench, or having the science club create a plastic bottle program.

The three school systems within Paulding County: Antwerp, Paulding Exempted and Wayne Trace are being provided with the opportunity to recycle in an ongoing endeavor to divert waste from the landfills. The Paulding County Program picks up recycling at Antwerp and Wayne Trace on a weekly basis and the PC Workshop provides recycling to the Paulding Exempted schools. Paulding County collects mixed paper, cardboard, plastic, steel and aluminum from their local schools. Many businesses near the schools are also contributing to the recycling effort.

In 2019, PC Workshop discontinued recycling at Paulding schools and the WMEA Program has taken over recycling collection at these schools. The Paulding County schools recycle: paper, newspaper, cardboard, glass bottle and jars, aluminum and steel cans, and plastic soda bottles, milk jugs, and detergent bottles.

The Fulton County Program contracts with BDD/Triangular Processing to pick up recycling from several school districts in the county. Williams County has Wilton Keck Recycling picking up paper and cardboard from six (6) public schools and one (1) parochial.

Table I-8: School Recycling Goals

NAME	START DATE	END DATE	GOAL
Defiance County School Program	1994	On-Going	Goals 1,2 & 4
Paulding County School Program	1994	On-Going	Goals 1,2 & 4
Wilton Keck – Williams County School Program	2016	On-Going	Goals 1,2 & 4
Fulton County School Program - TP	2000	On –Going	Goals 1,2 & 4

Office Recycling Program

The Defiance Office Recycling Program collects mostly paper & cardboard with a few plastic bottles or cans from select locations. The locations include: County Courthouse and Annex (Auditor, Clerk of Courts), Defiance County East Building (Health Department, Elections, and Veterans Affairs) Commissioners Building (Adult Probation, Engineering, Dog Warden, Family & Children First, and Coroner office) Defiance Public Library, Good Sam, Evergreen Lanes Office Complex (Job & Family Services, OSU Extension, Soil & Water), Records, Bob Latta’s Office, Senior Center and Weatherization. The Senior Center recognizes the savings of recycling the large steel food cans from the cafeteria.

The Paulding Office Recycling Program picks up paper and cardboard from the government facilities including the Courthouse, Sheriff’s Office, Board of Elections, Child Support, Senior Service Center, Health Department, Paulding County Job Center, Soil

and Water Conservation and Veterans Administration. BDD/Triangular Processing picks up recycling from Fulton County offices.

Table I-9: Office Recycling Goals

NAME	START DATE	END DATE	GOAL
Defiance County Program	1994	On-Going	Goals 1,2 & 4
Paulding County Program	1994	On-Going	Goals 1,2 & 4
Wilton Keck – Williams County Program	2016	On-Going	Goals 1,2 & 4
Fulton County Program - TP	2000	On –Going	Goals 1,2 & 4

These programs will continue during the plan update with the possibility of increased tonnages due to better tracking.

A. Large Venue Recycling

The District does not have any huge stadiums only high school football stadiums but does have annual community events that can bring in thousands of people. These events are used to promote litter containment, recycling (cans or bottles), specialized recycling requests and an opportunity to distribute literature and verbal information of the District Resources.

Table I-10: Venue Goals

NAME	START DATE	END DATE	GOALS
Williams County Fair	September	September	Goals 1,2 & 4
Paulding County Fair	June	June	Goals 1,2 & 4
Antwerp Football Games (Paulding County)	September	October	Goals 1,2 & 4
Defiance County Containment Program	September	September	Goals 1,2 & 4

Williams County provides information and containers to the fair board and 4H clubs to maintain recycling at the annual fair. Erie Recycling for Paulding County provides containers during their fair week and Erie Recycling collects plastic bottles at the Antwerp home games. The Defiance County Program provides containment barrels and recycling containers if available as part of the Litter Prevention program and Keep America Beautiful/Great American Clean Up. In 2017, the containment program consisted of:

Claire’s Day at the Library (300# trash) estimated 1500 people attended, Lilac Festival (750# trash) estimated 3500 people attended, Jazz Festival (1200# trash) with 1000 people attending. Additional events were also held, but these are examples of why I included them with venue goals.

These types of venues will continue with the hope of increasing recycling participation by developing new recycling programs at local sporting events.

B. Contracting Assistance

Table I-11 Contracts

NAME	START DATE	END DATE	GOALS
Correction Center of NW Ohio (CCNO)	1994	On-Going	Goals 1, 2 &4
Northwest Ohio Department of Transportation	2017	On-Going	Goal 4
BDD/Triangular Processing	2000	On-Going	Goals 1 & 4
Oberlin Recycling		On-Going	Goals 1 & 4
Erie Recycling		On-Going	Goals 1 & 4

The Defiance County Program contracts with CCNO to utilize inmates for many of our recycling programs; including school and office, drop-off trailers, litter prevention and containers. NW ODOT initiated the use of prisoners from CCNO to pick up roadside litter on State Routes within our District. The Fulton County Program contracts with the county Board of Developmental Disabilities who contracts with Triangular Processing to provide recycling services. Oberlin Recycling is contracted by Williams County to provide recycle transportation and Erie Recycling is contracted by Paulding County Program to operate a recycling center and assist with other recycling programs.

These contracts are expected to continue during the planning period.

C. Workgroup/Round Table

Table I-12 DAC

NAME	START DATE	END DATE	GOALS
District Advisory Committee	1989	On-Going	Goals 1-6

The District Advisory Committee was established with the creation of the District’s first Solid Waste Management Plan. The DAC consists of the District Coordinator and the four PMCC’s. The PMCC are responsible to implement, review, develop and manage their county programs to achieve the State Goals and comply with the Solid Waste District Plan. The DAC meets informally, quarterly to discuss any changes to programming. The PMCC’s report any changes to their programs to the District office.

This committee will continue during the planning period.

D. Awards and Recognition

Table I-13 Awards

NAME	START DATE	END DATE	GOALS
KAB-President’s Circle Award	1999	On-Going	Goals 1 & 4

The Defiance County Program is an affiliate in good standing with Keep America Beautiful and has retained this status to receive the President’s Circle Award annually.

Keep Defiance County Beautiful will continue to meet the requirements to be in good standing and achieve the President’s Circle Award during the planning period.

3. Industrial Sector Reduction and Recycling Programs

A. Waste Assessments/Waste Audits

Table I-14: Waste Assessment and Audits

NAME	START DATE	END DATE	GOALS
Waste Assessment/Audits	1989	On-Going	Goals 2 & 4

The District has continually been available to the Industrial Sector to establish or expand waste reduction and recycling programs at their request. As part of this program, the District can provide industries with information and material regarding the benefits associated with waste reduction such as reduced disposal costs and greater plant efficiency. The District will meet with industry leaders to establish or update reduction programs, conduct plant reviews and/or assist in conducting a waste audit.

The District has not conducted any waste assessments or audits for many years but the program still is available.

B. Collection Services

Table I-15 Collection Services

NAME	START DATE	END DATE	GOALS
Industrial Collection Svs	1989	On-Going	Goals 2 & 4

The District is able to review and assess internal recycling activities of local industries from the information provided on the ADR survey forms. The industrial sector is proficient at recycling ferrous and non-ferrous metals and wood products. Source reduction (generating zero waste) and scrap elimination (no production defects) efforts are common throughout the District's industries. Economic impact is still the common thread for any recycling program to reduce costs. The District is available to all industries to provide assistance with any recycling or waste effort.

Industrial businesses recognize the economic impact recycling may have on their operations. Business plans normally include scrap and waste disposal reductions and reuse capabilities to benefit the bottom line. The District knows from the data collected with the annual district survey forms that our industries recycle large quantities of ferrous and non-ferrous metals. Special items such as carpet padding, zinc, copper are also being recorded and reported as recycled materials.

The District distributed the EPA Ohio Materials Marketplace flyer to all Industrial, Residential and Commercial constituents with the 2018 annual district survey form to offer another avenue to recycle. The District received several calls regarding this opportunity and has become a member of the Materials Marketplace to continue to assist Industries with questions, suggestions, obtaining and posting of recyclable material.

The District wants to be sure that new industries coming to our counties are aware of the resources for waste reduction and recycling. To have a better outreach, the District is working with Economic Market Development departments in all four counties to assure that part of the incentive to attract new businesses includes the District as a resource for all solid waste disposal options. The Policy Committee supported the initial changes made to the Annual District Report Survey process and anticipates meeting the State's Recycling Goals. The District also will post resources on social media – Facebook.

This District will continue with these programs during the planning period.

4. Restricted/Difficult to Manage Wastes

A. Yard Waste

Table I-16 Yard Waste Program

NAME	START DATE	END DATE	GOALS
Yard Waste Management Program	1989	On-Going	Goal 5
Registered Composting Sites	1989	On-Going	Goal 4

The District has twelve (12) licensed compost locations throughout the District. Residents may utilize these or may have an alternate choice. The District compiles information of who, what, where and when for local communities that offer collection or a location to recycle leaves, brush and/or grass clippings. The District office keeps in contact with local communities to obtain accurate information to provide to district residents.

The list below is the communities that offer a yard waste management program.

1. Village of Hicksville – Defiance County - Has curbside pickup of leaves and small branches/brush.
2. Village of Ney – Defiance County - Has curbside pickup of leaves and grass.
3. Village of Sherwood – Defiance County - Has a location on the edge of village limits where leaves, grass and small branches may be taken.
4. Village of Archbold – Fulton County - Has curbside pickup of leaves, limbs, grass and branches. Also has a drop off location as well.
5. Village of Delta – Fulton County - Has curbside for leaves, limbs and branches.
6. Village of Lyons – Fulton County - Has curbside pickup and a drop off area for leaves.
7. Village of Fayette – Fulton County - Has curbside and a drop off area for leaves, limbs and branches.
8. Village of Metamora – Fulton County - Has curbside pickup for leaves, limbs, grass and branches.
9. Village of Swanton – Fulton County - Collects leaves.
10. City of Wauseon – Fulton County - Has curbside for brush and leaves and a 24/7 drop off for grass.

11. Village of Paulding – Paulding County – Has a drop off location on outskirts of town for leaves, limbs and branches.
12. Village of Antwerp –Paulding County - Has a drop off location on outskirts of town for leaves, limbs, grass and branches.
13. Village of Payne – Paulding County - Has curbside pickup for leaves, limbs and branches
14. Village of Edgerton – Williams County - Has curbside pickup and drop off for leaves, limbs, grass and branches.
15. Village of Edon – Williams County - Has curbside pickup and drop off for leaves, limbs, grass and branches.
16. Village of Montpelier – Williams County - Has curbside pickup and drop off for leaves, limbs, grass and branches.
17. Village of Pioneer – Williams County - Has curbside pickup for leaves, limbs, grass and branches.
18. Village of West Unity – Williams County - Has curbside pickup and drop off for leaves, limbs, grass and branches.

Yard waste increased slightly due to the contact with local administrations to obtain municipal non registered compost-related materials tonnages. Many communities grind the material and offer it to residents for their gardens, flower beds or a farmer’s field. Food wastes are expected to go higher with the increased awareness of the importance to report the tonnages being recycled and where. The District acknowledges and promotes composting and provides locations of composting facilities.

The Yard Waste Management Program will continue throughout the planning period, but may be updated to reflect changes to village programs or changes to the registered compost facilities.

B. Household Hazardous Waste (HHW)

Table I-17 HHW Program

NAME	START DATE	END DATE	GOALS
HHW Resource - District	2018	On-Going	Goal 5
HHW Resource – Defiance County	2018	On-Going	Goal 5
HHW Resource – Williams County	2018	On-Going	Goal 5

Mercury Recycling 2000 On-Going Goal 5

The District offers safe disposal and recycling options for HHW materials on their website. Defiance and Williams counties each has an HHW Resource Guide suggesting local businesses to accept materials listed. The District office can also be the point of contact for unknown disposal and recycling options. The Defiance and Williams County programs both accept mercury from thermostats, switches, thermometers, etc. Mercury is then transported or shipped to ERG Environmental in Bowling Green, OH.

The District determined that holding annual events for HHW waste was not cost productive and changed an annual event to a constant assistance for proper disposal. The Policy Committee understands educating the public on what is truly considered hazardous and giving them local resources for proper disposal will give the District residents many options.

The HHW Resource and recycling of mercury will continue throughout the planning period.

C. Scrap Tires

Table I-18 Scrap Tire Program

NAME	START DATE	END DATE	GOALS
Defiance County Tire Program	On-Going	On-Going	Goal 5
Fulton County Tire Program	On-Going	On-Going	Goal 5
Paulding County Tire Program	Event	Annual	Goal 5
Williams County Tire Program	Event	Annual	Goal 5

The Williams County Program holds an annual Tire Collection Day in cooperation with the Williams County Engineer’s office. The Paulding County Program also conducts an annual tire collection event. These events have proven to be a convenient and economical way for local residents to properly dispose of old tires for a small fee. Tires were then transported and recycled at the Henry County Landfill. Detailed information is in Special Events.

