



WASHTENAW COUNTY

SOLID WASTE PLAN

2017

EXECUTIVE SUMMARY



WASHTENAW COUNTY DEPARTMENT OF PUBLIC WORKS
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EXECUTIVE SUMMARY

OVERVIEW OF PLAN DOCUMENT

Each County in the State of Michigan is required to have a Solid Waste Management Plan to assure that all the solid waste generated in the county is collected and recovered, processed or disposed of for a ten-year period at facilities that comply with state laws and rules.

The purpose of the Executive Summary is to provide an easy-to-read overview of the Washtenaw County Solid Waste Management Plan (referred to as “the Plan”) including key components of the Plan and reference to where to find more information about a particular topic.

The plan consists of three primary sections with appendices to provide supporting documents and materials. The three sections are:

- **Introduction:** describes the goals and objectives of the Plan.
- **Database:** consists of background information to support the development and implementation of the Plan.
- **Selected Solid Waste Management System:** describes the comprehensive approach to managing the County’s solid waste and recoverable materials.

The appendices provide supporting documents and materials.

- **Appendix A** contains additional detail about the evaluation of current systems.
- **Appendix B** contains additional evaluation of alternatives not selected by the County.
- **Appendix C** contains documentation of public participation.
- **Appendix D** contains additional information related to the database, the selected system, and other materials the Solid Waste Planning Committee determined important to include. These materials include a glossary of terms and an overview of the solid waste planning process.

As you read through this document, please note that italicized text is required by the State of Michigan and must be included in the Plan document.

If you have any questions while reviewing this document, please contact Washtenaw County’s Department of Public Works via email at publicworks@washtenaw.org.

OVERALL VIEW OF THE COUNTY

Washtenaw County is in southeast Michigan, covering an area of 720 square miles. The County is situated approximately 30 miles west of Detroit: Ann Arbor is the County Seat. Six cities: Ann Arbor, Dexter, Ypsilanti, Saline, Chelsea and Milan; and two incorporated villages: Manchester, and Barton Hills are located within the County. The County spans a distance of 30 miles east-west and extends 24 miles in the north-south direction. The County's 28 cities, villages and townships are home to about 354,000 citizens in urban, suburban, and rural settings. This mix of settings provides many opportunities for education, recreation, business, agricultural, and home life. The two largest cities are Ann Arbor and Ypsilanti which are home to two large universities - the University of Michigan in Ann Arbor and Eastern Michigan University in Ypsilanti. For more information on population and other demographics, please see pages 45-54.

SOLID WASTE OVERVIEW OF WASHTENAW COUNTY

While the entire solid waste system is described in detail throughout this plan, this list provides a quick overview of some key components and data points for solid waste and recycling in Washtenaw County.

- 66% of Washtenaw County's population automatically receives curbside collection of trash and recycling through municipally contracted services. The rest of the population is served through subscription services or preferred hauler contracts; and for recycling, through drop-off locations throughout the county. See page 41 for additional information.
- The estimated residential recycling rate for Washtenaw County is 33%. For commercial recycling, the rate is roughly 12%. In comparison, the state average recycling rate is estimated to be about 15%. Therefore, Washtenaw County exceeds the state average by more than double.
- The highest residential diversion occurs in the City of Chelsea, which utilizes a Pay as You Throw (PAYT) program. Under this program, individual residents can control their own costs when it comes to disposal - if they want to throw away more, they pay more. If they throw away less, they pay less. Curbside recycling is provided weekly and drop-off bins are provided at two locations in the city, making recycling easy and convenient.
- Of the local units of government that track solid waste and recycling data, the average household recycles 440 pounds per year. In Chelsea, that number is almost double at 800 pounds per household.
- Washtenaw County Department of Public Works (DPW) offers several programs to divert challenging materials. The programs handle materials like household hazardous waste, electronic waste, shrink wrap, pharmaceutical waste, and recyclables from schools and special events. In 2016, the programs successfully diverted 494,000 pounds (or 247 tons) from disposal.
- 40% of waste generated within Washtenaw County is disposed of at Arbor Hills Landfill. The remaining waste generated within the County is disposed of in landfills southeast Michigan. Washtenaw County's waste only represents 10% of the waste received at Arbor Hills. Most waste disposed of in that landfill is collected from Wayne and Oakland Counties.
- There are 2 Material Recycling Facilities (MRF), 1 Landfill, 2 Trash Transfer Stations, 3 Compost sites, and 15 recycling drop-off locations in Washtenaw County (as of 2016).
- Washtenaw County DPW is actively engaged in community outreach through its programs such as Zero Waste Events, Saturday Drop-off Events, Waste Knot Partnerships, and Master Composter training. The DPW also provides information and resources to the community through a weekly radio program, informational videos, and helpful resource guides like "Turning Trash into Treasure" - a comprehensive summary of waste reduction, reuse, recycling and disposal opportunities throughout Washtenaw County.

