Local Solid Waste Management Plan 2024-2033

MONTGOMERY COUNTY



Prepared For

Montgomery County Business Development
Center
113 Park Drive
Fultonville, NY 12072

August 2024

Barton & Loguidice

Montgomery County

Local Solid Waste Management Plan 2024-2033

August 2024

Prepared For

Montgomery County Business Development Center 113 Park Drive Fultonville, NY 12072

Prepared By:

Montgomery County Business Development Center 9 Park Street Fonda, NY 12068

and

Barton & Loguidice, D.P.C. 70 Genesee Street, Suite 100 Utica, NY 13502

Table of Contents

<u>Section</u>	<u>n</u>	<u>Page</u>
1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7	PLANNING UNIT DESCRIPTION [366-2.1] Size and Geographic Location Population Served and Density Seasonal Variations of Population and Land Use Planning Unit Members and Services Provided Previous Solid Waste Management Activities and Practices Membership Changes Neighboring Planning Units	
2.0 2.1 2.2	WASTE GENERATION AND MATERIALS RECOVERY DATA [366-2.2]	7
3.0 3.1 3.2	EXISTING SOLID WASTE MANAGEMENT SYSTEM [366-2.3]	9
4.0 4.1 4.2	EXISTING ADMINISTRATIVE AND FINANCIAL STRUCTURE [366-2.4]	14
5.0 5.1 5.2 5.3	ALTERNATIVES EVALUATION AND SELECTION [366-2.5]	17 19
6.0	IMPLEMENTATION PLAN & SCHEDULE [366-2.6]	24
7.0	WASTE STREAM PROJECTIONS [366-2.7]	25
8.0	PUBLIC PARTICIPATION	26

Attachments

Attachment #1	Planning Unit & Planning Period
Attachment #2	Summary of Waste Types & Disposition
Attachment #3	Waste Generation Rate
Attachment #4	Population & MSW Projections
Attachment #5	Population Distribution
Attachment #6	Detailed MSW Composition
Attachment #7	MSW & Recyclables Projections
Attachment #8	Single Stream Composition Estimate
Attachment #9	Construction & Demolition Debris Composition
Attachment #10	Construction and Demolition Debris Generation Projections
Attachment #11	Construction and Demolition Debris Diversion Analysis
Attachment #12	Construction and Demolition Debris Detailed Projections
Attachment #13	2024 Rate Schedule

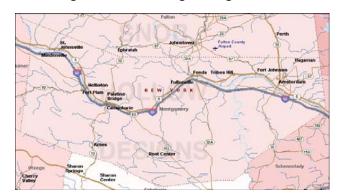
1.0 PLANNING UNIT DESCRIPTION [366-2.1]

1.1 Size and Geographic Location

The planning unit serves the entirety of Montgomery County, inclusive of one (1) city, ten (10) towns and ten (9) villages. The planning unit is limited to Montgomery County, located in the Eastern Mohawk Valley, straddling the Mohawk River. Predominately rural in character and comprising 410 square miles, the County's population is clustered in limited census-defined urban areas that generally adjoin the Mohawk River. As the map below illustrates, the cities and towns located within Montgomery county include the City of Amsterdam, and the Village of Hagaman at the eastern end of the County; the Village of Fonda and the Village of Fultonville located mid County; and the Village of Nelliston, Village of Palatine Bridge, Village of

Canajoharie, Village of Fort Plain, and the Village of St. Johnsville at the western end of the County.





Montgomery County lies within the Mohawk Valley watershed. Montgomery County has an especially aggressive agricultural lands protection program, and most of the agricultural lands are located within one of three agricultural protection zones. The New York State Department of Environmental Conservation does not list any critical environmental areas within Montgomery County.

1.2 Population Served and Density

The 2020 United States Census indicates that there are 49,532 persons living in Montgomery County. [It is worth noting that the 1991-92 MOSA LSWMP indicated a population for Montgomery County of 53,540 and a 20-year projection that population would increase to 70,074. Instead of an increase of 31% there has been a 7% decrease in population.

The current population is allocated across 18,918 households, for an average of 2.6 persons per household. The estimated distribution of the population is 61% suburban and 39% rural, with no urban population density in the county according to the DEC population classification.

1.3 Seasonal Variations of Population and Land Use

Montgomery County experiences minimal variations in its population throughout the year with exception to seasonal increase in construction and demolition projects, the Amsterdam Mohawks baseball games, the Fonda Speedway race track, Glen Ridge Motorsports Park, and the Fonda Fair. All in which draw warm weather crowds. With the exception of Fulton Montgomery Community College (FMCC), there are no institutions of higher learning within the County. FMCC serves a primarily commuter population, with on-campus housing serving approximately 300 students. There is a very modest increase in travelers during the summer where several campgrounds are open and a relatively small number of seasonal dwellings are utilized. Employment experiences a seasonal variation of approximately 3%, with more individuals hired during the summer and early fall for tourism and agricultural harvest purposes.

1.4 Planning Unit Members and Services Provided

The planning unit of Montgomery County includes all villages, towns and the City of Amsterdam as listed below, with the solid waste management services for each noted:

City of Amsterdam

City of Amsterdam DPW 518-842-3691

Garbage: picked up weekly

Recycling: picked up twice a month

Compost: Accept brush if not more than 30 lbs,

put out on a normal garbage day

Town of Amsterdam

Linda Bartone Hughes 518-842-7961

lhughes@townofamsterdam.org

Garbage: collection once a week by County Waste Recycling: Collection once a week by County

Waste

Compost: None

Town of Canajoharie

Erica Hayes 518-673-3112

canajoharietownclerk@gmail.com

Garbage: None

Recycling: 2nd Friday of the month. Picked up by

Spohn's Disposal Compost: None

Town of Charleston

Diane Ferguson 518-922-5259

charlestontownclerk@frontiernet.net

Garbage: Rizzo Trucking runs a program for Town

Residents, permit \$30/year

W 12-4, Sa 8-12, 480 Corbin Hill Road

Recycling: Single stream

Compost: None

Town of Florida

Emily Staley 518-843-6372

Emilystaley.tofclerk@outlook.com

Garbage: Rizzo Trucking runs program next to the Town Highway Garage, 167 Ft. Hunter Road M 5-8, W 5-8 Sa 8-4. Need a dumpster

sticker from the Town Clerk

Recycling: 1 bin for glass, plastic, aluminum. 1 bin for paper, next to the Town Highway Garage.

M 5-8, W 5-8 Sa 8-4 Compost: None

Town of Glen

Roxanne Douglass 518-853-3633

tnglenclk@capital.net

Garbage: None

Recycling: Drop off available at 3773 St. Hwy 30A, Tu 9-12, Th 3-7, Sa 8-12

Compost: None

Town of Minden

Tammy Beauregard 518-775-6677

Tnclkmin22@gmail.com

Garbage: None

Recycling: Weaver Sanitation picks up curbside

last Saturday of the month

Compost: None

Town of Mohawk

Kim Sullivan 518-853-3031

tnmohawk@frontier.net

Garbage: Drop off available right after train

Tracks on Broadway, Tu 4-8, Sa 7-12

\$200 annual fee, or \$10 for three clear kitchen size

bags w/no permit

Recycling: Drop off at dumpster on Broadway

Compost: Broadway site - leaves & grass clippings only

Town of Palatine

Linda Logan 518-673-4487

toptownclerk@gmail.com

Garbage: None

Recycling: Drop off available anytime at 817 Stone Arabia Road Highway Garage for

Town residents only, single stream

Compost: None

Town of Root

Marcia Schults 518-673-3422

Garbage: 1st Saturday of month at Root Town Hall

Carlisle Rd. 8 am - 12 pm

3rd Saturday of month at fire house

Argersinger Rd Randall 8 am - 12 pm (Town of Root)

fee through hauler

Recycling: same days and hours as garbage

Town of St. Johnsville

Lynn M. Stever 518-568-2662

tnstjohn1@yahoo.com

Garbage: Pick-up every Friday

Recycling: None Pick-up every Friday Compost: None

Village of Ames

James KilcullenBrenda Rava is village clerk 518-774-4387

amesvillageclerk@gmail.com

garbage: picked up curbside every Wednesday

recycling: picked up curbside 1st Wednesday of month compost: bulk pickup of leaves, etc. in spring and fall

Village of Canajoharie

Amy Krester 518-673-5512

deputyclerk@villageofcanajoharie.org

Garbage: Weekly garbage pickup Recycling: Weekly recycling pickup

Compost: 1st and 3rd Wednesday Apr – mid-October

Village of Fonda

Christine Kearns 518-853-4335

villageclerk@villageoffonda.ny.gov

Garbage: Picked up on Thursdays by

Weaver Sanitation

Recycling: Picked up on Thursdays by

Weaver Sanitation

Compost: Lawn trimmings and yard debris
Picked up by Village on Mondays and Fridays

Village of Fort Plain

David Briggs 518-993-4271

fortplainvillage@frontier.com

Garbage: Tuesday and Friday morning at Home pick-up by Weaver Sanitation;

larger items the Village will pick up for a cost. Recycling: Picked up the 2nd and 4th Thursdays Compost: Village DPW will pick-up yard waste

in the spring. Free to residents

Compost: none

Village of Fultonville

Vickie Romano 518-853-3815

fultonvillevillageaclerk@gmail.com

garbage: curbside every Thursday recycling: curbside every Thursday

compost: yard debris picked up Mon & Fri

April - November

Village of Hagaman

Maria Cebula 518-843-2480

vhagaman@nycap.rr.com

Garbage: Every Tuesday by County Waste Recycling: Every Tuesday by County Waste Compost: The Village picks up yard waste every other Wednesday from April-November