The Fulton County Transfer Station is part of the Fulton County Program and accepts tires throughout the year. The tires are then transported and recycled at the Henry County Landfill. The Defiance County Program promotes that tires can be disposed of at the Defiance County Landfill for a fee, dependent on the size and quantity of the tires. The tires are then transported by a licensed tire hauler.

The scrap tire program will continue throughout the planning period.

D. Electronics

Table I-19 E-waste Program

NAME	START DATE	END DATE	GOALS
Defiance County E-Waste Program	On-Going	On-Going	Goal 5
Fulton County E-Waste Program	On-Going	On-Going	Goal 5
Paulding County E-Waste Program	Event	Annual	Goal 5
Williams County E-Waste Program	Event	Annual	Goal 5

Paulding and Williams Counties offer annual Special Events to collect E-waste. The Defiance County Program will accept CPU's, 17" monitor or larger, laptops, e-readers or tablets at all drop-off trailer locations. In 2014-2017, Defiance County joined with Dell Computers and Goodwill Industries to collect and recycle computers. Defiance accepted all components of computers and transported them to the local Goodwill store. In mid-2017 Dell Computer and Goodwill suspended the collection and acceptance of computers. Defiance still collects the computers as listed above, however they are transported to OmniSource Electronics in Fort Wayne, IN. OmniSource Electronics is a certified electronics recycler. Defiance is also a registered drop off location for cell phones through Cell Phones for Soldiers. Triangular Processing accepts electronics at their facility for the Fulton County program.

The electronics or E-Waste programs will continue throughout the planning period. Changes made be made to the certified recycler that is used.

E. Lead-Acid Batteries

Table I-20 Lead-Acid Batteries

NAME	START DATE	END DATE	GOALS
------	------------	----------	-------

District Resources Lead Acid Batteries	On-Going	On-Going	Goal 5
TP - Fulton County Program Lead Acid Batteries	On-Going	On-Going	Goal 5

The District offers local resources that will accept lead-acid batteries within their communities; this is found within the HHW Resource guide for the District and on the Defiance website. Many local businesses such as AutoZone, NAPA, and Walmart along with area mechanics will accept lead-acid batteries. AutoZone and other companies pay for batteries, a great incentive. Triangular Processing accepts lead-acid batteries at their facility.

The Lead-Acid Battery program will continue throughout the planning period.

F. Appliances

Table I-21 Appliance Recycling

NAME	START DATE	END DATE	GOALS
Defiance County Appliance Program	On-Going	On-Going	Goals 4 & 5
Williams County Appliance Program	On-Going	On-Going	Goals 4 & 5
Fulton County Appliance Program	On-Going	On-Going	Goals 4 & 5
Paulding County Appliance Program	On-Going	On-Going	Goals 4 & 5

The Defiance County Program accepts appliances for a fee at the Hicksville Transfer Station location only. Defiance promotes that appliances be taken to two local scrap dealers, or donated to Christmas for Kids by disposing of the appliances or metal in two containers in the City. Williams County Program promotes their local scrap metal recycler and TP will accept appliances. The Paulding County Program accepts appliances at Erie Recycling and Koharts Recycling Center.

The appliance recycling program will continue throughout the planning period.

5. Other Material Specific Programs

A. Food Waste

Table I-22 Food Waste Program

NAME	START DATE	END DATE	GOALS
------	------------	----------	-------

Andre Farms – Williams County	On-Going	On-Going	Goals 1 & 4
-------------------------------	----------	----------	-------------

The District offers alternatives for food waste. Andre Farms in Fulton County accepts food waste as a part of their composting facility. They recycled over 13 tons in 2017. Wal-Mart stores in Defiance and Wauseon donate soon to be expired food to local food banks and/or churches. Spoiled food is part of rendering materials that can be dried to a powder and used in animal feed.

The food waste program as listed will continue throughout the planning period.

B. Glass

Table I-23 Glass Recycling

NAME	START DATE	END DATE	GOALS
Bryan Recycling – Williams County	On-Going	On-Going	Goals 4 & 5

Glass is not exempt from MSW Landfills. The District did not see a reduction in our recycling tonnages when select glass programs ended. The handling of glass is labor intensive; sorting the colors, cleaning, label removal (some programs), physical processing (heavy material) and requires additional safety precautions. Fulton and Paulding County has suspended (2019) taking glass within their programs for many of these reasons. Defiance ceased accepting glass in 2007.

The District will continue to keep glass as part of the programs that can recycle it. Limitation of the colors accepted or the requirements of how to recycle may change during the planning period as the PMCC’s assess this material and quantities for future recycling.

The glass recycling program will continue throughout the planning period at Williams County. This could be re-evaluated and changed due to poor economic value.

C. Pharmaceuticals

Table I-24 Drug Take Back Programs

NAME	START DATE	END DATE	GOALS
County Sheriff Offices	On-Going	On-Going	Goal 4

The county Sheriff Offices in each of the four counties within the District participate in the National Drug Take Back program and offer residents an opportunity to safely dispose of outdated, unwanted medications.

The Drug Take Back Program will continue throughout the planning period with the Sheriff Offices offering a wonderful service.

D. Funding/Grants

Table I-25 Available Grants

NAME	START DATE	END DATE	GOALS
EPA Litter Management Grant	Annually		Goals 1, 4 & 5
EPA Market Development Grant	Annually		Goals 1, 4 & 5
EPA Scrap Tire Grant	Annually		Goals 1, 4 & 5
EPA Community Development Grant	Annually		Goals 1, 4 & 5
Keep America Beautiful Grants	Annually		Goals 1, 4 & 5

The District PMCC applies for grant funding to supplement their recycling, tire amnesty and litter prevention programs. Each PMCC determines if a grant would benefit their programs and if so, they write and manage the grant process.

Sponsored required grants are processed at the District office. The District office assists with the application process, documentation and submits on behalf of the applicant. KAB grants vary per year per sponsors, but are reviewed annually for requirements and verification if the grant would benefit the District.

The District has received an estimated \$850,000 in grant funding since 2009 and will continue to sponsor and utilize any additional funding source available.

The writing and receiving grants will continue throughout the planning period.

6. Facilities Used by the District

A. Recycling Facilities

Table I-26 District Recycling Facilities

NAME	START DATE	END DATE	GOALS
Werlor Waste and Recycling	1969	On-Going	Goals 1 & 2

Triangular Processing	2000	On-Going	Goals 1 & 3
Koharts Recycling Center	On-Going	On-Going	Goals 1 & 3
Erie Recycling	On-Going	On-Going	Goals 1 & 3
Bryan Recycling Center	On-Going	On-Going	Goals 1 & 3
Erie Recycling Center	On-Going	On-Going	Goals 1 & 3
Wilton Keck Recycling	On-Going	On-Going	Goals 1 & 3

Werlor Waste and Recycling handles the majority of recycling within Defiance County. Werlor’s discontinued accepting recycling from the general public at their facility and distributes the Defiance County program’s brochure to promote using the drop-off trailers. The Defiance County Program hauls drop-off trailer recycling to Werlor’s.

Triangular Processing accepts recycling at their facility and contracts to conduct other programs for Fulton County. Koharts Recycling is open to the public for recycling during business hours and Erie Recycling Facility is open 24/7. The Bryan Recycling Center and Wilton Keck Recycling offer recycling options at either location.

These recycling centers will continue throughout the planning period.

B. Landfills

Table I-27 Landfill Facilities

NAME	START DATE	END DATE	GOALS
Defiance County Landfill	On-Going	On-Going	Goal 1
Williams County Landfill	On-Going	On-Going	Goal 1

These landfills will continue throughout the planning period and have decades of capacity left.

C. Transfer Stations

Table I-28 Transfer Stations

NAME	START DATE	END DATE	GOALS
Archbold Refuse Service – ARS	On-Going	On-Going	Goal 1
Fulton County Transfer Station	On-Going	On-Going	Goal 1

The District has two licensed transfer facilities.

These transfer station will continue throughout the planning period. The only change that may happen is if Werlor's decides to become a transfer station and receives a permit.

D. Compost Facilities

Table I-29 Licensed Compost Facilities

NAME	START DATE	END DATE	GOALS
Defiance WWTP	On-Going	On-Going	Goal 1
Strait Gate Farms	On-Going	On-Going	Goal 1
Andre Farms	On-Going	On-Going	Goal 1
Lammon Brothers	On-Going	On-Going	Goal 1
Village of Antwerp	On-Going	On-Going	Goal 1
Village of Paulding	On-Going	On-Going	Goal 1
Bryan Recycling Center	On-Going	On-Going	Goal 1
Edgerton Composting Facility 2	On-Going	On-Going	Goal 1
Village of Montpelier	On-Going	On-Going	Goal 1
Village of West Unity	On-Going	On-Going	Goal 1

Those listed are all registered compost facilities. The District has several communities that collect leaves, brush, grass and limbs, but are not registered and are listed in yard waste management program information

These compost facilities will continue throughout the planning period.

7. Data Collection

NAME	START DATE	END DATE	GOALS
Annual ADR Survey	On-Going	On-Going	Goal 9

The District submits forms to over 500 Residential/Commercial businesses and institution gathering recycling information for the prior year to compile and submit to the EPA by the June 1st deadline. Forms are detailed for Residential/Commercial, Industries, Scrap Yards, Compost/Yard Management. Mail or email instructions and OMM information is also

distributed with the forms. Contact via telephone and or email is constant to assure the forms are returned completed.

Distributing, Compiling Data via the ADR Survey will continue throughout the planning period.

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

A. Residential Sector Opportunity to Recycle

Goal 1 states – The SWMD shall ensure that there is adequate infrastructure to give residents and commercial businesses opportunities to recycle solid waste. The majority of the District’s resources are devoted to Goal 1 as primary and Goal 2 as secondary.

The plan format prescribes a formula for solid waste management districts to use, to determine the percentage of the population which has access to curbside and drop-off recycling services. The District needs to provide recycling opportunities to 90% of the population within each of the four counties.

The standard credit percentage is 100% of the population of a community up to and including the entire credit for a drop-off trailer location needed to achieve 100% of the residential population with access to recycling infrastructure. For example: a City population is 16,687 = 16,687 population credit. A drop-off trailer within the township and within the city = 2,500 credit for each drop-off if it meets the criteria to be creditable. If the population is under 5,000, then the credit is reduced to 2,000.

For Defiance, Sims Metal Management in Defiance Township meets the fulltime urban recycling description, but only accepts metals, so it does not receive the credit. Fulton County received the entire 5,000 credit for fulltime, full service drop-off locations in Archbold, Swancreek Township and Wauseon. The Village of Cecil drop-off trailer location isn’t listed on the Paulding County website, but is listed in the 2017 ADR. Due to limitations on credits per community, only two (2) of the Paulding Township locations received credits. Payne, Antwerp, Melrose and Oakwood villages have population credits for non-subscription curbside for the reference year. In 2018 those villages no longer have curbside. If those credits are removed, Paulding would still meet the requirements with 120%. Williams County, the City of Bryan has non-subscription curbside service so the credit is not applicable.

Criteria to be creditable include that each sector of waste generation (residential/commercial/institutional) has access to recycling for at least five of the eleven materials identified in the 1995 State Plan, as being amenable to recovery from

municipal solid waste. Those five materials related to this plan update are: cardboard, paper, steel cans, aluminum cans and plastic.

The District has been divided into four service areas. Each county in the District is a separate service area which will include all of the incorporated and unincorporated areas within that county. This data was analyzed to determine that the residential population in each county of the District had the opportunity to recycle using the infrastructure that existed in the reference year. It was also determined that this infrastructure will be more than adequate during the planning period. Each county exceeds the minimum requirement of 90%. The average percentage of the four counties representing the District is 122.75%. Based on these results, the District concludes that adequate infrastructure exists.