PLAN IMPLEMENTATION WITHIN WASHTENAW COUNTY GOVERNMENT

The Washtenaw County Board of Public Works (BPW) consists of a seven-member board appointed by the County Board of Commissioners (BOC). The BPW is authorized by the BOC to serve as the Designated Planning Agency for the County, referred to in this document as “the County” or “Washtenaw County”. The BPW is involved in all aspects of the County Solid Waste Plan, including planning, implementation, and enforcement. The County’s DPW and its staff serve the Board of Public Works and support the day-to-day implementation of the Plan. For additional information about roles and responsibilities, please see pages 94-97.

SITING OF LANDFILLS

Under this Plan, landfills are not an authorized disposal area type in Washtenaw County. Only authorized disposal areas are eligible to enter into the siting review process. Unauthorized disposal areas, such as a landfill, must be reassigned as an authorized disposal area in the solid waste management plan in order to build a new facility. Reassignment from unauthorized to authorized disposal area type would be considered during a state mandated Plan update or a free-standing Plan amendment. Therefore, if a landfill is interested in building a new facility within Washtenaw County, it would first need to be included in the plan as an authorized facility, which would require the plan to be opened and amended, or be updated as part of a state-mandated Plan update request. If a landfill or any other unauthorized disposal area type is reassigned to authorized, and the Plan amendment is accepted by the MDEQ; then the facility may proceed with the Siting Review Process. In the case of a disposal area type seeking reassignment from unauthorized to authorized, the Solid Waste Planning Committee would be convened to for the Plan Amendment process. The Facility Review committee (formerly the Siting Review Committee) would be convened for an authorized disposal area type interested in constructing a new facility. For more information about siting review procedures, please see pages 86-99.

THE SOLID WASTE PLANNING PROCESS

The Washtenaw County Solid Waste Planning Committee (SWPC) was appointed in August 2015 to prepare a Solid Waste Management Plan amendment in response to a request to expand the Arbor Hills Landfill located in the northeast portion of Washtenaw County in Salem Township. In September 2016, the Arbor Hills Landfill withdrew its request for an expansion. However, by opening the Plan, the County continued with the planning process to update the outdated sections of the County’s 1999 Solid Waste Management Plan. Much of the current solid waste law is focused on ensuring proper and adequate disposal capacity. However, the Washtenaw County Solid Waste Planning Committee (SWPC) embraced a mindset where waste is viewed as a resource and strived to set goals and objectives to focus on reduction, reuse, and recycling.

The SWPC embarked on a methodical and thorough process to update the plan. Starting first with data collection and analysis, this step provided the foundation for the Plan’s guiding principles, goals, and Selected System. The SWPC then addressed different plan implementation strategies, along with funding. Throughout the Plan process, there was regular opportunity for public involvement through SWPC meeting attendance, public hearing and informational sessions offered, and a public survey.

During the time the SWPC was convened, the committee was presented with feedback from the public about the current and future impacts of the landfill. The planning process incorporated concerns and considerations into the Plan amendment including restating that landfills are an unauthorized disposal area, and amending the siting review process to include additional requirements regarding relationships with facilities and the surrounding communities.

DATA COLLECTION AND ANALYSIS

The SWPC began the plan amendment process by creating an inventory of solid waste management systems currently available in the county through data collection and analysis. Data was collected about services, programs, and facilities along with facts and figures about program metrics such as annual tons disposed and tons recycled by community. Data collected from facilities located in Washtenaw County

demonstrated that there is at least 10 years of disposal capacity available for waste generated within the County, one of the primary purposes of the Solid Waste Management Plan process. Data was modeled based on national and state level information in cases where it was lacking or not available. This data comprises the information provided on pages 11-54.