Village of Nelliston

Edward Watt 518-993-2862 Clerk@nelliston.org

Garbage: Pick-up on Monday & Thursday

Recycling: 1st & 3rd Wednesday

Compost: Pick-up on Tuesdays, weather dependent

Village of Palatine Bridge

Emily Schults 518-673-2817

Clerk&villageofpalatinebridge.org

Garbage: Tuesday pick-up by Weaver Sanitation Recycling: Wednesday pick-up by Weaver

Sanitation

Compost: leaves, brush, branches picked up by Village

as needed

Village of St. Johnsville

Jayna Cool 518-568-2221 clerk@siny.org

garbage: picked up curbside Monday recycling: picked up curbside Thursday compost: picked up curbside Spring – Fall

Each municipality runs their own waste and recycling program. Some have curbside collection, some drop off points, others don't have any service and residents either hire a hauler or bring waste and recyclables directly to the transfer stations

1.5 Previous Solid Waste Management Activities and Practices

Montgomery County was a member of the Montgomery Otsego Schoharie Solid Waste Management Authority (MOSA) from its creation in 1988 until its dissolution in 2014. MOSA initially operated public landfill facilities transferred from the member counties until the capacity of each was reached and the facilities were closed. In the 1991-92 LSWMP MOSA adopted policies in response to the solid waste management hierarchy established by the NYS Solid Waste Management Act of 1988:

- *Support state and federal policies and actions targeting waste reduction and reuse
- *Construct a materials recovery facility to process the region's recyclables for market.
- *Noted that the development of a waste-to-energy facility was not feasible due to an inadequate volume of waste
- *Site and construct a new regional landfill facility

Following that 1991-92 LSWMP MOSA focused on recycling and the development of secondary materials processing in each County. MOSA further evaluated the development of a new regional landfill facility but ultimately determined such a facility was not practically or financially

feasible. MOSA continued to operate the transfer stations and procured transfer and disposal agreements through competitive requests for proposals.

The private market for waste disposal has undergone significant changes in New York State and world-wide. This has been evident in Montgomery County as the County shifted from a primarily multi-counties public system relying on a group of public facilities to a single county primarily private system. As the disposal market changed, particularly in the Capital District, Montgomery County's transfer stations, especially the Amsterdam Transfer Station, there was continued market pressure for the County's transfer stations to accept waste generated outside Montgomery County.

Effective March 31, 2018, Montgomery County prohibited the acceptance of waste from outside the County's borders in order to be compliant with the County's disposal agreement with Fulton County. However, since the County does not currently send waste to the Fulton County landfill facility the option of accepting waste from outside Montgomery County may again be a viable option.

Montgomery County was accepted into a bid request conducted by Fulton County for household hazardous waste in the past. This arrangement allowed Montgomery County to take advantage of an excellent pricing structure with a reliable company while saving the cost of generating their own bid. Following the prior joint program, Montgomery County retained the same company previously used. In 2021 and going forward competitive quotes were obtained directly by Montgomery County

1.6 Membership Changes

As noted above the planning unit has undergone fundamental change since the last approved LSWMP. Montgomery County, New York ended its current Solid Waste Service Agreement with the Montgomery, Otsego, Schoharie Solid Waste Management Authority (MOSA) on April 30, 2014. Legislation to dissolve MOSA and distribute its assets and liabilities among its constituent counties was subsequently adopted. The legislation, as requested by each of the constituent counties and supported by the MOSA Board of Directors, provided for the transfer of the MOSA transfer stations and other physical assets to the counties based upon their location. Upon transfer, the individual counties assumed responsibility for the management of the solid waste generated within their respective borders.

Montgomery County took title to two MOSA transfer stations, and the state permits to operate those facilities. The two facilities located within the County are: the Amsterdam Transfer Station, located at 1247 Route 5S, Amsterdam, N.Y., and the Western Transfer Station, located at 4583 Route 5S Sprakers, N.Y. In receiving title to the Transfer Stations, Montgomery County acquired equipment formerly used by MOSA in the operation of these facilities. This equipment is currently made available to the contractor GottaDo Contracting LLC, for use in the operation of the transfer stations. Montgomery County has entered into an agreement with Seneca Meadows Landfill for the disposal of Montgomery County solid waste. There were no other

significant changes as Montgomery County kept the practices MOSA put in place (with the exception of the removal of the clean wood program).

GottaDo Contracting LLC operates both Montgomery County transfer stations and transports MSW and C&D to the Seneca Meadows Landfill. This contract started on 5/1/2014 and expires 12/31/24.

1.7 Neighboring Planning Units

Montgomery County is bordered by six other counties: Fulton County, Herkimer County, Otsego County, Schoharie County, Schenectady County, and Saratoga County. As noted above, the dissolution of MOSA resulted in the former member counties became their own individual planning units. Schenectady County, Saratoga County, and Fulton County are individual planning units. Herkimer County is part of the Oneida-Herkimer Solid Waste Authority planning unit.

2.0 WASTE GENERATION AND MATERIALS RECOVERY DATA [366-2.2]

2.1 Solid Waste Generators

Within Montgomery County, there are multiple significant generators of solid waste. These are organized in a categorical manner as follows:

Residents: with nearly 50,000 residents, allocated across nearly 20,000 households, Montgomery County generates approximately 51,028 tons of municipal solid waste on an annual basis in which 93% is landfilled, and 7% is diverted.

Large Retailers/Commercial Centers: the largest cluster of significant retailers is located along Route 30 in the Town of Amsterdam. Major retailers including Lowe's, Home Depot, Target, and Walmart anchor a number of retail plazas along both sides of Route 30.

Major Population Centers: generally, Montgomery County's population is clustered along the Mohawk River in three distinct nodes. The City of Amsterdam, together with the Towns of Florida and Amsterdam, are located at the eastern end of the County and serve to concentrate more than half of the County's population in its eastern most municipalities. At mid-County, a cluster of population is found within the Villages of Fonda and Fultonville. The Villages of Canajoharie, Fort Plain, Nelliston, and St. Johnsville at the western end of the County, collectively form a significant population center.

Municipal Buildings: both Montgomery County and all its constituent municipalities have municipal buildings. Within the less populated municipal buildings, the town hall and town garage are often located within the same structure. For larger governments, such as the County and the City of Amsterdam, operations are spread through multiple buildings.

Institutions (Colleges or Universities, School Districts, Nursing Homes, Hospitals, Prisons, Museums, Entertainment Venues): significant institutions within Montgomery County include Fulton Montgomery Community College, St. Mary's Hospital, Shuttleworth baseball stadium, Wilkinson Residential Health Care Facility, the Montgomery County Correctional Facility, St. Johnsville Rehabilitation and Nursing Center, Inc. (just putting something from western end of county) and five public school districts.

State and Federal Parks and Public Spaces: public spaces are scattered throughout Montgomery County, often serving as local and regional parks and points of interest. There is no particularly significant individual tourism generator.

Industries Located in the Planning Unit: primary private sector employers include, but are not limited to, a Dollar General Distribution Center, Target Distribution Center, Amsterdam Printing and Lithograph, Beech-Nut Nutrition Company, Roses Brands, Hill & Markets, and many small businesses located within Amsterdam's Clock Tower, Sanford Farms Plaza, and more.

Waste Water Treatment Plants: Wastewater treatment plants in the planning unit which generate approximately 2,500 tons of biosolids per year include the following:

- Amsterdam Wastewater Treatment Plant, Amsterdam, New York
- Canajoharie Wastewater Treatment Plant, Canajoharie, New York
- Fonda-Fultonville Wastewater Treatment Plant, Fonda, New York
- Gloversville-Johnstown Joint Wastewater Treatment Facility, Johnstown, New York¹
- Montgomery County Sanitary District #1, Nelliston, New York
- St. Johnsville Wastewater Treatment Plant, St. Johnsville, New York.

2.2 Summary of Solid Waste Quantities and Composition

The required description of the Montgomery County waste stream, including the quantity and composition of all solid waste by component type, future projections, and any data gaps are included in the following attachments:

Attachment #1	Planning Unit & Planning Period
Attachment #2	Summary of Waste Types & Disposition
Attachment #3	Waste Generation Rate
Attachment #4	Population & MSW Projections
Attachment #5	Population Distribution
Attachment #6	Detailed MSW Composition
Attachment #7	MSW & Recyclables Projections
Attachment #8	Single Stream Composition Estimate
Attachment #9	Construction & Demolition Debris Composition
Attachment #10	Construction and Demolition Debris Generation Projections
Attachment #11	Construction and Demolition Debris Diversion Analysis
Attachment #12	Construction and Demolition Debris Detailed Projections
Attachment #13	2024 Rate Schedule

_

 $^{^{1}}$ This facility is located in Fulton County, however some of the biosolids waste is combined with Montgomery County facility waste.

3.0 EXISTING SOLID WASTE MANAGEMENT SYSTEM [366-2.3]

The planning unit has undergone fundamental change since the last approved LSWMP, from 1991-92. Montgomery County ended its Solid Waste Service Agreement with the Montgomery, Otsego, and Schoharie Solid Waste Management Authority (MOSA) on April 30, 2014. Legislation to dissolve MOSA and distribute its assets and liabilities among its constituent counties was subsequently adopted. The legislation, as requested by each of the constituent counties and supported by the MOSA Board of Directors, provided a title to the MOSA transfer stations and other physical assets to be distributed to the counties based upon their location. Upon transfer, the individual counties assumed responsibility for the management of the solid waste generated within their respective borders.

3.1 Facilities

Montgomery County took title and the associated NYSDEC permits for the two MOSA transfer stations in the County. Both facilities now provide exclusive service for waste generated in Montgomery County.