Opportunity to Recycle for Defiance County

ID #	Defiance	2017	
	Name of Community (City, Village, Township)	Community Population	Population Credit
<i>Non-subscription curbside</i>			
NCS1	City of Defiance	16687	16687
NCS2	Village of Sherwood	806	806
NCS3	Village of Hicksville	3445	3445
<i>Subscription curbside</i>			
<i>Full-time, urban drop-off</i>			
FTU1	Sims Metal Management (Defiance Township)	1696	0
<i>Part-time, urban drop-off</i>			
<i>Full-time, rural drop-off</i>			
<i>Part-time, rural drop-off</i>			
PTR1	Ayersville - Highland Township	2284	2500
PTR2	Power Dam - Defiance Township	1696	2500
PTR3	Evansport - Tiffin Township	1582	2500

PTR4	Farmer - Farmer Township	923	2500
PTR5	Hicksville Transfer Station (HTS) - Milford Township	1088	2500
PTR6	Village of Hicksville - Hicksville Township	4893	2500
PTR7	Village of Mark Center - Mark Center Township	875	2500
PTR8	Village of Ney - Washington Township	1566	2500
PTR9	Noble - Noble Township	2378	2500
PTR10	Richland - Richland Township	1198	2500
PTR11	Sherwood Village - Delaware Township	1263	2500
Mixed municipal waste material recovery facility			
Total County Population			38,156
Total Population Credit			48,438
Percent of Population			127%

Opportunity to Recycle for Fulton County

ID #	Fulton	2017	
	Name of Community (City, Village, Township)	Community Population	Population Credit
Non-subscription curbside			
NCS4	Village of Archbold	4305	4305
NCS5	Village of Delta	3132	3132
NCS6	Village of Swanton	3746	3746
Subscription curbside			
Full-time, urban drop-off			
FTU2	Triangular Processing - Clinton Township	9562	5000
Part-time, urban drop-off			
PTU1	Fulton County Transfer Station	7342	2500
Full-time, rural drop-off			

FTR1	Village of Archbold - German Township	4305	2500
FTR2	Pettisville - Clinton Township	498	2500
FTR3	Swanecreek Township	8498	2500
Part-time, rural drop-off			
PTR12	Village of Delta - York Township	4050	2500
PTR13	Village of Fayette - Gotham Township	2207	2500
PTR14	Village of Lyons - Royalton Township	1486	2500
PTR15	Village of Metamora - Amboy Township	1804	2500
PTR16	Pike Township	1486	2500
Mixed municipal waste material recovery facility			
Total County Population		42,442	
Total Population Credit		38,683	
Percent of Population		91%	

Opportunity to Recycle for Paulding County

ID #	Paulding	2017	
	Name of Community (City, Village, Township)	Community Population	Population Credit
Non-subscription curbside			
NCS7	Village of Payne	1147	1147
NCS8	Village of Antwerp	1684	1684
NCS9	Village of Oakwood	595	595
NCS10	Village of Melrose	264	264
Subscription curbside			
Full-time, urban drop-off			
Part-time, urban drop-off			
Full-time, rural drop-off			
FTR4	Erie Recycling - Carryall Township	2870	2500
FTR5	Kohart Recycling - Jackson Township	2870	2500

Part-time, rural drop-off			
PTR17	Village of Briceton - Paulding Township	3859	2500
PTR18	Village of Cecil - Crane Township	1361	2500
PTR19	Village of Grover Hill - Latty Township	983	2500
PTR20	Village of Haviland & Scott - Blue Creek Township	751	2500
PTR21	Village of Latty - Paulding Township	3859	2500
PTR22	Paulding County Fairgrounds - Paulding Township	3859	0
PTR23	Village of Payne - Harrison Township	2394	2500
PTR24	Junction - Auglaize Township	1399	2500
Mixed municipal waste material recovery facility			
Total County Population		18,731	
Total Population Credit		26,190	
Percent of Population		140%	

Opportunity to Recycle for Williams County

ID #	Williams	2017	
	Name of Community (City, Village, Township)	Community Population	Population Credit
Non-subscription curbside			
NCS11	Village of Blakeslee	94	94
NCS12	City of Bryan	8357	8357
NCS13	Village of Edgerton	2000	2000
NCS14	Village of Edon	814	814
NCS15	Village of Montpelier	3949	3919
NCS16	Village of Stryker	1300	1300
Subscription curbside			
Full-time, urban drop-off			
FTU3	City of Bryan	8357	0
Part-time, urban drop-off			
Full-time, rural drop-off			

FTR6	Northwest Recycling - Superior Township	1356	0
FTR7	Village of Pioneer - Madison Township	1300	2500
<i>Part-time, rural drop-off</i>			
PTR26	Alvordton - Millcreek Township	3949	2500
PTR27	Village of Blakeslee - Florence Township	1970	2500
PTR28	Bridgewater Township	1442	2500
PTR29	Jefferson Township	1870	2500
PTR30	Kunkle - Madison Township	958	2500
PTR31	Northwest Township	1207	2500
PTR32	Pulaski Township	2292	2500
PTR33	Springfield Township	3082	2500
PTR34	Village of West Unity - Brady Township	2531	2500
PTR35	Superior Township	1356	2500
PTR36	Center Township	2807	2500
PTR37	St. Joseph Township	2791	2500
<i>Mixed municipal waste material recovery facility</i>			
Total County Population			36,784
Total Population Credit			48,984
Percent of Population			133%

B. Demonstration of Commercial Opportunity to Recycle

Table J-4: Commercial Sector Opportunity to Recycle

Service Provider	Type of Recycling Service Provided	Cardboard	Mixed Paper	Steel	Aluminum	Plastic
Defiance						
Defiance County Program	Trailer - Public Drop Off	X	X	X	X	X
Archbold Refuse Service (ARS)	Transfer Station	X	X	X	X	X
OmniSource	Metal Scrap Yard			X	X	
Pike's Refuse Service	Hauler - Collection	X	X	X	X	X
Real Waste	Hauler - Collection	X	X	X	X	X
Republic Services	Hauler - Collection	X	X	X	X	X
S&S Sanitation	Hauler - Collection	X	X	X	X	X
Sims Metal Management	Metal Scrap Yard			X	X	
Werlor's Waste Control & Recycling	Hauler - Collection	X	X	X	X	X
Fulton						
Fulton County Program	Trailer - Public Drop Off	X	X	X	X	X
Triangular Processing	Recycling Processor	X	X	X	X	X
Fulton County Transfer Station	Transfer Station	X	X	X	X	X
Werlor's Waste Control & Recycling	Hauler - Collection	X	X	X	X	X
Pike's Refuse Service	Hauler - Collection	X	X	X	X	X
Republic Services	Hauler - Collection	X	X	X	X	X
Advanced Sanitation	Hauler - Collection	X	X	X	X	X
Archbold Refuse Service (ARS)	Transfer Station	X	X	X	X	X
Paulding						

Paulding County Program	Trailer - Public Drop Off	X	X	X	X	X
Werlor's Waste Control & Recycling	Hauler - Collection	X	X	X	X	X
Real Waste	Hauler - Collection	X	X	X	X	X
Republic Services	Hauler - Collection	X	X	X	X	X
Archbold Refuse Service (ARS)	Transfer Station	X	X	X	X	X
Porter's Sanitation	Hauler - Collection	X	X	X	X	X
Erie Recycling	Recycling Processor	X	X	X	X	X
Koharts	Metal Scrap Yard	X		X	X	
PC Workshop	Recycling Processor	X	X	X	X	X
Williams						
Williams County Program	Trailer - Public Drop Off	X	X	X	X	X
Werlor's Waste Control & Recycling	Hauler - Collection	X	X	X	X	X
Republic Services	Hauler - Collection	X	X	X	X	X
Archbold Refuse Service (ARS)	Transfer Station	X	X	X	X	X
Pike's Refuse Service	Hauler - Collection	X	X	X	X	X
Bryan City Recycling	Recycling Processor	X	X	X	X	X
Northwest Recycling	Metal Scrap Yard			X	X	

C. Demonstration of Meeting Other Requirements for Achieving Goal 1

Residential/Commercial Waste Reduction and Recycling Rate

The District provides adequate infrastructure throughout the entire planning period covered by the solid waste management plan and received at least 90% percent of the residential population in each county of the SWMD the opportunity to recycle.

The solid waste reduction and recycling rate for residential/commercial sector in 2017 was 31.8%, exceeding the State Goal of 25%. Projections to continue to achieve the State Goal are in Appendix K.

Rural drop-off trailer provide a minimum of six cubic yards of capacity and urban drop-offs provide a minimum of 10 cubic yards.

Industrial Waste Reduction and Recycling Rate

The District received a recycling rate of 66.98% in 2015, a 75.15% in 2016 and a 64.23% in 2017. The District concluded that the reduced percentage recorded in 2017 was due to minimal response or follow up from the 2017 ADR surveys. To amend this situation and achieve the State Goal of 66%, the District implemented the following changes/updates in 2018:

- ✓ The ADR Survey forms were modified for clarity of materials
- ✓ The new survey form was mailed and or emailed earlier than in prior years.
- ✓ The potential participants of the survey were doubled by updating business/industry listings with the local Chamber of Commerce and Economic Business Development offices per county.
- ✓ An employee was assigned to manage the distribution, reporting and continued success of the survey.

The District also sent out an Ohio Material Marketplace brochure with each survey to give all district residential/commercial/institutional/industrial sectors another opportunity to recycle with this program. The District received positive feedback on this information and also is a registered member.

The projected solid waste reduction and recycling rates for the Industrial Sector will exceed the State Goal of 66%. Charts are located in Appendix K.

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

1. Annual Rate of Waste Reduction

Table K-1: Residential/Commercial Solid Waste

Year	Population	Recycled	Disposed	Total Generated	Waste Reduction & Recycling Rate (%)	Per Capita Waste Reduction & Recycling Rate (ppd)
2017	136,113	51,838	103,921	155,759	33.28%	2.09
2022	134,215	70,152	121,172	191,324	36.67%	2.86
2023	133,589	70,167	126,694	196,861	35.64%	2.88
2024	132,969	70,183	132,468	202,651	34.63%	2.89
2025	132,349	70,198	138,505	208,703	33.64%	2.91
2026	131,807	70,214	144,817	215,031	32.65%	2.92
2027	131,265	70,229	151,417	221,646	31.69%	2.93
2028	130,723	70,229	158,318	228,547	30.73%	2.94
2029	130,181	70,229	165,533	235,762	29.79%	2.96
2030	129,639	70,229	173,077	243,306	28.86%	2.97
2031	129,269	70,229	180,965	251,194	27.96%	2.98
2032	128,899	70,229	189,212	259,441	27.07%	2.99
2033	128,529	70,229	197,835	268,064	26.20%	2.99
2034	128,159	70,229	206,851	277,080	25.35%	3.00
2035	127,770	70,229	216,278	286,507	24.51%	3.01
2036	127,755	70,229	226,135	296,364	23.70%	3.01
2037	127,721	70,229	236,441	306,670	22.90%	3.01

Population numbers were taken from Appendix C. Recycled numbers are waste projections from Recovery Projection on Table E-8 and Disposed is the total of Disposed Waste Projections in Table G-2.

The solid waste reduction and recycling rate for the residential/commercial sector shows the reference year exceeded the 25% recycling rate through 2034 and then decreases.

Table K-2: Industrial Solid Waste

Year	Waste Reduced and Recycled (tons)	Waste Disposed (tons)	Non-Recyclable Waste	Waste Generated (tons)	Waste Reduction and Recycling Rate (percent)
2017	535,528	315,037	24,742	825,823	64.85%
2022	646,484	587,953	41,958	1,192,479	54.21%
2023	646,484	654,917	45,967	1,255,435	51.49%
2024	646,484	729,509	50,359	1,325,634	48.77%
2025	646,484	812,596	55,170	1,403,909	46.05%
2026	646,484	905,145	60,442	1,491,187	43.35%
2027	646,484	1,008,236	66,217	1,588,503	40.70%
2028	646,484	1,123,069	72,544	1,697,008	38.10%
2029	646,484	1,250,980	79,476	1,817,988	35.56%
2030	646,484	1,393,459	87,070	1,952,873	33.10%
2031	646,484	1,552,166	95,389	2,103,261	30.74%
2032	646,484	1,728,949	104,504	2,270,929	28.47%
2033	646,484	1,925,866	114,489	2,457,861	26.30%
2034	646,484	2,145,211	125,429	2,666,266	24.25%
2035	646,484	2,389,538	137,414	2,898,609	22.30%
2036	646,484	2,661,693	150,543	3,157,633	20.47%
2037	646,484	2,964,844	164,928	3,446,401	18.76%

Table K-1 and K-2 do not have the same headers. Waste Reduced and Recycled (recycled header for R/C) is taken from Table F-7 Industrial Recovery Projections, Waste Disposed Tons from Table D-6 Waste Disposal Projections and Non-Recyclable Waste is taken from Table G-2 and is called Excluded Waste. Waste Generated (tons) is the total of Waste Reduced and Recycled + Waste Disposed + Non-Recyclable Waste.

Throughout this plan update it was noted that the District did not achieve the 66% recycling goal in the reference year, 2017. Changes were initiated to the survey data forms, industry lists, calling the industries and business and promoting the survey and explaining the importance of completing it. Although we are not quite at the 66%, we do expect the changes initiated will assist in making progress toward the State's Goals, even if the projections do not reflect this.

Table K-3: Total Solid Waste

Year	Waste Reduced and Recycled (tons)	Waste Disposed (tons)	Waste Generated (tons)	Waste Reduction and Recycling Rate (percent)
2017	587,366	394,216	981,582	59.84%
2022	716,636	667,167	1,383,803	51.79%
2023	716,651	735,645	1,452,296	49.35%
2024	716,667	811,618	1,528,284	46.89%
2025	716,682	895,930	1,612,612	44.44%
2026	716,698	989,521	1,706,218	42.01%
2027	716,713	1,093,436	1,810,149	39.59%
2028	716,713	1,208,842	1,925,555	37.22%
2029	716,713	1,337,037	2,053,750	34.90%
2030	716,713	1,479,466	2,196,179	32.63%
2031	716,713	1,637,741	2,354,454	30.44%
2032	716,713	1,813,657	2,530,370	28.32%
2033	716,713	2,027,655	2,744,368	26.12%
2034	716,713	2,245,917	2,962,630	24.19%
2035	716,713	2,488,565	3,205,278	22.36%
2036	646,484	2,511,149	3,157,633	20.47%
2037	646,484	2,799,917	3,446,401	18.76%

Waste Reduced and Recycled are R/C (Table K-1) Recycled number added to Ind. (Table K-2) Waste Reduce and Recycled Tons. Waste Disposed Tons = R/C (Table K-1) plus Industrial (Table K-2) Waste Disposed minus Industrial (Table K-2) Non Recycled Waste.