In addition to hard data collection, the SWPC conducted a S.W.O.T. (Strengths, Weaknesses, Opportunities, and Threats) analysis of solid waste management within Washtenaw County, which provided a greater understanding of current successes and areas for future improvement. The SWPC also reviewed information about solid waste management systems of peer communities from across the country. The review offered the SWPC insights into best practices and possibilities to adopt in Washtenaw County. Finally, a public information survey was also conducted during this time to seek input from the users of the solid waste management system. With 327 responses, the public offered feedback on their preferences and where the system needs improvement. For more information on the S.W.O.T, please see pages 107-112 and for the results of the public survey, please see pages 237-240.

GUIDING PRINCIPLES

The Guiding Principles are the core of what this Plan amendment seeks to achieve and were developed by compiling and comparing the data analysis, the outcomes of the S.W.O.T. analysis, and the public survey results. The results illustrated areas of importance that should be considered by the SWPC for inclusion in this Plan. More information can be found on pages 60 - 61.

- **Access and Convenience:** Programs and services that support proper disposal of waste and diversion of recoverable materials must be accessible and convenient for County residents, businesses, agencies, and institutions to utilize. For example, the County has partnered with the City of Ann Arbor to explore the feasibility of additional waste diversion sites in the county. As part of the study, potential sites were identified based on distance from population centers in the county. The study recommended in one scenario that to consider a site, it should require no more than a 20 minute drive to access for successful participation.
- **More Diversion and Recovery, Less Disposal:** Additional programs and services will increase the diversion of recoverable materials, and may require additional infrastructure, funding, and outreach. Increasing diversion opportunities will contribute to a reduced need for disposal and preserve capacity at existing disposal facilities available to the county. Making less waste in the first place is a priority as it is the first step in the 3R's: reduce, reuse, then recycle.
- **Education and Outreach:** Education and outreach around available programs and services are necessary to ensure proper participation. From the public feedback survey conducted, many respondents indicated a lack of familiarity with options for disposal and diversion, and expressed confusion to what is and is not acceptable in community programs. In addition to providing information about how to participate, education and outreach should include additional messages about why these activities are important and quantifying their impacts. Furthermore, to support the goals of the Plan, education and outreach is necessary to inform about how to make less waste in the first place through waste reduction and reuse.
- **Data and Measurement:** Measurement systems and processes will be investigated and implemented as needed to establish realistic and measurable goals for regular evaluation for successes, challenges, improvements, and opportunities. Currently, there is limited data for programs related to solid waste management, diversion, and recovery. This may be attributed to the fact that collection of materials is not limited to one community. That is, a service provider in one municipality could cross boundaries into another municipality, making it challenging to isolate tonnage data for one community. There is also not a consistent data collection system in place at the state or county level nor any rules or regulations mandating regular reporting.
- **Funding:** Adequate funding is required to support implementation of this Plan. Page 117 in Appendix A provides a complete list of available funding options to support programs and services. Using a variety of available methods as well as developing an adequate reserve of funds will support programs and services in challenging times. As programs are identified for implementation, the best funding option will be explored.

- **Coordination and Collaboration:** Working together can have a greater impact and cost benefit than an individual community pursuing programs on their own. Regional efforts and collaboration should occur to benefit as many users as possible. The Western Washtenaw Recycling Authority (WWRA) is one example of successful collaboration between local units of government by sharing costs and benefits to offer enhanced services for their residents.

GOALS AND OBJECTIVES

Overall, the Goals and Objectives of the past Plan remained relevant but required some updating to modernize the language. The SWPC intertwined the Guiding Principles into the previous Goals to be included this Plan Amendment. While the first two Goals sound similar, the focus of each is different. Making less waste in the first place through source reduction is the top priority (Goal One), but if waste is generated, diverting waste through reuse and recycling is the preference (Goal Two). Both Goals One and Two set incremental targets for five years and ten years. Each goal has a robust set of Objectives, provided in more detail on pages 57-60.

- **Goal One:** Reduce the overall amount of municipal solid waste (MSW) generated per capita in Washtenaw County by 5% in the year 2022 and by 10% in the year 2027, with a target of working towards zero waste.
- **Goal Two:** Increase municipal solid waste diversion rates from current levels (33%) to 38% in 2022 and 43% in 2027, with a target of 100% diversion.
- **Goal Three:** Develop, support, and monitor comprehensive education, outreach, and feedback programs to achieve the goals of this Plan.
- **Goal Four:** Ensure the safe, lawful and efficient management of municipal solid waste.
- **Goal Five:** Operate collaboratively within the County and regionally outside of the County for a comprehensive sustainable materials management strategy.