The two County facilities are:

 Amsterdam Eastern Transfer Station, located at 1247 Route 5S, Amsterdam, N.Y. 12010 518-843-3335

Hours: Monday-Friday 7:00 am – 3:00 pm Saturday 8:00 am – 11:30 am Closed Sunday



Western Transfer Station, located at 4583 Route 5S, Sprakers, N.Y. 12166
 518-673-4884

Hours: Monday-Friday 7:00 am – 3:00 pm Saturday 8:00 am – 11:30 am Closed Sunday

The County does not provide for direct collection services. Collection of waste and recyclables is provided through a combination of private collection, self-haul, and municipal service in the City of Amsterdam.

In receiving title to the Transfer Stations, Montgomery County also acquired equipment formerly used by MOSA in the operation of these facilities. The County in turn leased this equipment to the contractor GottaDo Contracting LLC, for use in the operation of the transfer stations. (NOTE: the lease/rental contract expired.)

Montgomery County has entered into an agreement with Seneca Meadows Landfill Facility [a private facility owned by Waste Connections Inc] for the disposal of non-recyclable waste. Seneca Meadows Landfill opened in 1983 is located in Seneca Falls, New York. The facility operates under local, state and federal permits; and undergoes inspections from the New York State Department of Environmental Conservation and the Environmental Protection Agency. Incoming waste materials must meet State and federal non-hazardous, solid waste parameters, and all non-municipal waste is laboratory tested to ensure that these parameters are met.

3.2 Programs

Significant Construction and Development Activities

Construction and demolition activity in Montgomery County generates approximately 1053 tons of construction and demolition (C&D) debris each year. Over the course of 2023, demolition crews worked on removing the remnants of the Beech-Nut Factory building in Canajoharie (completed as of April 2024). Additionally, new construction began in the Town of Florida for the Champlain Hudson Power Express transmission line which will bring energy from Hydro-Quebec in Canada to New York City – running directly through Montgomery County. Presently, considerable development in the eastern end of the County, including the development of a nearly 1,000,000 ft. Dollar General Distribution Center in the Town of Florida, is responsible for much of this waste. The county expects to see an influx in solar farm construction and business expansions which may contribute to future C&D debris generation.

Tire Recycling Program

The Montgomery County Soil and Water Conservation District runs a tire recycling program at the Western Transfer Station. They host a day where residents can sign up and deliver passenger car tires and agricultural tires for recycling. The transfer stations recycle tires year-round but at a cost to those delivering the tires. 2017 was the first year of the program and it has since shown a good amount of success. In 2022, a total of 87 participants dropped off 1,812 passenger tires for a total of 27.24 tons. In 2023, a total of 50 people participated in agricultural tire recycling and approximately 1031 tires were accepted for a total of 84.74 tons. Also in 2023, a total of 106 participants in the program dropped off approximately 2,258 passenger tires for a total of 19.37 tons recycled.

Agricultural Plastic Program

The agricultural-plastic program has been discontinued.

Household Hazardous Waste Program

The County holds a biennial household hazardous waste collection day at the County Annex building. The program collects pesticides, corrosives, pool chemicals, paints/stains, anti-freeze, fluorescent bulbs, hazardous cleaning products, and driveway sealer. The event is advertised on the County website, advertised on the County Facebook page, advertised in newspapers, and posted and distributed at the County transfer stations and distributed to local municipalities and residents before the event is held. It is free to residents of Montgomery County.

Organic Management Programs

Montgomery County does not currently have an organics management program. The County website recommends contacting local municipalities to see if they have programs available.

The County is rural in nature, like many other rural communities' residents tend to manage yard trimmings on their own property. Therefore, materials collected for centralized composting are lower than in suburban or urban areas where yard trimmings tend to be handled centrally.

Green waste in Montgomery County is collected by these local municipalities:

- City of Amsterdam compost collection at city garden city now throws away
- Town of Mohawk compost facility at Park/Broadway site
- Village of Fonda compost facility in the Village
- Village of Fort Plain compost facility in Wiles Park
- Village of Hagaman compost collected by SM Gallivan
- Village of Canajoharie compost facility in the Village
- Village of Fultonville compost facility in the Village
- Village of Palatine Bridge compost on private property
- Village of Nelliston weekly yard waste pickup compost in Town of Palatine
- Village of St Johnsville weekly yard waste pickup compost behind sewer plant

Biosolids

Wastewater Treatment Plants (WWTPs) in Amsterdam, Canajoharie, Fonda, Nelliston and St. Johnsville collectively generated 3,007.52 tons of biosolids in 2023. According to the 2023 annual report, 7.32 tons were sent to the Colonie Landfill, and the remaining 3000.20 tons were sent to Seneca Meadows Landfill. By 2033 Montgomery is aiming at decreasing the tonnage of biosolids by 5% during the 10 year plan.

The facilities that generate biosolids within the planning unit include:

- City of Amsterdam WWTP Incineration ash disposed at Auburn and Ontario landfills
- Village of Canajoharie WWTP Chemical stabilization N-Viro process residue disposed at Plattsburgh and Ontario landfills
- Fonda-Fultonville WWTP biosolids sent to Johnstown/Gloversville
- Montgomery County SD #1 STP Incineration through Watertown
- Village of St. Johnsville WWTP biosolids sent to Johnstown/Gloversville
- In Fulton County. KeyMark also produces biosolids included in planning unit report

Waste Reduction, Reuse, and Recycling Programs

Neither Montgomery County nor the municipalities within the County have local source separation laws or ordinances. Montgomery County does not administer a County-wide recycling program and leaves that responsibility to the individual municipalities within the County. However, the recovery of recyclables in Montgomery County is done successfully through a variety of efforts by local private haulers, local municipalities, and the County. The County accepts recyclables at \$100.00 per ton or \$5 for up to 10 bags at the two transfer stations. Montgomery County's single stream recycling includes paper, plastic, glass, and metal products. Recycling brochures are available on the County's website, at the transfer stations, and upon request. The County has met with GottaDo to consider potential future programs which may include Christmas trees, mattresses, yard waste, green waste, construction and demolition debris, and food waste.

Education and Outreach Programs

Montgomery County uses the County website as the main platform for public education to encourage recycling, composting, and waste reduction. The site is updated frequently as programs change. The site provides information regarding proper disposal methods, and how county residents can get involved. One of the more prominent organizations, Grow of Amsterdam NY Inc., or "GROW" is a charitable 501(c)(3) organization that is formed to conserve, create, and empower community managed greenspace through outreach programs and environmental education. They hold monthly meetings and seminars on how to garden, compost, and recycle. GROW also accepts food scrap drop-offs in the City of Amsterdam community garden every Saturday.

Volume-Based Pricing Incentives or Other Financial Incentives Used

Montgomery County accepts single stream recyclables at \$100 per ton or \$5 for up to 10 bags at the two County transfer stations. This serves as an incentive reduce waste by recycling more. For waste, Montgomery County charges are based on the weight delivered.

Recycling Market Agreements

- Single stream recycling contract with County Waste & Recycling Services, Inc.
- Electronic Waste/fluorescent bulbs/batteries contract with Ewaste+
- Scrap Metal Nathan H. Kelman
- Tires Seneca Meadows Landfill and Geiter Done of WNY
- Freon JGS Recycling and Hauling Inc.

Hauler & Business Transactions

Business customers fill out an application. They receive a customer vehicle registration card for each vehicle on file. Each time they visit the transfer station the customer shows the weigh station operator the card. When the card gets scanned the customer information populates on the computer screen, including if the customer is a credit or pay for each load customer. The weigh station operator asks what type of waste the customer has and where it originates. They weigh the customer in, the customer dumps the waste, and then weighs out. They receive a ticket (receipt) when they leave the facility.

Recycling Data Collection Efforts

Data is collected at the scale house. The weigh station operators ask each customer what type of material they have and where it originated.

Electronic Waste

Montgomery County's e-waste program is also a very successful program. In 2023 the County collected 55.89 tons of electronic waste for recovery and recycling. The County still accepts this waste from residents, businesses, and schools at no charge.

4.0 EXISTING ADMINISTRATIVE AND FINANCIAL STRUCTURE [366-2.4]

4.1 Administrative Structure

As indicated above, Montgomery County dissolved its relationship with MOSA in 2014, and subsequently acts as an independent planning unit. Montgomery County has a dedicated position within the Treasurer's Office that provides the necessary administrative and financial oversight for the operations of the planning unit, as well as coordination of specialized programs such as household hazardous waste collection. Also, as discussed previously, GottaDo Contracting LLC was hired by the County to operate both transfer stations and transport all non-recyclable waste to the Seneca Meadows Landfill.

Currently, Montgomery County does not have a recycling coordinator, but the County's Solid Waste Principal Account Clerk Typist has compiled information, and created brochures along with Senior Printer Composer K. Casey Boyd, that are available at many locations including the County website. Brochures provide information on what is acceptable/unacceptable material, non-recyclable material, and what belongs in single stream recycling. The brochure also gives information on what to do with batteries, electronics and household hazardous waste. The brochures outline the proper way to dispose of waste.

The expenses generated for the operation of the solid waste management system are covered by revenue from tipping fees for all non-recyclable waste that crosses the scale. No additional revenue, either from the County's property tax levy or other sources, is required. The County does not subsidize the transfer stations. Some individual municipalities which provide waste and recyclables collection raise the revenue to pay for that service through municipal property taxes, fees, or other measures.

Robert A. Purtell is the County Executive for Montgomery County. Any decisions made regarding the solid waste management system is the responsibility of the County Executive and the County Legislature.

Crysti Simonds is the contact person for questions on solid waste management services provided by the County. She is a Principal Account Clerk Typist for Montgomery County.

Strengths and Weaknesses of Current Structure

Strengths

- Single stream recycling program
- Location of Montgomery County transfer stations are key for success. One of them being located in the geographic center of the County (4583 Route 5S Sprakers, New York 12166). The Amsterdam Transfer Station is located in the highest populated area in the County, Amsterdam (1247 Route 5s Amsterdam, New York 12010).