Waste Generated = Waste Reduced and Recycled plus Waste Disposed Tons. The Recycling Rate overall is for Industrial and Residential/Commercial combined.

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

This section discusses State Plan Goals 3 and 4 and the District’s strategies to satisfy the requirements of meeting each goal. The following summarizes each goal, as presented in Ohio EPA’s Plan Format v4.0.

GOAL 4: OUTREACH AND EDUCATION- OUTREACH PLAN AND GENERAL REQUIREMENTS	THE SWMD SHALL PROVIDE: EDUCATION – OUTREACH – MARKETING – TECHNICAL ASSISTANCE, REGARDING REDUCTION, RECYCLING, COMPOSTING, REUSE AND OTHER ALTERNATIVE WASTE MANAGEMENT METHODS TARGET AUDIENCES USING BEST PRACTICES
REDUCTION AND RECYCLING RATES	<ul style="list-style-type: none"> • WEBSITE • A COMPREHENSIVE RESOURCE LIST • AN INVENTORY OF AVAILABLE INFRASTRUCTURE • A SPEAKER OR PRESENTER

A. Minimum Required Programs

The State Plan requires all SWMD’s to provide at minimum the following four programs: (1) Web Site, (2) Comprehensive Resource Guide, (3) Infrastructure Inventory and a (4) Speaker/Presenter. The District met these requirements in the reference year.

(1) WEBSITE

The District maintains a website that contains general district information such as: the SWMD plan (will be updated during the Draft Plan Update process), ADR Summaries (added when percentages are completed), Public Records Policy (updated only if policy changes), HHW Resource Guide (updated annually or if significant change occurs), DEA Pharmaceuticals (updated only if a change occurs) and Contact Information (updated as needed).

The District’s website suggests that users select/click the individual courthouse picture which will link to the county’s individual recycling programs. Individual county websites

are also listed and each contain a schedule of drop-off trailers; locations, dates and times, other available programming, events, contact information, etc. The individual county websites are kept updated by the PMCC as needed.

NAME	START DATE	END DATE	GOALS
www.4cswd.com	2011	On-Going	Goals 3 & 4
www.defiance-county.com	On-Going	On-Going	Goals 3 & 4
www.fultoncountyoh.com	On-Going	On-Going	Goals 3 & 4
www.pauldingcountywmea.com	On-Going	On-Going	Goals 3 & 4
www.williamscountyhealth.org	On-Going	On-Going	Goals 3 & 4

(2) COMPREHENSIVE RESOURCE LIST

The District prepares and regularly updates and makes available several brochures, flyers and resource guides. The HHW Resource guide assists the public with recycling or safely disposing of specific materials such as clothing, fluorescent bulbs, plastic shopping bags, HHW, batteries and more. The HHW Resource guide is listed on the District website with a reference to contact the District office for further information. The Defiance and Williams county Website Resource Guide lists local businesses that will accept a variety of recyclable materials with a local resource. The HHW Resource guides are updated annually by contacting local businesses to stay current on the status of the recyclable materials. The District has been a strong promoter of the Ohio Material Marketplace recycling opportunity and distributes a flyer or brochure annual with the ADR Survey Form and annual review of District resource letters that are sent to local municipal authorities. Brochures such as Adopt-A-Highway, Recycling are intended to be used to provide referrals to interested parties that are looking alternate management options for specific wastes. A copy of each listed brochure, resource or flyer is in Documents.

NAME	START DATE	END DATE	GOALS
HHW Resource Guide	2018	On-Going	Goal 3 & 4
Defiance County Environmental Services Brochure	1990	On-Going	Goal 3 & 4
Defiance County Adopt-A-Highway Program	1990	On-Going	Goal 3 & 4
Defiance County Landfill Brochure	1990	On-Going	Goal 3 & 4

Fulton County Recycling Program Brochure	1990	On-Going	Goal 3 & 4
Paulding County Waste Management Education & Awareness Program Brochure	1990	On-Going	Goal 3 & 4
Williams County Recycling Resource Guide	2016	On-Going	Goal 3 & 4
Williams County Recycling Schedule Flyer	1990	On-Going	Goal 3 & 4
Ohio Materials Marketplace Flyer	2019	On-Going	Goal 3 & 4

(3) INFRASTRUCTURE INVENTORY

On the District’s website is a copy of the District’s Solid Waste Management Plan. The PMCC’s are responsible to know and have a thorough understanding of the infrastructure within their county. All changes to curbside, drop-off recycling, composting facilities, yard waste programs, and recycling centers per each county within the District, if applicable are also reported to the District office. The District office records the information for further communications with the Board of Directors and the Policy Committee. The Plan contains the following information for available infrastructure:

Solid Waste Management and Disposal Infrastructure:

1. Landfill Facilities – Defiance County Landfill and Williams County Landfill
2. Transfer Facilities – ARS and Fulton County Transfer Station
3. Scrap Tire Facilities – Defines where tires may be recycled or disposed: Henry County Landfill, Defiance County Landfill, Fulton County Transfer Station

Waste Reduction and Recycling Infrastructure:

1. Curbside Recycling Services – Noted within the District Plan
2. Drop-Off Recycling Locations – Schedule of dates, times and locations on each county website
3. Composting Facilities – Noted within the District Plan
4. Yard Waste Collection Programs – Noted within the District Plan. District office contacts villages annually to keep current of yard waste programs.
5. Recycling Centers –Noted within the District Plan.

Infrastructure

NAME	START DATE	END DATE	GOALS
------	------------	----------	-------

Inventory of Available Infrastructure (Detailed in SWMD Plan on District Website)	1989	On-Going	1, 3 & 4
--	------	----------	----------

(4) SPEAKER OR PRESENTER

The District Coordinator, the PMCC per county, District Commissioners and the Defiance Educational Specialist all are available for presentations or to speak regarding recycling, composting, landfills, water conservation and litter prevention. In addition to local schools, adult presentations have been given to the Senior Center, Kiwanis Club, Hicksville Library, Hicksville Beautification Committee and Rotary Clubs. Having a diverse group to be able to present or speak is a valid resource for the District.

NAME	START DATE	END DATE	GOALS
Speaker/Presenter	1989	On-Going	Goal 3 & 4

B. Outreach and Education – Outreach Plan

The following table presents the District’s existing education and outreach programs and the applicable target audience.

Existing Programs	Target-Residents	Target-Schools	Target-Industries	Target-Institutions/ Commercial Business	Target-Communities -Elected Officials
District Website	✓	✓	✓	✓	✓
Distributing Publications	✓	✓	✓	✓	✓
Presentations	✓	✓		✓	✓
Drop-Off Trailers	✓				
School Recycling		✓			
Office Recycling				✓	✓
Education & Outreach	✓	✓		✓	✓

The goal is to increase the amount of material diverted from disposal within the District by changing behavior. This will be measured by obtaining volume information for the programs and analyzing the data to determine growth. The District has adequate infrastructure and will focus on the programs listed above to achieve the Outreach Priority.

Outreach Priority – The District’s outreach priority is to implement social marketing tools to promote and communicate how to recycle properly, to create a larger audience for recycling, post updates and share/post when the outcome or behavior is not acceptable.


1. District Website

The District Website provides each target audiences with awareness education about programs, infrastructure, available locally for recycling and reducing waste. The website contains information about each county within the District and county programs, events, schedules and updates per county. The website contains information about participating in recycling programs so the focus of the website is not just on increasing awareness, materials are geared to changing behavior.

Expanding into Social Media will allow more ‘real time’ information being posted. The user should be able to go to the District website, click on the county of interest and determine where, what and how to recycle for that county. The user can follow us on Facebook and may see a post that shows a picture of trash at a recycling location with a message explaining that this is unacceptable, location, date, of the incident and a why this can’t continue. This will be a great tool to change behavior. On the Facebook site the following statistics were shared:

- Facebook users are **54% female and 46% male**.
- Of all the people on the internet, **83% of Women & 75% of Men** use Facebook.
- Average Facebook user has **155 “friends”**.
- Around seven-in-ten U.S. adults (69%) use Facebook.
- 62% of online seniors **aged 65+** are on Facebook and 72% are between **ages 50-64**.
- 88% of online users of **age 18-29** are on Facebook, 84% of those **30-49**.
- 82% of college graduates are on Facebook.

Strengths and Challenges – The District Website www.4cswd.com maintains a copy of the District Solid Waste Management Plan and other pertinent District information with pictures of county courthouses (per each county in the District) for the user to click to find

detailed information for that county. Adding Facebook  with a link established to the District Website and asking that users follow and like us, will allow more interaction and an opportunity to create followers for the District. Challenges may be the website name. The District is the Joint Solid Waste Management District of Defiance, Fulton, Paulding and Williams Counties. The District is a four county district, but not the only four county district in Ohio. Search engines are lax and if someone would type in Defiance Solid Waste, the return response is for Defiance website or the District website, however if Fulton Solid Waste is entered, it directs the user to Fulton County site or Fulton Transfer Station. Creating the Facebook access from the District website will eliminate some possible confusion. Knowing the amount of followers will also create data to evaluate, is Facebook reaching people? Was it worth the expense and effort? Another challenge is the 17% of people who may not utilize Facebook or the website.

2. Distributing Publications

The District is mostly rural and to serve these communities each county has a person (s) or department to utilize resources to develop and implement recycling programs that best meets their community needs. Each county also develops a recycling brochure with the applicable who, what, where and how to recycle requirements and other essential county information. All brochures and publications will be updated to reflect the District's webpage and Facebook link and a like/follow/share option. This should increase the participation. Brochures will also reflect the District name, emblem and contact which is the District Office.

The District determined that local municipality authorities should be aware of the District Resources and initiated in 2018 that the District office would submit a letter to those authorities at the beginning of each New Year. The letter will be updated to reflect that those municipalities could follow us on Facebook. This Resource letter also includes a copy of the OMM flyer.

Strengths and Challenges – The publications are updated regularly as needed for any changes or updates. The District office is also notified or updated and continues to be the centralized contact. Many county offices maintain a communication board or literature galley of informational brochures. This is a free outlet for distributing brochures and sharing the information in addition to county fairs, special events, and presentations. Reaching out to residents at events provides opportunities to reach segments of the population that might not otherwise be reached. Challenges will be to track how many brochures are distributed, how many more may be requested or needed to determine if an impact has been made. Reviewing to understand if the 'how to' recycle is being understood and followed.

3. Presentations

The District is fortunate that public speakers are in abundance for District information and provide District information to local Kiwanis, Eagles, Moose Lodge, Science Fairs, City Departments, etc. Most presentations on District recycling programs result in the distribution of brochures or other information. Noting that the District is now on Facebook will be incorporated into all presentations and publications that are being distributed.

The variety of speakers also denotes the variety of information being shared at the presentation. The Kiwanis requested a lunch time presentation to review what is being recycled within the county. A teacher requested a presentation on the origin of Earth Day and current environmental concerns. Senior centers want to know where does local recycling get processed and what does it cost. Presentations are given on the local landfills and the rules and regulations required to operate a landfill, the origin of the District and Solid Waste Management Plans and requirements, Litter Prevention and Adopt-A-Highway opportunities, Keep America Beautiful and the Great American Cleanup. A strength is our variety of the content of presentations.

Strengths and Challenges – The District Program Managers/County Coordinators are normally the presenters, however the District Coordinator and County Commissioners have also been asked to speak on District Resources. The PMCC's may present to a township board to gain approval to park a recycling trailer at a township location, or to a Senior Center group that would like more recycling information. Challenges would include having records of presentations. Who presented, where, what topic, what was handed out, quantities, etc. This could prove to be valuable information.

4. Drop-Off Recycling

Drop-off recycling trailers are the largest recycling program for the District and have the most resources dedicated to it. The PMCC's evaluate the quantities, locations, times, material, contamination, complaints, compliments, signs, every detail to assure this program is giving the community what they need and want and allow the program to meet the District's goals. Drop-Off schedules are on the county websites, publications and brochures. As noted all will be updated to reflect the Facebook link.

Facebook will be updated with recycling changes (location closed due to Holiday or weather), Problems will be posted such as: no early drop off and reasons for this, COVID updates, Contamination within the recycling, Dirty Recycling, etc. Positive comments will be posted as well such as: Location X had over 500# of cardboard recycled! Thank You location name! Good praise along with corrected behavior will initiate positive changes and updates. That is the goal.