WORKING TOWARDS ZERO WASTE

One of the key elements included in the goals is the aspiration to achieve zero waste. The County has already adopted a zero waste mindset through its Zero Waste Washtenaw Event community outreach program and will continue to build on its success. According to the Zero Waste International Alliance, zero waste promotes positive alternatives to landfill and incineration and a system where waste is regarded as a resource. These definitions align with commitment of this SWPC to work towards limiting the amount of waste requiring disposal, and to focus on waste as resources through reduction, reuse, and recycling. As part of the discussion of setting a zero waste goal, the SWPC recognizes that achieving zero waste is an aspirational goal, with zero waste top of mind throughout the implementation of this Plan. The SWPC also recognizes the need for smart and focused implementation of any zero waste initiative to be in balance with the amount of resources required with the potential outcomes, so that these efforts are productive and make a true positive impact.

THE SELECTED SYSTEM

The Selected System is the strategy and methods to be utilized by a county to handle its solid waste for the planning period. Both the data collection and analysis along with the development of goals informed the description of the Selected System. Washtenaw County's Selected System is an integrated strategy that places waste prevention, reduction, reuse, recycling, and composting at the top of the solid waste management hierarchy. This alternative requires strengthening existing diversion programs and recovery rates through access, education and outreach, and data measurement. This alternative also seeks to increase diversion of additional materials such as food waste, and construction and demolition waste. The theory being that landfill space would only be utilized to dispose of solid waste remaining after the diversion technologies have been developed to their fullest long term environmental, technological and economic potential.

IMPLEMENTATION OF THE PLAN

The SWPC detailed an implementation plan (available on pages 84-85) to ensure action on the goals and objectives once the plan is approved by the state. At the core, their effort identified the development of a Plan Advisory Committee (PAC) to serve as a resource to DPW staff. The make-up of the PAC would be reflective of the different types of stakeholders in the county, just as the SWPC membership requires representatives from the waste industry, local government, environmental organizations, and the public. The PAC will set annual priorities, develop action plans, and provide regular reports on milestones.

FUNDING IMPLEMENTATION

Currently, programs coordinated through Washtenaw County's DPW are funded by the revenues earned through the host community agreement with Arbor Hills Landfill. In this Plan, the SWPC seeks to diversify future funding options so that programs are not reliant on one funding source. This plan contains a list of potential funding mechanisms available, but ultimately funding options are best determined by the type of activity or program to be implemented. Therefore, no specific funding mechanisms were selected as part of this Plan, but will be evaluated in the future in the implementation of the Plan by the PAC. Available funding mechanisms are on page 117.

PUBLIC REVIEW

There was extensive public comment throughout the planning process from the public in attendance at the SWPC meetings, and the public survey conducted. In addition to the required public hearing, the SWPC requested that two additional information meetings be held to increase the number of opportunities for public comment and dialogue related to the draft Plan Amendment. During these sessions, information about the plan process was presented, and the attendees were also guided through an interactive discussion to capture priorities and ideas to support plan implementation. This information will be used during the Plan Advisory Committee (PAC) kick-off.

CONCLUSIONS

The landscape of waste and recycling has changed dramatically since the previous Plan adoption in 2000 such as less fiber in the waste stream due to the decline of printed newspapers; the production and use of different types of plastic packaging that challenge recycling processing; and single-stream recycling technology that is more automated and sorts recyclables at the facility rather than at the curb. While the technologies and industry norms have significantly changed over the years, the County Plan has remained the same. This Plan amendment builds on the progressive goals and programs set forth almost two decades ago, and reinforces the desire to continue to seek alternatives to wasting resources through opportunities like reduction, reuse, recycling, and composting. The delicate balance between the need for disposal areas for waste and the maintaining quality of life were made very clear during this planning process, especially through the participation of residents surrounding the county's only landfill. The true cost of disposal is not quantified in the current business as usual approach. A paradigm shift in our culture will be necessary to focus on making less waste in the first place through reduction and reuse. If these important strategies can become part of the way of life not just the residents of Washtenaw County, but for everyone, then society can really begin to diminish the need for disposal.

To view the complete Solid Waste Management Plan, please visit www.ewashtenaw.org/publicworks.