Weaknesses

- Cyclical global secondary materials markets and the associated wide swings in revenue for recyclable materials.
- Limited options for disposal of non-recyclable waste.
- The cost of transportation, as related to fuel prices.
- Adequate funding from NYS to fund NYS required programs and NYS advocated plans.

Enforcement program

For the County transfer stations, uncovered loads are charged double, and enforcement measure that has been in effect since 2014. Failure to follow the County credit limit policy can result in that privilege being revoked. If procedures are not followed, Montgomery County is under no obligation to accept solid waste. If checks are returned, customers are not able to dump until the returned check is paid.

Montgomery County does not currently have any local disposal enforcement.

Laws and regulations related to solid waste management

Montgomery County does not have a County source separation law. The municipalities within the County do not have local source separation laws or ordinances.

Montgomery County's contract with GottaDo Contracting, LLC for waste removal at the two transfer stations also includes a clause for liquidated damages for improper operation of the transfer stations. The parties agree that the County will suffer damage and injury from the failure of the Contractor to conduct operations in a manner sufficient to prevent the backlog of waste or storage of waste within the premises for periods in excess of 24 hours. The County and the contractor have agreed that the following liquidated damages shall be assessed against the contractor for the events noted:

• The Contractor shall be liable to reimburse the County for any and all expenses, including fines, penalties and attorney's fees, associated with the issuance of any Notice of Violation or other legal or administrative proceeding arising out of the Contractor's failure to remove all MSW from the tipping floor on a daily basis, and yard waste from the Transfer Station in accordance with the permit

Municipal zoning laws have no relevance to the County solid waste management system.

4.2 Financial Structure

The County estimates revenue from tipping fees for 2024 at \$6,200,000 to cover operating expenses (principally contract services for transfer stations operation and maintenance, transportation and landfill disposal), at \$6,160,993.

A separate post closure fund is maintained by the County for three closed landfills. The operations account balance is \$566,529.31 (4/30/24). The reserve balance is \$1,063,124.18 (4/30/24).

Grants

Montgomery County applied for the household hazardous waste grant for the County's household hazardous waste day. In 2015, Montgomery County was awarded \$4,691.88. In 2017, Montgomery County was awarded \$5,204.92 Montgomery County also went after E-waste grant funds. Montgomery County received \$20,139.08 in 2016, \$14,998.38 in 2017 and \$16,626.17 in 2018. Due to new legislation, Montgomery will no longer charge for any e-waste delivered to the transfer stations.

2024 Rate Schedule

The 2024 Rate Schedule can be found at Attachment #13.

5.0 ALTERNATIVES EVALUATION AND SELECTION [366-2.5]

5.1 Program Alternatives – Assessment and Evaluation

- Waste Prevention Part of the efforts to encourage people to reduce the volume of
 waste each individual generates depends on providing information and education. In
 terms of public policy, extended producer responsibility is promoted by the NYS
 government. This policy advocates shifting the responsibility for recycling and disposal
 from product consumers to product producers.
- 2. Data Collection As the County transitions from its membership in MOSA, the County is building a data base, including this LSWMP and the County website, which over time will serve to provide instructions on utilizing the services provided by the County and it will build an understanding of decisions individuals, business, and industries can make to reduce disposal and increase the quality of environmental management.
- 3. Re-use Programs The network of social media is providing expanding opportunities for re-use of materials and products. For things like building materials there are private companies that specialize in salvage and re-sale of recovered materials for renovations and new construction.
- 4. Education and Outreach The County's principal means of for providing education and community outreach is the County website. The County can consider additional initiatives in the future, as funding is available, such as educational materials for schools and contests for schools and community groups.
- 5. Incentive Based Pricing Montgomery County uses a Pay-As-You-Throw [PAYT] for waste disposal, wherein residents are charged a fee based on the amount of waste they deliver to one of the transfer stations. To institute a PAYT program at the point of collection of waste and recyclables would be the responsibility of each municipality to enact a local law or enter into a contract with a hauling service that specifies PAYT.

Advantages

- PAYT programs are a fair way to charge customers.
- PAYT programs do not place restrictions on customer choices. Customers are not prohibited from delivering any amount of garbage, but those who want to dispose of more garbage will pay a higher fee.
- PAYT programs are inexpensive to implement, may help prevent overuse of solid waste services.
- PAYT encourages residents to recycle and compost instead of throwing everything away.
- PAYT reduces the amount of waste that is being sent to a landfill.

<u>Disadvantages</u>

- PAYT programs raise concerns on illegal dumping, especially in a rural county like Montgomery
- PAYT programs can be a concern for large families that cannot afford to pay for the amount of waste they produce.
- PAYT programs can be hard to implement county wide if a municipality is unwilling to change the way they pay for waste services.
- PAYT programs may require the purchase and management of containers (distribution and replacement) or bags (specification, security, sales) and potentially retrofitting waste collection trucks.
- 6. Construction and Demolition Debris Reduction Nearly all renovation and construction is driven by market economics which in many cases does not support reuse of building materials. On the demolition side there is often on-site contamination of the materials that render it unusable for a new purpose.
- 7. Recyclables Recovery The current programs for residential single stream recycling, scrap metal recovery, and textiles are well established and functioning on a sustainable basis. Any recycling program in any locality can be improved starting with information and education. Montgomery County hopes to continue or reactivate the tire recycling and the agricultural plastic programs.
- 8. Programs to Develop/Improve Regional Markets for Recyclables A single County that generates approximately 2554 tons of recyclables a year cannot affect global secondary materials markets.
- 9. Organics Recovery The County has monitored the implementation of NYS's law mandating food waste recovery and posts information for generators of the specified threshold volumes. Montgomery County is building an information network among local volunteers, restaurants, farms, or other local food waste generators to connect them to nearby soup kitchens and food pantries.
- 10. Flow Control and Districting The County will continue to evaluate the potential benefits of implementing a local flow control law consistent with the national precedent established by the United States Supreme Court Decision United Haulers v Oneida Herkimer case. The County is not involved with collection therefore the creation of districts would serve no purpose.
- 11. Enforcement Programs Improved enforcement of transfer station procedures would require Montgomery County to create a new position at each transfer station, for which there is no funding at this time.
- 12. Hauler Licensing The County is not involved in roadside waste and recyclables collection therefore hauler licensing would require each municipality to enact a local law or ordinance or enter into a contract with a hauling service.

- 13. Private Sector Management Given the configuration of the current County system coordination and utilization of services by the private sector is beneficial.
- 14. Waste Disposal Options As noted above, the solid waste management system for Montgomery has evolved to a principally private sector operation for the most critical service provided by the County the safe and economic disposal of non-recyclable waste. As part of the County's diligence to insure that the transfer and disposal functions are being done in the most cost effective way a snapshot of the private disposal market will continue to be tracked by the County as future competitive bids are sought for the service. The information below provides the County with several reference points of what they can expect in the landfill disposal market. It should be noted that this is provided only as a reference. Not all the facilities listed accept waste on a merchant basis.

5.2 Reference Landfill Facility Tipping Fees (per ton) 2023

ı	ACILITY	MSW	C&D
1. Private Landfill W	/NY	\$38-\$40	\$38-\$40
2. Private Landfill W	/NY	\$48-\$50	\$48-\$50
3. Private Landfill W	/NY	\$48-\$50	\$48-\$50
4. Private Landfill W	/NY	\$48-\$50	\$48-\$50
5. Private Landfill W	/NY		\$38-\$40
6. Private Landfill W	/NY	\$76	\$76
7. Private Landfill C	NY	\$33	\$33
8. Private Landfill C	NY	\$38-\$40	\$38-\$40
9. Public Landfill W	NY	\$44	\$65
10. Public Landfill NN	IY	\$50	\$50
11. Public Landfill CN	IY	\$75	\$60
12. Public Landfill CN	IY	\$88-\$114	\$88-\$114
13. Public Landfill CN	IY		\$50
14. Public Landfill CN	IY	\$60	\$58
15. Public Landfill EN	Υ	\$104-\$122	\$116-\$135
16. Public Landfill EN	Υ	\$62	\$62

5.3 Technology Options

While current and near-term reliance on waste disposal through a competitive contract with a private or public landfill facility will continue, through the preparation of this plan and future biennial updates the County will evaluate waste processing technologies including those identified below.