Strengths and Challenges: Drop-Off recycling is accepted and used throughout the District. Consistency is appreciated and contributes to regulars utilizing a drop-off location. The PMCC's have developed a better process to track the commodities per recycling location and that data will assist with the evaluation of the program. Adding Facebook will allow important notices and changes to be posted and seen quickly for those following and the information can be shared as well. Challenges could be people not liking the corrected recycling procedure or pictures of trash that may have been theirs, or be the small percentage that does not utilize on line resources.

5. School Recycling

School recycling in the Draft Plan references Institutional recycling. This includes picking up recyclables at the local schools, assisting with other recycling programs such as Crayola Markers, caps for benches, obtaining containers for recycling and recycling guidance. The county programs are recycling in the school districts within their county and making an impact. The PMCC's also have begun to weigh and track the materials recycled for future evaluations.

School paper recycling or the school recycling program isn't the only program for the schools. Presentations are also given to teach and reach students in a variety of grades.

Close the Loop presentations define when recycling is collected and transformed into a new product and then put back into consumer circulation, the recycling loop has been closed. A

discard bottle can be broken down and processed back in to the same standard plastic bottle. This removes the need to extract valuable resources to make a completely new one. Closed-loop recycling goes beyond simply reusing resources and protecting the environment. It also enables high-quality material to remain in circulation and ensure that there is a demand for this material. Close the Loop presentations were given to over 400 students in Paulding County. The Paulding County Program provides annual presentations to local Day Care, Pre-School and Kindergarten on how to distinguish the difference between steel cans and aluminum cans by using magnetic wands and understanding land conservation by using an earth cookie. A variety of presentations on recycling and environmental programs is available and targets different ages and comprehension. Presentations such as Fred the Fish (water pollution), Vermicomposting, Water Conservation, Who Polluted the Water (bingo game), Components of the Earth (earth bracelet), What is Recycling?, Fishing for Litter Habits and Mining for Resources.

Although the focus has been on the youth, mainly Kindergarten, 2nd and 4th grades for presentations correlating with Earth Day activities or a science recycling chapter, expanding into junior high school and high schools has been a new focus. The youth are social media savvy, but the older students would be considered the experts and the ones who would go to social media to find an answer or a schedule before looking in a brochure. This is a group we hope to reach with adding social media such as Facebook. Letters are sent to schools annually outlining the recycling program and other services offered, this includes a link to the website and will include the new addition of Facebook.

Strengths and Challenges – The District has an outstanding association with the school districts through years of recycling that has been provided. Schools and teachers are aware of the availability of PMCC’s to assist with solid waste educational efforts to spread the message with solid waste management. Challenges include getting the presentations scheduled. Spring time, Earth Day is normally convenient with the curriculum, but also is a busy time for required testing.

Commercial/Institutional Sector

NAME	START DATE	END DATE	GOALS
School Recycling Program	1990	On-Going	1, 3 & 4
Office Recycling Program	1990	On-Going	1, 3 &4

6. Office Recycling

The District collects recycling from a variety of county facilities within the District and assists with the implementation of office recycling programs. Containers can be found beside vending machines for aluminum cans and beside desks for loose paper. Cardboard boxes are broken down and placed in a recycling pick up area. The District office recycling programs are normally collected weekly. Office recycling typically includes aluminum cans, loose paper, shredded paper, plastic bottles and cardboard. Special pickups within

this program have included old Law Books, dot matrix computer paper, carbonless paper and other obsolete materials. The offices understand the importance of recycling and utilize this program often. Facebook will be a useful tool for this program to post updates, schedule changes, clean up days, etc.

Strengths and Challenges – The Office Recycling program has been a staple program since the beginning of the District. Community officials understand the importance of recycling and encourage everyone to participate in office recycling practices. Posting positive pictures or comments regarding an office participating or collecting recycling, may promote a friendly competition between offices. Challenges have been assuring the materials have been sorted properly. Shredded paper, separate from loose paper and to assure the bags are securely tied so the paper does not become airborne.

7. Education and Outreach

The District had an internal goal expand school presentations other grades, adults and to use other formats. This would be become a fulltime job in itself and a position was created in cooperation with Defiance Soil & Water Conservation District to meet this goal. In 2017, Defiance Soil & Water Conservation District engaged over 37,971 individuals with conservation/recycling/environmental outreach. Of these 37,971 participants, over 5,600 were students who were reached in K-12 classroom presentations. Those students include local school districts, parochial schools and home-schools.

Educational programs include classroom as well as outdoor programs and camps. Topics include food webs, recycling, soils, vermicomposting, water quality, watershed modeling, wildlife and numerous other environmental interests. Poster contests, photo contests have been well received and acknowledged. Outdoor programs incorporate local nature centers and historical preservation village.

Early 5's/Kindergarten

Classroom presentations are given to students with emphasis on reducing, reusing and recycling, natural resources and litter prevention. Interacting to help this young group learn and understand these concepts by making an earth bracelet. In addition, activity books, stickers, recycling brochures and a recycling promotional item is distributed to each student. This component of the overall Outreach program was provided to 500 Early 5's/Kindergarten students through 28 presentations.

Second Grade

Vermicomposting is a means to reduce residential food waste being sent to the landfill. To demonstrate this process each classroom is provided a vermicomposting box, including worms to study and learn. Students gain a greater understanding of the different types of materials that can be composted as well as leaving about which non-composting materials can be recycled or reused. Students receive a brochure and activity book. This component of the overall Outreach Program was provided to 400 second graders.

Fourth Grade

Students are engaged to understand how long particular trash items might last in a landfill or within the environment to demonstrate consequences of not recycling. Emphasis will be on closing the loop and defining raw materials and resources. This component of the program reached 400 4th graders.

Outdoor Classroom Programs

The fifth grade conservation program has about 200 students participating while the sixth grade tour has 300. Stations are created with different topics such as recycling, litter prevention, water quality, wildlife, compost, etc. The students go to a station of interest, usually six of the dozen displayed, for a presentation and discussion of that material. Hands on materials are available making the presentation interactive and fun.

Conservation Camp Programs

Two recycling educational programs is conducted in conjunction with the Penney Nature Preserve and the YMCA Conservation Camp. The primary program is to build recycle rockets. Students will build and launch water/air pressure propelled rockets constructed from sanitized, re-used plastic pop bottles. This program emphasizes the ability to reuse an ordinary household item for a completely new and innovative use. This camp also initiates a little competition to see who has the rocket that goes the farthest. Over 120 students are involved with the camps and 25 adults.

Additional Outreach Opportunities

The Educational Specialist utilizes evaluation forms for feedback on all presentations and tracks the amount of students, adults, presentation type, and publications distributed. The Educational Specialist will expand on contests and information by utilizing social media.

Strengths and Challenges – The District achieved their intent to expand on regular classroom presentations to other grades with new formats and feels the Education Specialist will influence the behavior of the participants. The District is hoping to utilize this specialist to guide, direct or conduct presentations throughout the four counties and utilize social media. Challenges – The cost and time of the Educational Specialist to reach the needs of the District.

C. Documents

- District HHW Resource Guide
- Defiance County Program Brochure
- Defiance County Adopt-A-Highway Brochure
- Defiance County HHW Resource Guide
- Fulton County Program Brochure
- Fulton County Transfer Station Information

- Fulton County Triangular Processing Information
- Fulton County Glass Suspension Notice
- Paulding County Program Brochure
- Paulding County Recycling Opportunities
- Williams County Program Flyer
- Williams County Resource Guide

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
Defiance County Landfill	Defiance - Ohio	56.8
Evergreen R.D.F.	Wood - Ohio	42
Hancock County Landfill	Hancock - Ohio	31.9
Wood County Landfill	Wood - Ohio	6.6
Williams County Landfill	Williams - Ohio	174.5
National Serv-All Landfill	Fort Wayne, IN	27.7
Hoosier Landfill 2	Claypool, IN	23.72
Cherokee Run Landfill	Bellefontaine, OH	24.1

This information was taken from the Ohio EPA – Ohio Solid Waste Facility Data Report. The District will have access to landfills for many decades.

B. Access to Captive Landfill Facilities

Table M-2: Remaining Operating Life of Privately-Available Landfills

Facility	Location	Years of Remaining Capacity
Lafarge North America	Paulding , OH	761
GM Castings Operation	Defiance, OH	29.1

Lafarge North America is a permitted Class III Residual Solid Waste Landfill and the GM Castings Operation is a permitted Solid Waste Facility.

C. Incinerators and Energy Recovery Facilities None

APPENDIX O: FINANCIAL PLAN

A. Funding Resources and Revenue Generated

Disposal Fee – A fee levied by the Solid Waste District pursuant to division (B) of section 3734.57 of the Ohio Revised Code. This fee is levied on solid waste disposed of at any licensed or permitted solid waste disposal, transfer, resource and recovery facility within the District.

In-District fee is \$1.00 per ton – Out-of-District fee is \$2.00 per ton – Out-of-State is \$1.00 per ton

A \$1.00 per ton District Fee on waste generated within the District and disposed of at a licensed or permitted solid waste disposal, transfer, resource and recovery facility within the District.

A \$2.00 per ton District Fee on waste generated out of the District and disposed of into the district.

A \$1.00 per ton District Fee on waste generated out of state and disposed of into the district.

A \$1.00 per ton Host Fee on out of state waste disposed of at the Defiance County Landfill and the Williams County Landfill.

Information used for all charts in Appendix O was provided by the Solid Waste District Fee Tonnages per District landfills and transfer stations.

1. Disposal Fees

Table O-1 Disposal Fee Schedule and Revenue

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	
2013	\$1	\$2	\$1	\$111,105	\$60,385	\$20,055	\$191,545
2014	\$1	\$2	\$1	\$121,015	\$62,789	\$31,520	\$215,325
2015	\$1	\$2	\$1	\$125,799	\$81,420	\$29,406	\$236,625
2016	\$1	\$2	\$1	\$133,075	\$68,081	\$28,667	\$229,823
2017	\$1	\$2	\$1	\$142,463	\$66,256	\$33,744	\$242,463
2018	\$1	\$2	\$1	\$139,402	\$65,097	\$30,999	\$235,498
2019	\$1	\$2	\$1	\$142,226	\$75,644	\$28,878	\$246,747
2020	\$1	\$2	\$1	\$143,648	\$76,400	\$29,166	\$249,214
2021	\$1	\$2	\$1	\$145,084	\$77,164	\$29,458	\$251,707
2022	\$1	\$2	\$1	\$146,535	\$77,936	\$29,753	\$254,224
2023	\$1	\$2	\$1	\$148,000	\$78,715	\$30,050	\$256,766
2024	\$1	\$2	\$1	\$149,480	\$79,502	\$30,351	\$259,334
2025	\$1	\$2	\$1	\$150,975	\$80,297	\$30,654	\$261,927
2026	\$1	\$2	\$1	\$152,485	\$81,100	\$30,961	\$264,546
2027	\$1	\$2	\$1	\$154,010	\$81,911	\$31,270	\$267,192
2028	\$1	\$2	\$1	\$155,550	\$82,731	\$31,583	\$269,864
2029	\$1	\$2	\$1	\$157,106	\$83,558	\$31,899	\$272,562
2030	\$1	\$2	\$1	\$158,677	\$84,393	\$32,218	\$275,288
2031	\$1	\$2	\$1	\$160,263	\$85,237	\$32,540	\$278,041
2032	\$1	\$2	\$1	\$161,866	\$86,090	\$32,865	\$280,821
2033	\$1	\$2	\$1	\$163,485	\$86,951	\$33,194	\$283,630
2034	\$1	\$2	\$1	\$165,120	\$87,820	\$33,526	\$286,466
2035	\$1	\$2	\$1	\$166,771	\$88,698	\$33,861	\$289,331
2036	\$1	\$2	\$1	\$168,438	\$89,585	\$34,200	\$292,224
2037	\$1	\$2	\$1	\$170,123	\$90,481	\$34,542	\$295,146

Disposal fees in accordance with ORC section 3734.57(B). The District does not foresee any problems with finances that would require a change to the disposal fees during the planning period, but reserves the right if necessary.

The reference year is in bold and the figures for 2018 and 2019 are factual. The Defiance County Landfill tonnages are currently in an upward trend and Williams County Landfill continues to increase out of state waste. A conservative 1% increase has been projected.

6. *Designation Fees*

Table O-3 reflects what we refer to as a CONTRACT FEE on designated waste. A contract fee is collected and remitted to the District by any designated solid waste disposal, transfer, resource and recovery facilities that have a signed agreement with the District to pay a fee (\$2.00 per ton) when accepting MSW waste generated from within the district. This fee was applied in October, 2014 to assure funding for the District’s programming thru the planning period of the 2015 plan approval. Details of the designation process are in Appendix P.

Table O-3 Designation Fee Schedule and Revenue

Year	Contract Fee for designated facilities Schedule (\$ per ton)	Total Contract Fee Revenue (\$)
2013	\$0.00	\$0
2014	\$2.00	\$48,733
2015	\$2.00	\$254,766
2016	\$2.00	\$271,145
2017	\$2.00	\$274,318
2018	\$2.00	\$271,264
2019	\$2.00	\$277,433
2020	\$2.00	\$280,207
2021	\$2.00	\$283,009
2022	\$2.00	\$285,839
2023	\$2.00	\$288,698
2024	\$2.00	\$291,585
2025	\$2.00	\$294,500
2026	\$2.00	\$297,445
2027	\$2.00	\$300,420
2028	\$2.00	\$303,424
2029	\$2.00	\$306,458
2030	\$2.00	\$309,523
2031	\$2.00	\$312,618
2032	\$2.00	\$315,744
2033	\$2.00	\$318,902
2034	\$2.00	\$322,091
2035	\$2.00	\$325,312
2036	\$2.00	\$328,565
2037	\$2.00	\$331,851

7. Other Sources of District Revenue

The District also receives interest on the monies held in the District's bank account and from the Host Fee agreement between the District and the Defiance and Williams County Landfills on out of state waste.

Interest is applied annually and is based on prior year balances and the current blended interest rate. Interest rate for 2017 was .66% based on average balance of \$418,042.05 and for 2018 was 1.4897% based on average balance of \$530,870.62. The projection for interest is an average of 2013 through the reference year.

The District has a Host Fee Agreement with the two in-District Landfills. The District collects an additional fee of \$1.00 per ton on each ton of out of state waste disposed at the Defiance County Landfill and the Williams County Landfill. This agreement is for a term of five (5) years and was signed on January 1, 2016 and will expire January 1, 2021. A copy of the agreement is in Appendix O. The projection for the Host Fee is a conservative 1%.

The District agrees to NOT do the following while the Host Fee Agreement is in effect:

1. Increase the amount of District Disposal Fees levied by the District pursuant to division (B) of section 3734.57 of the ORC above the amounts listed in A. Funding Resources and Revenue Generated in Appendix O.
2. Establish and levy pursuant to section 3734.573 of the ORC, generation fees on solid waste generated within the District, unless there is a corresponding reduction in the amount of disposal fees levied by the District pursuant to section 3734.57(B) of the Ohio Revised Code.
3. Adopt rules pursuant to section 343.01(G) 1 through 4 that will adversely affect the operation, maintenance or use of the landfills, or implement a program providing the inspection of landfill operations by officials or representatives of the District except that this limitation shall not preclude the District from taking any regulatory action that the District determines to be necessary to address a situation involving a threat to human health or the environment.

Table O-5: Other Sources of Revenue

Year	Interest	Host Fee	Total Other Revenue
2013	\$210	\$20,055	\$20,264
2014	\$980	\$31,520	\$32,501
2015	\$1,703	\$29,406	\$31,109
2016	\$1,213	\$31,148	\$32,361
2017	\$2,789	\$31,262	\$34,051
2018	\$7,908	\$30,999	\$38,907
2019	\$8,640	\$28,878	\$37,517
2020	\$1,379	\$28,879	\$30,258
2021	\$1,379	\$28,880	\$30,259
2022	\$1,379	\$28,882	\$30,261
2023	\$1,379	\$28,883	\$30,262
2024	\$1,379	\$28,885	\$30,264
2025	\$1,379	\$28,886	\$30,265
2026	\$1,379	\$28,888	\$30,267
2027	\$1,379	\$28,889	\$30,268
2028	\$1,379	\$28,891	\$30,270
2029	\$1,379	\$28,892	\$30,271
2030	\$1,379	\$28,893	\$30,272
2031	\$1,379	\$28,895	\$30,274
2032	\$1,379	\$28,896	\$30,275
2033	\$1,379	\$28,898	\$30,277
2034	\$1,379	\$28,899	\$30,278
2035	\$1,379	\$28,901	\$30,280
2036	\$1,379	\$28,902	\$30,281
2037	\$1,379	\$28,904	\$30,283

The interest rates for 2018 and 2019 (actual data) was not factored into the projections.

4. Summary of District Revenues

The total revenue for the District includes: Disposal Fees from waste disposed at the Defiance County and Williams County landfills. Contract Fees from waste generated within the district but taken to a designated facility, Host Fees from out of state waste received at the two district landfills and interest earned on the balance of the district bank account.

Table O-6: Total Revenue

Year	Disposal Fees	Generation Fees	Designation Fees	Other Revenue	Total Revenue
2013	\$191,545	\$0	\$0	\$20,264	\$211,810
2014	\$215,325	\$0	\$48,733	\$32,501	\$296,559
2015	\$236,625	\$0	\$254,766	\$31,109	\$522,500
2016	\$229,823	\$0	\$271,145	\$32,361	\$533,328
2017	\$242,463	\$0	\$274,318	\$34,051	\$550,831
2018	\$235,498	\$0	\$271,264	\$38,907	\$545,669
2019	\$246,747	\$0	\$277,433	\$37,517	\$561,697
2020	\$249,214	\$0	\$280,207	\$30,258	\$559,679
2021	\$251,707	\$0	\$283,009	\$30,259	\$564,975
2022	\$254,224	\$0	\$285,839	\$30,261	\$570,324
2023	\$256,766	\$0	\$288,698	\$30,262	\$575,726
2024	\$259,334	\$0	\$291,585	\$30,264	\$581,182
2025	\$261,927	\$0	\$294,500	\$30,265	\$586,693
2026	\$264,546	\$0	\$297,445	\$30,267	\$592,258
2027	\$267,192	\$0	\$300,420	\$30,268	\$597,880
2028	\$269,864	\$0	\$303,424	\$30,270	\$603,557
2029	\$272,562	\$0	\$306,458	\$30,271	\$609,292
2030	\$275,288	\$0	\$309,523	\$30,272	\$615,083
2031	\$278,041	\$0	\$312,618	\$30,274	\$620,933
2032	\$280,821	\$0	\$315,744	\$30,275	\$626,841
2033	\$283,630	\$0	\$318,902	\$30,277	\$632,808
2034	\$286,466	\$0	\$322,091	\$30,278	\$638,835
2035	\$289,331	\$0	\$325,312	\$30,280	\$644,922
2036	\$292,224	\$0	\$328,565	\$30,281	\$651,070
2037	\$295,146	\$0	\$331,851	\$30,283	\$657,279

B. Cost of Implementing Plan

The District budgets \$400,000 annually to implement the programs outlined within this plan. Each county in the District receives \$100,000 to implement their county programs to meet the District's goals and objectives. Grant funding may be obtained to supplement programming expenses. The District office incurs office related and personnel expenses for meetings, notices, etc. Expenses during a plan re-write timeframe and an audit year is expected and is projected to increase. Overall the District spends on average, \$420,000 to \$440,000 to operate the District.

1. Expenses

Table O-7: Expenses Reference Year thru 2027

Line #	Category/Program	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1	1. Plan Monitoring/Prep.	\$419	\$203	\$18,843	\$7,158	\$20,000	\$10,000	\$1,000	\$1,000	\$1,000	\$5,000	\$20,000
1.a	a. Plan Preparation	\$419	\$203	\$18,843	\$7,158	\$20,000	\$10,000	\$1,000	\$1,000	\$1,000	\$5,000	\$20,000
1.b	b. Plan Monitoring											
1.c	c. Other											
2	2. Plan Implementation	\$417,618	\$422,536	\$524,424	\$565,159	\$570,811	\$576,519	\$582,284	\$588,107	\$593,988	\$599,928	\$605,927
2.a	a. District Administration	\$17,618	\$22,536	\$134,388	\$182,514	\$184,339	\$186,183	\$188,044	\$189,925	\$191,824	\$193,742	\$195,680
2.a.1	Personnel	\$3,060	\$10,394	\$66,574	\$111,045	\$112,155	\$113,277	\$114,410	\$115,554	\$116,709	\$117,877	\$119,055
2.a.2	Office Overhead	\$1,351	\$11,459	\$64,777	\$65,527	\$66,182	\$66,844	\$67,513	\$68,188	\$68,870	\$69,558	\$70,254
2.a.3	Other	\$907	\$684	\$3,037	\$5,942	\$6,001	\$6,061	\$6,122	\$6,183	\$6,245	\$6,308	\$6,371
2.b	b. Facility Operation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.b.1	MRF/Recycling Center											
2.b.2	Compost											
2.b.3	Transfer											
2.b.4	Special Waste											
2.c	c. Landfill Closure/Post-Closure											
2.d	d. Recycling Collection	\$0	\$0	\$165,410	\$279,053	\$281,844	\$284,662	\$287,509	\$290,384	\$293,288	\$296,220	\$299,183
2.d.1	Curbside											
2.d.2	Drop-off			\$93,805	\$184,158	\$186,000	\$187,860	\$189,738	\$191,636	\$193,552	\$195,487	\$197,442
2.d.3	Combined Curbside/Drop-off				\$0							
2.d.4	Multi-family			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.d.5	Business/Institutional			\$71,605	\$94,895	\$95,844	\$96,802	\$97,770	\$98,748	\$99,736	\$100,733	\$101,740
2.d.6	Other											
2.e	e. Special Collections	\$0	\$0	\$27,254	\$10,073	\$10,174	\$10,275	\$10,378	\$10,482	\$10,587	\$10,693	\$10,800
2.e.1	Tire Collection			\$6,816	\$420	\$424	\$428	\$433	\$437	\$441	\$446	\$450
2.e.2	HHW Collection			\$2,507	\$571	\$577	\$582	\$588	\$594	\$600	\$606	\$612
2.e.3	Electronics Collection			\$11,587	\$3,372	\$3,406	\$3,440	\$3,474	\$3,509	\$3,544	\$3,579	\$3,615
2.e.4	Appliance Collection			\$51	\$663	\$670	\$676	\$683	\$690	\$697	\$704	\$711
2.e.5	Other Collection Drives			\$6,293	\$5,047	\$5,097	\$5,148	\$5,200	\$5,252	\$5,304	\$5,357	\$5,411

2.f	f. Yard Waste/Other Organics			\$619	\$578	\$584	\$590	\$596	\$601	\$607	\$614	\$620
2.g	g. Education/Awareness	\$0	\$0	\$59,918	\$83,898	\$84,737	\$85,584	\$86,440	\$87,305	\$88,178	\$89,059	\$89,950
2.g.1	Education Staff			\$51,409	\$76,698	\$77,465	\$78,240	\$79,022	\$79,812	\$80,610	\$81,416	\$82,231
2.g.2	Advertisement/Promotion			\$8,341	\$7,200	\$7,272	\$7,345	\$7,418	\$7,492	\$7,567	\$7,643	\$7,719
2.g.3	Other			\$169	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.h	h. Recycling Market Development	\$0	\$0	\$125,291	\$814	\$822	\$830	\$839	\$847	\$856	\$864	\$873
2.h.1	General Market Development Activities			\$291	\$814	\$822	\$830	\$839	\$847	\$856	\$864	\$873
2.h.2	ODNR pass-through grant			\$125,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.i	i. Service Contracts											
2.j	j. Feasibility Studies											
2.k	k. Waste Assessments/Audits											
2.l	l. Dump Cleanup			\$85	\$420	\$424	\$428	\$433	\$437	\$441	\$446	\$450
2.m	m. Litter Collection/Education			\$11,459	\$7,809	\$7,887	\$7,966	\$8,046	\$8,126	\$8,207	\$8,289	\$8,372
2.n	n. Emergency Debris Management											
2.o	o. Loan Payment											
2.p	p. Other	\$400,000	\$400,000									
Total Expenses		\$418,037	\$422,739	\$543,267	\$572,317	\$590,811	\$586,519	\$583,284	\$589,107	\$594,988	\$604,928	\$625,927

Health Department Enforcement, Well Testing, Out-of-State Waste Inspections, Open Dump Litter Law Enforcement, Health Department Training, Municipal/Township Assistance and Compensation to an affected Community were hidden categories to be able to size the spreadsheet. These categories did not have any expenses historically or projected.

2017 and 2018 reflect the lump sum of \$400,000 in the 'other' column. The \$400,000 expenditure is the \$100,000 distributed to each county to implement their county programming. The other expenses listed reflect the District Office costs.