- a. Traditional Waste-to-Energy Combustion/Incineration A traditional waste-to-energy (WTE) facility is a solid waste management facility that processes waste through a combustion process. These facilities are sometimes referred to as resource recovery facilities, Municipal Waste Combustors (MWC), or Energy-From-Waste (EFW) facilities. There are approximately 80 of these facilities in operation in North America, 10 of which are in New York State. This technology is extremely effective in reducing the ultimate disposal volume, often times by 80-90 percent. The byproduct of the process is residual "bottom ash" (the portion of ash that is expelled from the furnace) and "fly ash" (the portion of ash that is removed from the flue gas stream). Often times these streams are combined and sent to landfills under a Beneficial Use Determination (BUD) for use as alternative daily cover. Other alternative uses of for WTE ash are being researched and additional options may become available in the future if the state is willing to issue BUDs for alternative uses, which could include using portions of the ash stream as aggregate for road base and/or concrete block/cement production. These facilities are typically net exporters of power, as the steam produced from the combustion process is typically superheated and run through a turbine-generator to produce electrical power. A small number of these facilities sell steam directly to a local end user. Newer technology allows higher efficiency heat recovery from the combustors, increasing energy production potential. If the County initiated the permitting, construction and operation of their own WTE facility within the County, high construction and operations and maintenance costs as well as uncertainty in energy sales revenues, would result in higher disposal costs per ton than landfilling. As an example, the most recent mass burn WTE facility constructed in the United States was the West Palm Renewable Energy Facility in West Palm Beach, FL. It cost \$672 million (\$2015) to construct and processes 3,000 TPD of MSW. Another example is the Durham York Energy Centre located in Ontario, Canada. That facility is designed to process up to 480 TPD and cost approximately \$290 million. At this time, a WTE facility is not a viable option for the County.
- b. Pyrolysis These systems use a vessel which is heated to temperatures of 750°F to 1,650°F, in the absence or near absence of free oxygen. The temperature, pressure, reaction rates, and internal heat transfer rates are used to control pyrolytic reactions in order to produce specific synthetic gas (syngas) products. These syngas products are composed primarily of hydrogen (H₂), carbon monoxide (CO), carbon dioxide (CO₂), and methane (CH₄). The syngas can be used in boilers, gas turbines, or internal combustion engines to generate electricity, or alternatively can be used in the production of chemicals. Some of the volatile components of MSW form tar and oil, and can be removed for reuse as a fuel. The balance of the organic materials that are not volatile, or liquid that is left as a char material, can be further processed or used for its adsorption properties (activated carbon). Inorganic materials form a bottom ash that requires disposal, although it is reported that some pyrolysis ash can be used for manufacturing brick materials. Under typical operations, the ash is landfilled. At this time, pyrolysis of MSW has not been demonstrated to be commercially viable. There are

- no commercially operating MSW pyrolysis facilities in North America. There are 12 commercial facilities in Japan and Germany that process Japanese municipal and industrial waste and are in the size range of 100 to 400 tons per day.
- c. Gasification This is a similar process to pyrolysis, but which requires the partial oxidation of a feedstock to generate syngas. Oxygen must be provided for the reaction, but at a quantity less than is required for complete combustion. The primary syngas products are H₂ and CO with smaller quantities of CH₄ produced at lower temperatures. Similar to pyrolysis, the syngas product may be used for heating, electricity generation, fuel, fertilizers or chemical products, or in fuel cells. Byproduct residues such as slag and ash are produced and require disposal in a landfill. Gasification of MSW have not been demonstrated to be commercially viable in the United States at the time of this report's publication; however, the use of this technology is widespread in Japan. Although the predominant disposal technology used in Japan is traditional mass burn waste-to-energy, there are over one hundred thermal treatment plants utilizing a variety of gasification technologies (direct smelting, thermoselect, plasma arc) with facilities in the size range of 100 to 400 tons per day processing Japanese municipal and industrial wastes. Tipping fees for MSW pyrolysis facilities in North America can be expected to be in the range of \$150 to \$300 per ton.
- d. Mixed Municipal Solid Waste Composting This typically an aerobic composting process that breaks down organic portions of the waste into compost material. Waste is typically collected at the facility as a mixed stream. The process requires intense preand post-processing, treatment and sorting to remove inert materials such as plastic or glass, which diminish the quality of compost products. Some MSW composting facilities may also accept biosolids/sewage sludge. Wastes are typically loaded into a rotating bioreactor drum for two to four days. Screening processes are used to separate unacceptable wastes, which are landfilled as process residue, from the raw compost which is stored in a maturation area for approximately one month to allow biological decomposition to occur. Facilities such as this have a limited track record in the United States. There are a small number of mixed MSW composting facilities in operation in the United States, including one in Delaware County, New York. Typical issues associated with the reliable and cost-effective operation of such facilities include quality of compost, retail/wholesale outlet for compost generated, disposal location for bypass material, and odors. The facility in Delaware County is a mixed MSW composting facility, which has been successful as it relates to their needs. Their facility met the need of extending the life of their current landfill facility due to declining capacity and difficulty in siting a new landfill. This facility allowed the landfill to be operational for another 50 years. The cost of this facility was approximately \$20 million, which includes a rather complex odor control component. The facility became operational in 2007, which serves a rural population of about 47,000 people. This facility handles approximately 100 tons per day of waste materials, consisting of a blend of MSW and biosolids. The mixed MSW composting facility is one part of Delaware County's integrated solid waste management system.

- e. Mechanical/Biological Treatment These systems are similar to mixed MSW composting systems in that intense sorting is required as the first step in the waste treatment process. This is considered the mechanical phase of the treatment, where recyclable and non-organic materials are removed from the waste stream prior to the biological treatment. The biological treatment phase involves the processing of the remaining organic materials using a variety of different methods to produce a variety of different end products. Typically the organic materials are dried and used to produce refuse derived fuel (RDF). RDF can be used in place of fossil fuels. Other conversion processes for the organic fraction of the MSW stream are described in more detail in the following sections. To date, this technology has not been proven to be economically feasible within the United States.
- f. Anaerobic Digestion This is a biological process by which microorganisms digest organic material in the absence of oxygen, producing a solid byproduct (digestate) and a gas (biogas). Anaerobic digestion has been used extensively to stabilize sewage sludge, but is more recently under consideration as a method to process the organic fraction of MSW. In anaerobic digestion, biodegradable material is converted by a series of bacterial groups into methane and CO₂. In a primary step called hydrolysis, a first bacterial group breaks down large organic molecules into small units like sugars. In the acidification process, another group of bacteria converts the resulting smaller molecules into volatile fatty acids, mainly acetate, but also H₂ and CO₂. A third group of bacteria, the methane producers, or methanogens, produce a medium-Btu biogas consisting of 50-70% methane, as well as CO₂. This biogas can be collected and used for a variety of purposes including electricity production or converted to high BTU natural gas. Anaerobic digestion facilities are used extensively for the treatment of agricultural, wastewater sludge and organic wastes such as food wastes. Mixed MSW anaerobic digestion facilities are more common in foreign countries. Specific to the United States, few mixed MSW anaerobic digestion facilities exist, as the technology has not proven economically feasible.
- g. Fermentation This is an anaerobic biological process through which microorganisms metabolize sugars and produce alcohols as a byproduct. In addition to producing such alcohols as beer and wine for consumption, fermentation can be used to produce such fuel liquids as ethanol and other chemicals. Cellulosic feedstocks, including the majority of the organic fraction of MSW, must first undergo hydrolysis to break down cellulose and hemicelluloses to simple sugars that can be metabolized by the yeast and bacteria for the fermentation process. MSW must first be processed through a MRF to separate, shred, and dry the cellulosic fraction.
- h. Ethanol Production When this is done for MSW it requires an intensive sorting process as the first processing step. All recyclable and inert materials must be removed to produce an organic waste stream for ethanol production. This material is then chopped, fluffed, and fed into a hydrolysis reactor. The effluent of this reactor is mostly a sugar solution, which is prepared for fermentation. This solution is detoxified and introduced

to a fermenter, in which microorganisms convert the sugar to ethanol and CO₂. Next, the solution is introduced into an energy-intensive process that combines distillation and dehydration to bring the ethanol concentration up to fuel grade (99%) ethanol. A solid residue of unfermented solids and microbial biomass is recovered through the anaerobic digestion process, and its marketability as a compost material depends on the purity of feedstock as well as its visual quality. Solid residues can be burned or gasified if alternative methods of reuse are not feasible. Various pilot scale facilities are operating in the United States and Europe, but many have reverted to more homogeneous feedstocks such as wastewater treatment sludge and food processing wastes, because obtaining the homogeneous input stream from mixed MSW has proven difficult.

6.0 IMPLEMENTATION PLAN & SCHEDULE [366-2.6]

	Program Alternative	Proposed Action	Target Schedule
1.	Waste Prevention	Provide local municipalities and private haulers information on waste reduction through the County website and links to the DEC website. Encourage municipalities and private haulers to adopt user fee for collection and disposal thereby encouraging reduction and recycling. Through the County website and links to the DEC website encourage waste reduction at schools, businesses and industries.	2024-2025
2.	Data Collection	Provide a link on the County website to this LSWMP and all subsequent biennial updates	2025-2026
3.	Re-Use Programs	Provide information on the County website for any reuse businesses	
4.	Education and Outreach	The County will continue to utilize the County website as the principal means of communication to the public	Ongoing
5.	Incentive Based Pricing	Continue to operate the transfer stations with the tipping fees based on the weight/volume of the waste material delivered Provide on the County website a list of advantages and disadvantages of PAYT programs and links to websites for municipalities that have experience with various PAYT based services.	2024
6.	Construction and Demolition Debris Reduction	Provide information and links on the County website	2026
7.	Recyclables Recovery	Provide detailed instructions on single stream recyclables on the County website. Support the Soil and Water Conservation District tire recovery program Work to restore the establishment of an agriculture plastics recycling program Review recyclables separation and recovery at all County facilities Place textile drop boxes at selected County facilities Establish goals to increase participation in recycling and increasing the total recovery of recyclables	Ongoing
8.	Develop/Improve Regional Markets	The County has no ability to affect global markets	
9.	Organics Recovery	Through the County website publish information to connect food waste generators with local volunteers, restaurants, farms, food pantries. Explore working with the FULMONT Community Action program	2025
10.	Special Waste Management	Continue to hold HHW collection programs on a biennial basis. Explore funding for electronics collection and recovery.	Ongoing
11.	Flow Control and Districting	The configuration of the County system which extensively utilizes private contracts and private facilities for collection, transportation, recyclables recovery, and disposal of non-recyclable waste does not at this time require the enactment of flow control or districting.	No Action
12.	Enforcement Programs	Continue to enforce separation of single stream recyclables and operations requirements at the County transfer stations	Ongoing
13.	Hauler Licensing	Local municipal responsibility	
14.	Private Sector Management	Continue current public private partnerships for transfer stations operation, waste and recyclables transfer, waste disposal and processing of recyclables.	Ongoing
15.	Technology Options	Continue to track the viability of alternative waste processing and disposal technologies.	Ongoing
16.	Waste Disposal Options	Continue to utilize State permitted 6NYCRR Part 360 compliant landfill disposal facility which presents the lowest cost option. Continue to track the viability of other technologies for managing MSW Continue to track and support technical evaluations by the local wastewater treatment facilities operators working to develop improved technologies.	2024-2033

7.0 WASTE STREAM PROJECTIONS [366-2.7]

These projections are an assessment of data developed in the previous chapters. Montgomery County used the NYSDEC Population and Municipal Solid Waste Composition Calculator and C&D Debris Waste Composition Calculator to generate these projections. Montgomery County has established projections through 2035 for municipal solid waste, C&D debris, non-hazardous industrial materials, and biosolids. The calculator is included in Attachments #1 - #13.

MSW

Using the above referenced tools, the total MSW volume is expected to decrease over the next 12 years (from 51,028 tons in 2023 to 44,927 tons in 2035). With respect to diversion, it is estimated to go from 3,055 tons in 2023 to 6,874 tons in 2035.

C&D Debris

In 2023, Montgomery County hauled 1,044.00 tons of construction and demolition debris for disposal. In 2035 Montgomery County is projected to lower that number to 953 tons.

Non-hazardous Industrial Waste

Commercial and manufacturing enterprises within Montgomery County produced an estimated 1,162.25 tons of non-hazardous industrial waste in 2023. According to the 2023 Annual Reports, 1115.80 tons were sent to Seneca Meadows Landfill and 46.25 tons were sent to the Colonie Landfill. Montgomery County is aiming to reduce the total amount of non-hazardous industrial material by 2% over each year. In 2034, Montgomery County is projected to divert at least 30% of its non-hazardous industrial waste.

Biosolids

Wastewater Treatment Plants (WWTP's) in Amsterdam, Canajoharie, Fonda and Nelliston collectively generated 3,007.52 tons of biosolids in 2023. According to the 2023 NYSDEC annual reports, 3000.20 tons of biosolids were disposed of at Seneca Meadows landfill, and 7.32 tons were sent to the Colonie Landfill. By 2033 Montgomery is aiming at decreasing the tonnage of biosolids by 5% during the 10-year plan.

8.0 PUBLIC PARTICIPATION

The County will establish the required 45 day public comment period including the required notice in the County's official publication. Within that period a publicly noticed public meeting on the draft LSWMP will be held. A public participation summary will be included in the final draft of this plan including a responsiveness summary for the public comments on the plan.



Attachment #1
Planning Unit & Planning Period

Planning Unit and Planning Period

Please, select from the drop-down list the name of your **planning unit** and the **planning period** of your **LSWMP**. Be aware that a LSWMP must be developed for a **10-year period**, and that your selection will be replicated on each one of the following tabs.

Planning Unit	Montgomery County
Planning Period	2024-2033

Attachment #2
Summary of Waste Types & Disposition

Summary of Waste Types & Disposition

In order to project how the amount of waste generated in the planning unit will change over time, data regarding the current amount of waste generated by the planning unit in the current year (Tons/yr), or this can be the estimated daily quantity of waste generated per person in the planning unit (Ib/person/day). If both the total annual generation and the estimated generation rate per person are unknown, the state average for MSW generation rate can be used along with the planning unit's population to estimate the total amount of waste generated in the planning unit.

For this step, select **one** of the options that describes the known information about the planning unit. Enter the waste generated in Tons (MSW disposed & Recycled Materials) or the waste generation rate in lb/person/day) in the purple cell. If no data on the waste generated in the planning unit is available, choose the corresponding option from the list. The calculator will estimate the total amount of waste generated based on the state's average generation rate and the planning unit's population.

Montgomery County

I know the amount of MSW generated (Tons/year): Enter tons disposed here: 47.973	the planning unit will be based on what is known. If the MSW generation amount and the generation rate are unknown, the state average for MSW generation	The amount of waste generated (by all residents, institutions, etc.) in the planning unit will be based on what is known. If the MSW generation amount rate will be used.
	Enter tons disposed here: 47,973	I know the amount of MSW generated (Tons/year):
The planning unit Average MSW Generation Rate (lb/person/day) is:	/day) is:	The planning unit Average MSW Generation Rate (lb/person/day) is:
The amount of MSW Generated and the planning unit Average MSW Generation Rate are unknown.	ige MSW Generation Rate are unknown. Enter tons diverted here: 3,055	The amount of MSW Generated and the planning unit Average MSW Generation Rate are unknown.

Attachment #3
Waste Generation Rate

Waste Generation Rate

This tab will provide you with population projections and MSW generation projections for the planning period you had previously selected. It is recognized that Municipal Solid Waste (MSW) generation is reliant on population changes, hence, it is necessary to project both and identify their correlation.

purple cell enter the total tons of MSW that was disposed in the year immediately before your plan period starts. For example: If the plan period is 2016-2026, the MSW disposed data should be from 2015.

Population Projection:

Calculations are determined by a linear regression based on the latest census population data and an annual growth rate percentage specific to the planning unit. If it is anticipated that the population is going to decrease overtime, the minus sign (-) will be used.

MSW Generation Projection

The MSW generation rate (Lb/person/day) calculated on the previous tab from the Waste Generation Rate will serve as a start point for the planning period. On the calculator, three options are considered to anticipate the MSW generation over time, and one must be selected according to the goals of the planning unit:

First Option:

MSW generation rate does not change. Consequently, MSW generation fluctuates with the population of the planning unit. If the population increases, waste generation will rise as well, and vice versa. By selecting this option, the planning unit is in "status quo", meaning that is not making any improvements, and consequently is getting far from reaching the State's goal by 2030.

Second Option:

MSW generation amount remains the same, regardless of whether or not the planning unit's population changes.

Third Option:

As a result of successfully implementing the Local Solid Waste Management Plan, MSW generation will be reduced by an annual factor of ...

An Annual Factor of Reduction (%) should be calculated, defined, and selected by the planning unit. This factor will be the numerical representation of one of the planning unit's goals for the planning period. Once calculated, the Annual Factor of Reduction can be chosen from the drop down list provided.

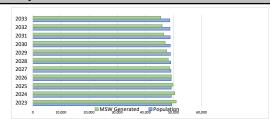
Note:

• The graphic will display the Population and MSW Generation projections over the selected planning period. It has been designed to visualize the contrast of the final outcomes, based on the selections of each planning unit

Montgomery County

2024-2033

Current Data	
2020 Population Census	49,532
2023 Population	49,329
2023 MSW Generated (Tons/yr)	51,028
2023 MSW generation rate (Lb/person/day)	5.33
2023 MSW Disposed (Tons/yr)	47,973
2023 MSW Diverted (Tons/yr)	3,055



Annual rate of population	growth	-0.14%

ı						Popula	tion Pro	jection					
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	49,329	49,262	49,194	49,127	49,060	48,993	48,925	48,859	48,792	48,725	48,658	48,592	48,525

Forecasting future conditions... What do you expect to happen to the MSW generation rate over the next 10 year period plan?

- MSW generation rate does not change. Consequently, MSW generation fluctuates with the population of the planning unit, if the population increases, waste generation will rise as well, and vice versa.
- MSW generation amount remains the same, regardless of whether or not the planning unit's population fluctuates.

As a result of successfully implementing the Local Solid Waste Management Plan, MSW generation will be reduced by an annual factor of ...

Reduction Factor (per year) 1.0%

MSW generation rate	5.66
(Lb/person/day)	0.00

				n	Projectio	eration I	ISW Gen	N				
23 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035												
5.02	5.07	5.12	5.17	5.22	5.27	5.33	5.38	5.44	5.49	5.55	5.60	5.66
44,417	225 48,666 48,113 47,567 47,027 46,493 45,965 45,443 44,927 44,417										50,362	50,940

Attachment #4
Population & MSW Projections

Population and MSW Projections

The next step is to <u>Identify the Materials Composition of the Waste Stream</u> based on population density, and demographic characteristics of the Planning Unit.

This tab will provide the PU with a more detailed estimate of the materials present in the waste stream, which could be crucial when prioritizing the initiatives and programs of the LSWMP.

The population density distribution has been calculated based on the 2010 Census data and will be auto populated when a planning unit is selected. The following parameters were used:

- · Rural: <325 persons/mi²
- · Suburban: >325 and <5,000 persons/mi²
- · Urban: >5,000 persons/mi²

Under **Density Population Distribution**, the user has the option to modify the percentage values for the **Sector** (Residential and Commercial/Institutional) based on land use and specific characteristics of each planning unit. For example: A rural population in Westchester County could be 64% Residential and 36% Commercial / Institutional, while in Wyoming County might be 50% Residential and 50% Commercial / Institutional.

The results are presented on the last right column under MSW Materials Composition. Be aware of color changes on the cells, whenever a category represents over 15% of the total waste generation, the cell will turn red to easily identify key categories of the waste stream. It will also facilitate the selection of initiatives, programs, and infrastructure for the solid waste management system.

Note: If no data exists, use the pre-populated information in the worksheet.