Table O-7: Expenses 2028 through 2037, End of Planning Period

Line #	Category/Program	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
1	1. Plan Monitoring/Prep.	\$22,000	\$20,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$20,000	\$22,000	\$20,000
1.a	a. Plan Preparation	\$22,000	\$20,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$20,000	\$22,000	\$20,000
1.b	b. Plan Monitoring										
1.c	c. Other										
2	2. Plan Implementation	\$611,986	\$618,106	\$618,105	\$618,105	\$618,105	\$618,105	\$617,215	\$617,215	\$618,105	\$618,105
2.a	a. District Administration	\$197,637	\$199,613	\$199,613	\$199,613	\$199,613	\$199,613	\$199,613	\$199,613	\$199,613	\$199,613
2.a.1	Personnel	\$120,246	\$121,448	\$121,448	\$121,448	\$121,448	\$121,448	\$121,448	\$121,448	\$121,448	\$121,448
2.a.2	Office Overhead	\$70,956	\$71,666	\$71,666	\$71,666	\$71,666	\$71,666	\$71,666	\$71,666	\$71,666	\$71,666
2.a.3	Other	\$6,434	\$6,499	\$6,499	\$6,499	\$6,499	\$6,499	\$6,499	\$6,499	\$6,499	\$6,499
2.b	b. Facility Operation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.b.1	MRF/Recycling Center										
2.b.2	Compost										
2.b.3	Transfer										
2.b.4	Special Waste										
2.c	c. Landfill Closure/Post-Closure										
2.d	d. Recycling Collection	\$302,174	\$305,196	\$305,196	\$305,196	\$305,196	\$305,196	\$305,196	\$305,196	\$305,196	\$305,196
2.d.1	Curbside										
2.d.2	Drop-off	\$199,417	\$201,411	\$201,411	\$201,411	\$201,411	\$201,411	\$201,411	\$201,411	\$201,411	\$201,411
2.d.3	Combined Curbside/Drop-off										
2.d.4	Multi-family	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.d.5	Business/Institutional	\$102,758	\$103,785	\$103,785	\$103,785	\$103,785	\$103,785	\$103,785	\$103,785	\$103,785	\$103,785
2.d.6	Other										
2.e	e. Special Collections	\$10,908	\$11,017	\$11,016	\$11,016	\$11,016	\$11,016	\$11,016	\$11,016	\$11,016	\$11,016
2.e.1	Tire Collection	\$455	\$459	\$459	\$459	\$459	\$459	\$459	\$459	\$459	\$459
2.e.2	HW Collection	\$618	\$624	\$624	\$624	\$624	\$624	\$624	\$624	\$624	\$624
2.e.3	Electronics Collection	\$3,651	\$3,688	\$3,688	\$3,688	\$3,688	\$3,688	\$3,688	\$3,688	\$3,688	\$3,688
2.e.4	Appliance Collection	\$718	\$725	\$725	\$725	\$725	\$725	\$725	\$725	\$725	\$725
2.e.5	Other Collection Drives	\$5,465	\$5,520	\$5,520	\$5,520	\$5,520	\$5,520	\$5,520	\$5,520	\$5,520	\$5,520

2.f	f. Yard Waste/Other Organics	\$626	\$632	\$632	\$632	\$632	\$632	\$632	\$632	\$632	\$632
2.g	g. Education/Awareness	\$90,850	\$91,758	\$91,758	\$91,758	\$91,758	\$91,758	\$91,758	\$91,758	\$91,758	\$91,758
2.g.1	Education Staff	\$83,053	\$83,883	\$83,883	\$83,883	\$83,883	\$83,883	\$83,883	\$83,883	\$83,883	\$83,883
2.g.2	Advertisement/Promotion	\$7,797	\$7,875	\$7,875	\$7,875	\$7,875	\$7,875	\$7,875	\$7,875	\$7,875	\$7,875
2.g.3	Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.h	h. Recycling Market Development	\$881	\$890	\$890	\$890	\$890	\$890	\$890	\$0	\$0	\$890
2.h.1	General Market Development Activities	\$881	\$890	\$890	\$890	\$890	\$890	\$890	\$890	\$890	\$890
2.h.2	ODNR pass-through grant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.i	i. Service Contracts										
2.j	j. Feasibility Studies										
2.k	k. Waste Assessments/Audits										
2.l	l. Dump Cleanup	\$455	\$459	\$459	\$459	\$459	\$459	\$459	\$459	\$459	\$459
2.m	m. Litter Collection/Education	\$8,456	\$8,541	\$8,541	\$8,541	\$8,541	\$8,541	\$8,541	\$8,541	\$8,541	\$8,541
2.n	n. Emergency Debris Management										
2.o	o. Loan Payment										
2.p	p. Other										
	Total Expenses	\$633,986	\$638,106	\$619,105	\$619,105	\$619,105	\$619,105	\$618,215	\$637,215	\$640,105	\$638,105

Solid Waste Management Districts are required by law to submit quarterly fee reports on the collection and expenditures of SWMD funds (see also ORC Section 3734.575). These reports have been standardized to make the information provided by individual SWMD’s comparable and accurate.

The District has standardized the PMCC expense report to duplicate the fee report. The PMCC will estimate their expenses per the categories listed to give an indication of the monies spent per county programs. Recycling drop-off programs is the largest part of District programming and reflects the biggest expense, followed by office and school recycling programs and education and awareness. The PMCC will also continue to report to the Board of Directors all expenses and any carry-over funds per year.

2. Explanation of Expenses

1. Plan Monitoring
 - 1a. Plan Preparation – Includes expenses for a plan re-write, PMCC’s time, consultants, etc.
 - 1b. Plan Monitoring – Includes the costs associated with the annual Policy Committee Plan review and the preparation of the Annual District Report.
 - 1c. Other – Plan expenses not represented by preparation or monitoring and should have an explanation.

2. Plan Implementation
 - 2.a. District Administration
 - 2.a.1 Personnel – Salary plus benefits of District employees which is spent on implementation of the plan and other related expenses. PMCC will estimate personnel expenses and place those expenses within the category that the personnel time is being utilized.
 - 2.a.2 Office Overhead – Includes supplies, software, hardware, meeting expenses, subscriptions, liability insurance, telephone, postage, travel, printing, displays, advertising done by the District (public notices, District legal notices), audits, payments to counties for their administration (commissioners, auditor, treasurer). PMCC will estimate office expenses and place those expenses within the category the office items are needed.
 - 2.a.3 Other – Expenses for District administration that are not represented by Personnel and Office Overhead and should have an explanation.
 - 2.b. Facility Operation – The District does not own or operate anything listed under 2.b or 2.c. Expenses are not applicable.
 - 2.d. Recycling Collection
 - 2.d.1 Curbside – Non-subscription curbside is normally a contract with municipalities and communities. Expenses applicable would be minimal if not non-existent.
 - 2.d.2 Drop-Off – PMCC will estimate drop-off trailer expenses such as public or private contracts for trailers/containers, management (labor) of the trailers, maintenance, advertising, etc.
 - 2.d.3 Combined Curbside/Drop-Off – The PMCC are able to separate these expenses and would not use this category.
 - 2.d.4 Multi-Family – The PMCC do not have any applicable expenses for this category at this time.
 - 2d.5. Business/Institutional – The PMCC will track expenses related to government recycling programs (government facilities) and school recycling pickup.
 - 2.d.6. Other – Expenses will be recorded for other collection programs not listed as a special collection in 2.e. and with an explanation.

- 2.e. Special Collections
 - 2.e.1. Tire Collection – The PMCC will track expenses related to a tire collection event including labor, disposal fees, containers, ads and other related tire event expenses.
 - 2.e.2. HHW Collection – The PMCC will track expenses related to an event or program including labor, fee’s and supplies.
 - 2.e.3. Electronics Collection – The PMCC will track and record expenses resulting from the collection, transportation, labor, fees and ads associated with an e-waste event.
 - 2.e.4. Appliance Collection – The PMCC will track and record expenses resulting from appliance collection.
 - 2.e.5. Other Collection Drives – The PMCC will report all direct expenses associated with other materials collection drives such as Christmas Trees, Christmas Lights, Pharmaceuticals, etc.
- 2.f. Yard Waste/Other Organics – The District provides information regarding yard waste management and would record any expenses if applicable.
- 2.g. Education/Awareness
 - 2.g.1 Education Staff – The PMCC will report personnel hours or contract amounts that perform education, awareness and outreach functions. Contracts will be defined as public or private on the expense form.
 - 2.g.2 Advertisement/Promotion - The PMCC will report all costs incurred to implement marketing campaigns, advertisement, education materials and promotional items, seminars, and awards.
 - 2.g.3 Other – This will include any expenses for education/awareness that are not represented by other items within Education/Awareness.
- 2.h. Recycling Market Development
 - 2.h.1 General Market Development Activities – The District Coordinator’s office will report any expenses related to government sponsored grant applicants.
 - 2.h.2 Ohio EPA pass-through grant – The District Coordinator’s office will expense the fifty percent upfront payment and the final payout to grant applicant. Multiple grants will be expensed the same.
- 2.i. Service Contracts – The District does not own any facilities and will not have any expenses in this category.
- 2.j. Feasibility Studies – The District does not have any applicable expenses for this category at this time.
- 2.k. Waste Assessments/Audits - The District does not have any applicable expenses for this category at this time.
- 2.l. Dump Cleanup – The PMCC will expense all direct costs incurred to clean up public and private lands.
- 2.m. Litter Collection/Education – PMCC will expense costs for litter collection events, litter prevention education, supplies, advertisement, and Adopt-A-Highway.
- 2.n. Emergency Debris Management – The District will report any expenses regarding a local and/or county emergency if applicable.

2.o Loan Payment - The District does not have any loans and does not foresee this expense in the future.

2.p Other – The District will report all expenditures for plan implementation which are not represented in other categories.

3 – 9: Health Department Enforcement, Well Testing, Out-of-State Waste Inspections, Open Dump Litter Law Enforcement, Health Department Training, Municipal/Township Assistance and Compensation to an affected Community were hidden categories to be able to size the spreadsheet. These categories did not have any expenses historically or projected.

3. Budget Revenue and Expenses Projections

Table O-8: Budget Summary

	Revenue	Expenses	Annual Surplus/Deficit (\$)	Balance (\$)
2012			Ending Balance	\$413,087
2013	\$211,810	\$329,228	-\$117,418	\$295,669
2014	\$296,559	\$308,748	-\$12,190	\$283,479
2015	\$522,500	\$476,655	\$45,845	\$329,324
2016	\$533,328	\$422,598	\$110,730	\$440,054
2017	\$550,831	\$418,037	\$132,794	\$572,848
2018	\$545,669	\$422,739	\$122,930	\$695,778
2019	\$561,697	\$543,267	\$18,430	\$714,209
2020	\$559,679	\$572,317	-\$12,638	\$701,571
2021	\$564,975	\$590,811	-\$25,836	\$675,735
2022	\$570,324	\$586,519	-\$16,195	\$659,540
2023	\$575,726	\$583,284	-\$7,558	\$651,982
2024	\$581,182	\$589,107	-\$7,925	\$644,057
2025	\$586,693	\$594,988	-\$8,295	\$635,762
2026	\$592,258	\$604,928	-\$12,669	\$623,093
2027	\$597,880	\$625,927	-\$28,047	\$595,046
2028	\$603,557	\$633,986	-\$30,429	\$564,617
2029	\$609,292	\$638,106	-\$28,814	\$535,802
2030	\$615,083	\$619,105	-\$4,022	\$531,781
2031	\$620,933	\$619,105	\$1,828	\$533,609
2032	\$626,841	\$619,105	\$7,736	\$541,345
2033	\$632,808	\$619,105	\$13,703	\$555,048
2034	\$638,835	\$618,215	\$20,620	\$575,668
2035	\$644,922	\$637,215	\$7,707	\$583,375
2036	\$651,070	\$640,105	\$10,965	\$594,340
2037	\$657,279	\$638,105	\$19,174	\$613,514

In 2019 the District sponsored a local business who received a Scrap Tire Grant in the amount of \$300,000. The District received half of this allotment \$150,000 and is expected to receive the remaining \$150,000 in 2020, when the grant is closed. The District also accepted and sub-contracted with the EPA to manage a 2017 Market Development Grant which was transferred into our District. The remaining eligible funding for this grant was \$125,000 and was disbursed in 2019. Grant monies are considered pass-through transactions and 'appear' to increase the expense projection. This is reflected as a deficit for 2019 and 2020, but in actuality does not affect the budget.

C. Documents

- PMCC Fee Expense Report Form
- PMCC Fiscal Report Form
- Host Community Agreement

APPENDIX P: DESIGNATION

A. Statement Authorizing/Precluding Designation

The Board of Directors is authorized under division E (2)(b) or (c) of section 3734.53 of the Revised Code to be included in the initial solid waste management plan of the District approved under section 3734.55 of the Revised Code, the provision required under division E (1) of section 3734.53 of the Revised Code to be included in the initial or an amended solid waste management plan of the District approved under section 3734.521 or 3734.56 of the Revised Code, or an amendment to the plan or amended plan adopted and ratified under division (F) of section 3734.56 of the Revised Code, **explicitly authorizes the Board of Directors of the Joint Solid Waste Management District of Defiance, Fulton, Paulding and Williams Counties to designate solid waste facilities and recycling activities pursuant to this section.**

The Board of Directors of the District at any time after the approval of the initial or amended plan or the amendment to the plan and in accordance with this section may designate solid waste disposal, transfer or resource recovery facilities or recycling activities that are owned by persons, or that are owned by a municipal corporation, county, county or joint solid waste management district, township or township waste disposal district created under section 505.28 of the Revised Code for which no debt has been issued or is outstanding under Chapters 133,343, or 6123 of the Revised Code where solid wastes generated within or transported into the district shall be taken for disposal, transfer, resource recovery or recycling.