Montgomery County

2024-2033

Materials

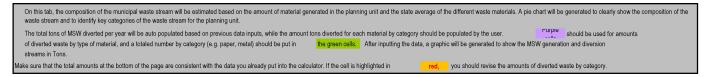
				Rural			Suburban			Urban	
ļ	Density Populat	tion Distribution		38.78%			61.22%			0.00%	
ļ	Delisity Fopular	uon Distribution	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combine
ļ			58.00%	42.00%	100.00%	55.00%	45.00%	100.00%	58.00%	42.00%	100.009
Material O O O D D D D D D D D D D D D D D D D	Newspaper		5.20%	1.90%	3.81%	5.00%	1.90%	3.61%	6.60%	2.00%	4.67
	Corrugated Cardboard		6.60%	13.90%	9.67%	6.60%	13.90%	9.89%	6.90%	13.70%	9.76
		Paperboard	3.20%	1.10%	2.32%	3.30%	1.00%	2.27%	3.60%	0.90%	2.47
		Office Paper Junk Mail	0.80% 3.00%	3.80% 0.70%	2.06% 2.03%	0.90% 3.20%	4.20% 0.70%	2.39%	1.10% 3.50%	5.80% 0.70%	3.07 2.32
		Other Commercial Printing	1.70%	2.30%	1.95%	1.70%	2.40%	2.00%	2.30%	2.60%	2.43
	Other Recyclable Paper	Magazines	1.10%	0.90%	1.02%	1.00%	0.80%	0.91%	1.10%	1.00%	1.0
		Books	0.50%	0.30%	0.42%	0.50%	0.30%	0.41%	0.60%	0.40%	0.5
		Paper Bags Phone Books	0.50%	0.20%	0.37%	0.50%	0.20%	0.37%	0.60%	0.20%	0.4
		Poly-Coated	0.20%	0.30%	0.24%	0.20%	0.20%	0.20%	0.30%	0.20%	0.2
	Other Recyclable Paper (Total)		11.30%	9.90%	10.71%	11.60%	10.10%	10.93%	13.40%	12.00%	12.8
	Other Compostable Paper		6.80%	6.80%	6.80%	6.40%	6.40%	6.40%	6.80%	6.80%	6.8
		Paper	29.90%	32.50%	30.99%	29.60%	32.30%	30.82%	33.70%	34.50%	34.04
Oth Ferrican Oth Oth Oth Oth Oth Oth Oth Oth	Ferrous/Aluminum	Ferrous Containers	1.90%	1.00%	1.52%	1.20%	0.70%	0.98%	1.40%	0.70%	1.1
	Containers	Aluminum Containers	0.70%	0.40%	0.57%	0.60%	0.30%	0.47%	0.50%	0.40%	0.4
	Ferrous/Aluminum Containers		2.60%	1.40%	2.10%	1.80%	1.00%	1.44%	1.90%	1.10%	1.5
	Other Ferrous Metals		5.20%	5.40%	5.28%	5.00%	5.80%	5.36%	3.30%	3.70%	3.4
		Other aluminum	0.20%	0.30%	0.24%	0.20%	0.30%	0.25%	0.20%	0.30%	0.2
(Other Non-Ferrous Metals	Automotive batteries	0.80%	0.50%	0.67%	0.70%	0.40%	0.57%	0.20%	0.20%	0.2
	Other New Francis Metals (Feb	Other non-aluminum	0.50%	0.30%	0.42%	0.30%	0.40%	0.35%	0.40%	0.20%	0.3
	Other Non-Ferrous Metals (Tot		1.50%	1.10%	1.33%	1.20%	1.10%	1.16%	0.80%	0.70%	0.7
	PET Containers	Metals	9.30%	7.90%	8.71%	8.00%	7.90%	7.96%	6.00%	5.50%	5.79
	HDPE Containers		1.10%	0.80%	0.97%	0.90%	0.80%	0.86%	1.20%	1.00%	1.1
			1.10%	0.60%	0.89%	0.90%	0.70%	0.81%	1.00%	0.70%	0.8
	Other Plastic (3-7) Containers		0.20%	0.10%	0.16%	0.20%	0.20%	0.20%	0.20%	0.20%	0.2
_	Film Plastic	Т	5.70%	5.90%	5.78%	5.50%	5.80%	5.64%	5.80%	5.80%	5.8
	Other Plastic	Durables Non-Durables	3.10% 1.60%	3.20% 1.80%	3.14% 1.68%	3.00% 1.60%	3.20% 1.80%	3.09% 1.69%	3.20% 1.80%	3.30% 1.90%	3.2
		Packaging	1.40%	1.10%	1.27%	1.40%	1.10%	1.27%	1.50%	1.10%	1.3
	Other Plastic (Total)		6.10%	6.10%	6.10%	6.00%	6.10%	6.05%	6.50%	6.30%	6.4
	Total F	Plastics	14.20%	13.50%	13.91%	13.50%	13.60%	13.55%	14.70%	14.00%	14.41
	Glass Bottles, Jars and Contai	iners	4.10%	3.80%	3.97%	3.90%	3.80%	3.86%	4.30%	3.80%	4.0
			4.10% 0.50%	3.80% 0.40%	3.97% 0.46%	3.90% 0.30%	3.80% 0.40%	3.86% 0.35%	4.30% 0.40%	3.80% 0.40%	
	Other Glass (Flat glass, dishw										0.4
	Other Glass (Flat glass, dishw	are, light bulbs, etc.)	0.50%	0.40%	0.46%	0.30%	0.40%	0.35%	0.40%	0.40%	0.4 4.49 %
	Other Glass (Flat glass, dishw	are, light bulbs, etc.) Glass	0.50% 4.60%	0.40% 4.20%	0.46% 4.43%	0.30% 4.20%	0.40% 4.20%	0.35% 4.20%	0.40% 4.70%	0.40% 4.20%	0.4 4.49% 20.5
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning an	are, light bulbs, etc.) Glass	0.50% 4.60% 12.70%	0.40% 4.20% 13.30%	0.46% 4.43% 12.95%	0.30% 4.20% 12.90%	0.40% 4.20% 15.50%	0.35% 4.20% 14.07%	0.40% 4.70% 17.20%	0.40% 4.20% 25.20%	0.4 4.49% 20.5
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning an	are, light bulbs, etc.) Glass nd Trimmings rganics	0.50% 4.60% 12.70% 3.10%	0.40% 4.20% 13.30% 1.10%	0.46% 4.43% 12.95% 2.26%	0.30% 4.20% 12.90% 11.30%	0.40% 4.20% 15.50% 9.10%	0.35% 4.20% 14.07% 10.31%	0.40% 4.70% 17.20% 4.20%	0.40% 4.20% 25.20% 1.50%	4.0 0.4 4.49% 20.5 3.0 23.63
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning ar Total O	are, light bulbs, etc.) Glass nd Trimmings rganics	0.50% 4.60% 12.70% 3.10% 15.80%	0.40% 4.20% 13.30% 1.10% 14.40%	0.46% 4.43% 12.95% 2.26% 15.21%	0.30% 4.20% 12.90% 11.30% 24.20%	0.40% 4.20% 15.50% 9.10% 24.60%	0.35% 4.20% 14.07% 10.31% 24.38%	0.40% 4.70% 17.20% 4.20% 21.40%	0.40% 4.20% 25.20% 1.50% 26.70%	0.4 4.49% 20.5 3.0 23.63
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning ar Total O Clothing Footwear, Towels, Sh Carpet	are, light bulbs, etc.) Glass nd Trimmings rganics	0.50% 4.60% 12.70% 3.10% 15.80% 4.60%	0.40% 4.20% 13.30% 1.10% 14.40% 3.00%	0.46% 4.43% 12.95% 2.26% 15.21% 3.93%	0.30% 4.20% 12.90% 11.30% 24.20% 4.40%	0.40% 4.20% 15.50% 9.10% 24.60% 3.20%	0.35% 4.20% 14.07% 10.31% 24.38% 3.86%	0.40% 4.70% 17.20% 4.20% 21.40% 4.80%	0.40% 4.20% 25.20% 1.50% 26.70% 2.50%	0.4 4.49% 20.5 3.0 23.63 3.8 1.3
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning ar Total O Ciothing Footwear, Towels, Sh Carpet Total 1 Total	are, light bulbs, etc.) Glass and Trimmings reganics eets Vood	0.50% 4.60% 12.70% 3.10% 15.80% 4.60% 1.40%	0.40% 4.20% 13.30% 1.10% 14.40% 3.00% 1.30%	0.46% 4.43% 12.95% 2.26% 15.21% 3.93% 1.36%	0.30% 4.20% 12.90% 11.30% 24.20% 4.40% 1.70%	0.40% 4.20% 15.50% 9.10% 24.60% 3.20% 1.40%	0.35% 4.20% 14.07% 10.31% 24.38% 3.86% 1.57%	0.40% 4.70% 17.20% 4.20% 21.40% 4.80% 1.70%	0.40% 4.20% 25.20% 1.50% 26.70% 2.50% 0.90%	0.4 4.49% 20.5 3.0 23.63 3.8 1.3 5.20
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning ar Total O Ciothing Footwear, Towels, Sh Carpet Total 1 Total	are, light bulbs, etc.) Glass and Trimmings Irganics Pextiles Wood and non-adulterated wood)	0.50% 4.60% 12.70% 3.10% 15.80% 4.60% 6.00%	0.40% 4.20% 13.30% 1.10% 14.40% 3.00% 4.30%	0.46% 4.43% 12.95% 2.26% 15.21% 3.93% 1.36% 5.29%	0.30% 4.20% 12.90% 11.30% 24.20% 4.40% 6.10%	0.40% 4.20% 15.50% 9.10% 24.60% 3.20% 1.40%	0.35% 4.20% 14.07% 10.31% 24.38% 3.86% 1.57% 5.43%	0.40% 4.70% 17.20% 4.20% 21.40% 4.80% 1.70% 6.50%	0.40% 4.20% 25.20% 1.50% 26.70% 2.50% 0.90% 3.40%	0.4 4.49% 20.5 3.0 23.63