The Board of Directors may modify or add to the list of designated transfer, disposal, recycling or resource recovery facilities authorized to receive solid waste generated within the District and may adopt local District rules for administration and enforcement of such designations.

B. Designated Facilities

Table P-1: Designated Facilities

Facility Name	County	State	Facility Type	Year Designated
American Landfill	Warren	OH	Landfill	2019
Celina Sanitary Landfill	Mercer	OH	Landfill	2019
Cherokee Run Landfill	Logan	OH	Landfill	2019
County Environmental Landfill of Wyandot	Wyandot	OH	Landfill	2019
Crawford County Landfill	Crawford	OH	Landfill	2020
Defiance County Landfill	Defiance	OH	Landfill	2019
Evergreen Recycling & Disposal	Wood	OH	Landfill	2019
Hancock County Sanitary Landfill	Hancock	OH	Landfill	2019
National Serv All	Allen	IN	Landfill	2019
Noble Road Landfill	Richland	OH	Landfill	2019
Pine Grove Sanitary Landfill	Fairfield	OH	Landfill	2019
Stony Hollow Landfill	Montgomery	OH	Landfill	2019
Sunny Farms Landfill	Seneca	OH	Landfill	2019
Vienna Junction Landfill	Lucas	OH	Landfill	2019
Williams County Landfill	Williams	OH	Landfill	2019
Wood County Landfill	Wood	OH	Landfill	2019
ARS-Archbold Refuse Service	Fulton	OH	Transfer Station	2019
Fulton County Solid Waste Facility	Fulton	OH	Transfer Station	2019
Marion Transfer Facility	Marion	OH	Transfer Station	2019
Shelby County Transfer Facility	Shelby	OH	Transfer Station	2019
Waste Management of Ohio - Lima TS	Allen	OH	Transfer Station	2019
Young's Waste Service	Van Wert	OH	Transfer Station	2019

The existing designations to accept in-district waste expired in December 2019. The Board of Directors is following the Designating Solid Waste Facilities Process outlined in ORC 343.014 to obtain new signed agreements which will be included with this plan update. The Board of Directors also elected to change the designated agreement from a five year term to a fifteen year term. A copy of this resolution is in Appendix P.

C. Designation Process

On **November 15, 2018**, the Policy Committee authorized the Board of Directors to begin the designation process. A copy of this Resolution is in Appendix P. The existing/current designation agreements will expire December 31, 2019. The intent is to have renewed and/or new agreements signed to submit with this plan update.

1. The Board of Directors may initiate the proceedings to designate a facility by adopting a Resolution Expressing the Intent to Designate.
 - a) On **January 28, 2019** the Board of Directors passed Resolution #2019-01 Expressing the Intent to Designate. A copy of this resolution is in Appendix P.

2. After adopting a Resolution of Intent to Designate, the Board of Directors did the following:
 - a) On **February 1, 2019** a notice of the adoption of the Resolution and the date, time and location of the Public Hearing and a description of the types and scope of services subject to the proposed designation was published in a local newspaper. A copy of this notice is in Appendix P.
 - b) On **February 4, 2019** a notice of the adoption of the Resolution Expressing the Intent to Designate and information of the public hearing was mailed or emailed to 50 Industrial, Commercial and Institutional SW generators; to the legislative authorities of each municipal corporation, county and township in the District. A copy of the notice and a list of the 50 generators and legislative authorities are in Appendix P.
 - c) On **February 5, 2019** after receiving verification that this notice did not need to go certified mail, the notice of the adoption of the Resolution Expressing the Intent to Designate and information of the public hearing was mailed to the Director of the EPA.
 - d) A public hearing was held on **March 21, 2019** on the proposed designation.

3. On **April 22, 2019** the Board of Directors was informed that there were not any comments from the public hearing. The Board of Directors discussed and determined to proceed with the designation process and adopted a Resolution of Preliminary Designation. A copy of resolution #2019-02 is in Appendix P.

The Board of Directors reviewed the list of the facilities to be designated and adopted a Resolution Declaring the Intent to Establish Designation. A copy of resolution #2019-03 is in Appendix P.

- a) The Board of Directors determined that May 1 through May 31, 2019 would be the public comment period to accept written comments.
4. After adopting a Resolution Declaring the Intent to Establish Designation, the Board of Directors did the following:
 - a) On **April 26, 2019** a notice of the adoption of the Resolution, the location where it is available for review, the beginning and end date of the Public Comment Period was published in a local newspaper. A copy of this notice is in Appendix P.
 - b) On **April 29, 2019** a notice of the adoption of the Resolution Declaring the Intent to Establish Designation, a list of facilities requesting designation and beginning and end date of the Public Comment Period was mailed or emailed to 50 Industrial, Commercial and Institutional SW generators; to the legislative authorities of each municipal corporation, county and township in the District; and to the Director of the EPA. A copy of the notice is in Appendix P.

- c) The Public Comment Period was available May 1 through May 31, 2019 to accept written comments on the proposed designation.
 - d) On **June 3, 2019** it was determined that no one submitted written comments.
5. On **July 22, 2019** the Board of Directors were informed that no one submitted written comments during the public comment period. The Board of Directors reviewed the designation requests and proceeded to adopt a Resolution of Final Designation. This resolution also contains a list of the designated facilities. A copy of resolution #2019-03 is in Appendix P.
- a) The designations contained an amended resolution of final designation become effective for the purposes of division (I) (2) of section 343.01 of the Revised Code sixty day after the adoption of the amended resolution.
 - b) The signed designation agreements will become effective on September 20, 2019 with a termination date of December 31, 2034.
 - c) A copy of the District's designation agreement is in Appendix P.

Waiver Process: Any person may request to the Board of Directors to grant a waiver authorizing the delivery of solid waste generated within the District to a solid waste facility other than a facility that has been designated by the District. The waiver request must be submitted to the Board of Directors in writing and shall state the type, amount and origin of material, the facility to be used, the intended duration of the waiver and the reason requesting the waiver.

The District staff will review the request and may request additional information if necessary. The Board of Directors shall act on the request for waiver within 90 days after receiving the request. The Board of Directors may grant the request for a waiver if the following has been determined:

1. Issuance of the waiver is not inconsistent with the projections contained in the District's approved plan under ORC section 3434.53(A)(6) and (A)(7); and
2. Issuance of the waiver will not adversely affect implementation and financing of the District's approved plan.

D. Documents

- Board Meeting Minutes
- Resolution 2019-01 – Expressing Intent to Designate
- Resolution 2019-02 – Preliminary Designation
- Resolution 2019-03 – Declaring Intent to Establish Designation
- Resolution 2019-04 – Final Designation
- Legal Notice – Expressing Intent to Designate
- Legal Notice – Declaring Intent to Designate
- Public Hearing Minutes
- Public Comment Period Notes
- List of Solid Waste Generators

- List of Municipal Authorities and EPA Director
- Copy of Designation Agreement

APPENDIX Q: DISTRICT RULES

A. Existing Rules

According to the Ohio Revised Code Section 3734.53(C), ‘the solid waste management plan of a county or joint district may provide for the adoption of rules under division (G) of section 343.01 of the Revised Code after approval of the plan under section 3734.521 or 3734.55 of the Revised Code.’ The District reserves the authority for the Board to adopt rules under the provision of the Ohio Revised Code.

The District does not have any existing rules. There are no current plans to adopt new rules at the time of the development of this Plan Update.

B. Proposed Rules

APPENDIX R: BLANK SURVEY FORMS AND RELATED INFORMATION

- Residential/Commercial Recycling Survey
- Industrial Recycling Survey
- Composting Yard Management Survey
- Scrap Metal Processors, Scrap Yards, Salvage Dealers Recycling Survey
- Survey Cover Letter
- Ohio Material Marketplace Flyer
- NAICS Reference Guide

APPENDIX S: SITING STRATEGY

The purpose of the siting strategy is to establish that the District will have access to enough capacity at landfill facilities to accept all of the waste the District will need to dispose of during the planning period. As defined within this plan, the District has a total of 200 years of life left with the two landfills in the district. The District does not foresee any problems or concerns with capacity and will not create a siting strategy for this plan update.

The District would like to be notified of any solid waste landfill, transfer station or resource recovery facility, plans to build new, modify current or expansion of a facility. The Board of Directors do not require plans, permits or building specifications, but would like general information such as: type of facility, address, contact person information, email address, license or permit number and proposed changes or modifications.

This general information request will be communicated with corresponding departments/authorities that may have knowledge of new or improved facilities as defined. This will include but is not limited to: City Economic Development Offices, Village Mayors, Chamber of Commerce, etc. The solid waste landfills, transfer stations or resource recovery facilities owner, operator or developer may submit the requested general information in writing, in person, via email or through the District Coordinator or PMCC.

The District would like to use this general information as an opportunity to share district information with all new facilities and assure that current solid waste landfills, transfer stations, resource recovery facilities understand and utilize the District's resources.

APPENDIX T: MISCELLANEOUS PLAN DOCUMENTS

- Defiance County Resolution to Create District
- Fulton County Resolution to Create District
- Paulding County Resolution to Create District
- Williams County Resolution to Create District
- October 24, 1996 EPA Letter for District Plan Approval
- January 23, 2003 EPA Letter for District Plan Approval
- June 9, 2009 EPA Letter for District Plan Approval
- July 28, 2015 EPA Letter for District Plan Approval
- Map of Defiance County with Recycling Locations
- Map of Fulton County with Recycling Locations
- Map of Paulding County with Recycling Locations
- Map of Williams County with Recycling Locations

APPENDIX U: RATIFICATION RESULTS

- Copy of the Public Notice
- Copy of the Public Hearing
- Resolution 2021-01 from the Policy Committee to ADOPT the plan
- Copy of the List of Legislative Authorities and Municipalities for Approval of Plan
- Copy of the Cover Memo sent to Legislative Authorities and Municipalities which included a generic resolution for townships and/or villages
- Spreadsheets per county Legislative Authorities verification of voting within the 90 days after receipt of District Plan.
- Copies of Resolutions of Approvals from:

Defiance County:

Defiance County Commissioners
Adams Township Trustees
Defiance Township Trustees
Delaware Township Trustees
Farmer Township Trustees
Hicksville, Township Trustees
Highland Township Trustees
Mark Township Trustees
Milford Township Trustees
Noble Township Trustees
Richland Township Trustees
Tiffin Township Trustees
Washington Township Trustees
City of Defiance Mayor and City Council
Village of Hicksville Mayor and Village Council
Village of Ney Mayor and Village Council
Village of Sherwood Mayor and Village Council

Fulton County:

Fulton County Commissioners
Amboy Township Trustees
Chesterfield Township Trustees
Clinton Township Trustees
Dover Township Trustees
Franklin Township Trustees
Fulton Township Trustees
German Township Trustees
Gorham Township Trustees
Pike Township Trustees
Royalton Township Trustees

Swanecreek Township Trustees
York Township Trustees
City of Wauseon Mayor and City Council
Village of Archbold Mayor and Village Council
Village of Delta Mayor and Village Council
Village of Fayette Mayor and Village Council
Village of Lyons Mayor and Village Council
Village of Metamora Mayor and Village Council
Village of Swanton Mayor and Village Council

Paulding County

Paulding County Commissioners
Auglaize Township Trustees
Benton Township Trustees
Blue Creek Township Trustees
Brown Township Trustees
Carryall Township Trustees
Crane Township Trustees
Emerald Township Trustees
Harrison Township Trustees
Jackson Township Trustees
Latty Township Trustees
Paulding Township Trustees
Washington Township Trustees
Village of Antwerp Mayor and Village Council
Village of Broughton Mayor and Village Council
Village of Cecil Mayor and Village Council
Village of Grover Hill Mayor and Village Council
Village of Haviland Mayor and Village Council
Village of Latty Mayor and Village Council
Village of Melrose Mayor and Village Council
Village of Oakwood Mayor and Village Council
Village of Payne Mayor and Village Council
Village of Paulding Mayor and Village Council

Williams County

Williams County Commissioners
Brady Township Trustees
Bridgewater Township Trustees
Center Township Trustees
Florence Township Trustees
Jefferson Township Trustees
Madison Township Trustees
Millcreek Township Trustees

Northwest Township Trustees
Pulaski Township Trustees
Springfield Township Trustees
St. Joseph Township Trustees
Superior Township Trustees
City of Bryan Mayor and City Council
Village of Blakeslee Mayor and Village Council
Village of Edgerton Mayor and Village Council
Village of Edon Mayor and Village Council
Village of Holiday City Mayor and Village Council
Village of Montpelier Mayor and Village Council
Village of Pioneer Mayor and Village Council
Village of Stryker Mayor and Village Council
Village of West Unity Mayor and Village Council

The Fiscal Office for the Village of Scott in Paulding County emailed a notification to the District that the Village of Scott REJECTED passing a resolution for the District Plan.

- Resolution 2021-02 from the Policy Committee declaring the Draft Plan now RATIFIED.