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning ar Total O Clothing Footwear, Towels, Sh Carpet Total 7 Total (Pallets, crates, adulterated	are, light bulbs, etc.) Glass and Trimmings Irganics Pextiles Wood and non-adulterated wood)	0.50% 4.60% 12.70% 3.10% 15.80% 4.60% 4.60% 4.40%	0.40% 4.20% 13.30% 1.10% 14.40% 3.00% 1.30% 4.30% 9.00%	0.46% 4.43% 12.95% 2.26% 15.21% 3.93% 1.36% 5.29% 6.16%	0.30% 4.20% 12.90% 11.30% 24.20% 4.40% 1.70% 6.10% 2.90%	0.40% 4.20% 15.50% 9.10% 24.60% 1.40% 4.60% 4.10%	0.35% 4.20% 14.07% 10.31% 24.38% 3.86% 1.57% 5.43% 3.44%	0.40% 4.70% 17.20% 4.20% 21.40% 4.80% 1.70% 6.50% 2.00%	0.40% 4.20% 25.20% 1.50% 26.70% 2.50% 0.90% 3.40% 3.50%	0.4 4.49% 20.5 3.0 23.63 3.8 1.3 5.20 2.63
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning ar Total O Clothing Footwear, Towels, Sh Carpet Total 1 [Pallets, crates, adulterated DIY - Construction & Renovation	are, light bulbs, etc.) Glass and Trimmings Irganics Pextiles Wood and non-adulterated wood)	0.50% 4.60% 12.70% 3.10% 15.80% 4.60% 4.40% 6.00% 4.10% 8.00%	0.40% 4.20% 13.30% 1.10% 14.40% 3.00% 1.30% 4.30% 9.00% 7.60%	0.46% 4.43% 12.95% 2.26% 15.21% 3.93% 1.36% 5.29% 6.16% 7.83%	0.30% 4.20% 12.90% 11.30% 24.20% 4.40% 1.70% 6.10% 2.90% 3.80%	0.40% 4.20% 15.50% 9.10% 24.60% 3.20% 1.40% 4.60% 4.10% 2.70%	0.35% 4.20% 14.07% 10.31% 24.38% 3.86% 1.57% 5.43% 3.44% 3.31%	0.40% 4.70% 17.20% 4.20% 21.40% 4.80% 1.70% 6.50% 2.00% 4.40%	0.40% 4.20% 25.20% 1.50% 26.70% 2.50% 0.90% 3.40% 3.50% 3.80%	0.4.49% 20.3 3.63 3.8 1.3 5.20 2.63 4.1
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning ar Total O Clothing Footwear, Towels, Sh Carpet Total 1 [Pallets, crates, adulterated DIY - Construction & Renovation Diapers	are, light bulbs, etc.) Glass and Trimmings Irganics Pextiles Wood and non-adulterated wood)	0.50% 4.60% 12.70% 3.10% 15.80% 4.60% 4.60% 4.00% 4.10% 8.00% 1.90%	0.40% 4.20% 13.30% 1.10% 14.40% 3.00% 4.30% 4.30% 9.00% 7.60% 1.10%	0.46% 4.43% 12.95% 2.26% 15.21% 3.93% 1.36% 5.29% 6.16% 7.83% 1.56%	0.30% 4.20% 12.90% 11.30% 24.20% 4.40% 6.10% 6.2.90% 3.80% 2.10%	0.40% 4.20% 15.50% 9.10% 24.60% 3.20% 1.40% 4.60% 4.10% 2.70% 1.20%	0.35% 4.20% 14.07% 10.31% 24.38% 3.86% 1.57% 5.43% 3.44% 3.31% 1.70%	0.40% 4.70% 17.20% 4.20% 4.20% 4.80% 1.70% 6.50% 2.00% 4.40% 2.30%	0.40% 4.20% 25.20% 1.50% 26.70% 2.50% 0.90% 3.40% 3.50% 3.80% 1.10%	0.4 4.49% 20.3 3.6 3.6 3.6 5.20 2.63 4.1 1.8
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning ar Total O Clothing Footwear, Towels, Sh Carpet Total 7 [Pallets, crates, adulterated DIY - Construction & Renovation Diapers Electronics	are, light bulbs, etc.) Glass and Trimmings Irganics Pextiles Wood and non-adulterated wood)	0.50% 4.60% 12.70% 3.10% 15.80% 4.60% 4.60% 4.00% 4.10% 8.00% 1.90%	0.40% 4.20% 13.30% 1.10% 14.40% 3.00% 4.30% 4.30% 9.00% 7.60% 1.10%	0.46% 4.43% 12.95% 2.26% 15.21% 3.93% 1.36% 5.29% 6.16% 7.83% 1.56% 1.34%	0.30% 4.20% 112.90% 113.00% 24.20% 4.40% 6.10% 6.10% 2.90% 3.80% 1.60%	0.40% 4.20% 15.50% 9.10% 24.60% 3.20% 1.40% 4.60% 4.10% 2.70% 1.20%	0.35% 4.20% 14.07% 10.31% 24.38% 3.86% 1.57% 5.43% 3.44% 1.70% 1.65%	0.40% 4.70% 17.20% 4.20% 21.40% 4.80% 6.50% 2.00% 4.40% 2.30% 1.30%	0.40% 4.20% 2.5.20% 1.50% 2.6.70% 2.50% 3.40% 3.40% 3.50% 1.10% 1.30%	0.4 4.49% 20.3 3.6 3.6 3.6 5.20 2.63 4.1 1.8 1.3
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning an Total O Clothing Footwear, Towels, Sh Carpet Total 1 (Pallets, crates, adulterated DIY - Construction & Renovation Diapers Electronics Tires HHW	are, light bulbs, etc.) Glass and Trimmings Irganics Pextiles Wood and non-adulterated wood)	0.50% 4.60% 12.70% 3.10% 4.60% 15.80% 4.60% 4.40% 6.00% 4.10% 1.90% 1.90% 1.90% 6.00%	0.40% 4.20% 13.30% 1.10% 4.4.40% 3.00% 1.30% 4.30% 4.30% 4.30% 4.30% 1.00% 1.10% 1.10% 1.80% 0.00%	0.46% 4.43% 12.95% 2.26% 15.21% 3.93% 1.36% 5.29% 6.16% 1.56% 1.34% 1.80% 0.35%	0.30% 4.20% 12.90% 11.30% 24.20% 4.40% 1.70% 6.10% 2.90% 2.10% 1.60% 1.70%	0.40% 4.20% 15.50% 9.10% 24.60% 3.20% 1.40% 4.60% 4.10% 4.10% 1.20% 1.20% 1.40%	0.35% 4.20% 14.07% 10.31% 24.38% 3.86% 1.57% 5.43% 3.44% 3.31% 1.70% 1.55% 0.33%	0.40% 4.70% 17.20% 4.20% 4.20% 4.80% 1.70% 6.50% 6.50% 2.00% 1.30% 0.50% 0.50%	0.40% 4.20% 25.20% 1.50% 26.70% 0.90% 3.40% 3.50% 3.10% 1.10% 1.30% 0.40% 0.00%	0.4 4.49% 20.5 3.6 23.63 3.8 5.20 2.63 4.1 1.8 1.3 0.4
	Other Glass (Flat glass, dishw Total Food Scraps Leaves and Grass / Pruning at Total O Clothing Footwear, Towels, Sh Carpet Total 7 [Pallets, crates, adulterated DIY - Construction & Renovation Diapers Electronics Tires	are, light bulbs, etc.) Glass and Trimmings Irganics Heets Wood I and non-adulterated wood) In Materials	0.55% 4.60% 12.70% 3.10% 15.80% 4.66% 4.00% 4.00% 4.10% 8.00% 1.30% 1.30%	0.40% 4.20% 13.30% 1.10% 14.40% 3.00% 4.30% 4.30% 7.60% 1.10% 1.40%	0.46% 4.43% 12.95% 2.26% 15.21% 3.93% 1.36% 5.29% 6.16% 7.83% 1.56% 1.34%	0.30% 4.20% 12.90% 11.30% 24.20% 4.40% 4.70% 6.10% 2.90% 3.80% 2.10% 1.60% 1.70%	0.40% 4.20% 115.50% 9.10% 24.60% 3.20% 1.40% 4.60% 4.10% 1.20% 1.70% 1.40%	0.35% 4.20% 14.07% 10.31% 24.38% 3.86% 1.57% 5.43% 3.44% 1.70% 1.65% 1.57%	0.40% 4.70% 17.20% 4.20% 4.20% 4.80% 1.70% 6.50% 4.40% 2.30% 1.30% 0.50%	0.40% 4.20% 2.5.20% 1.50% 2.6.70% 2.50% 3.40% 3.50% 3.10% 1.10% 4.30% 4.40%	0.4 4.49% 20.5 3.6 23.63 3.8 5.20 2.63 4.1 1.8 1.3

	Composition (%)
	100.00%
	3.69%
	9.80%
]	2.29%
	2.26%
ł	2.06% 1.99%
1	0.95%
	0.41%
1	0.37% 0.30%
1	0.22%
	10.84%
	6.56%
	30.88%
-	1.19%
ł	0.51%
	1.69%
4	5.33% 0.24%
1	0.24%
1	0.37%
	1.22%
	8.25%
	0.90%
	0.84%
	0.18%
	5.69%
]	3.11%
-	1.69% 1.27%
	6.07%
	13.68%
	3.90%
	0.39%
	4.29%
	13.64%
	7.19%
	20.82%
	3.89%
	1.48%
	5.37%
	4.49%
	5.06%
	1.64%
	1.53%
	1.66%
-	0.34%
1	1.66%
1	12.20%

Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
-------	---------	---------	---------	---------	---------	---------	---------	---------	---------

Attachment #5
Population Distribution

Population Distribution

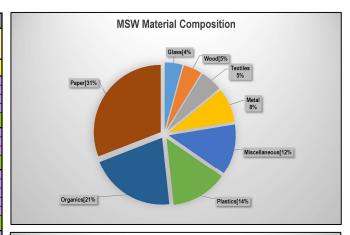


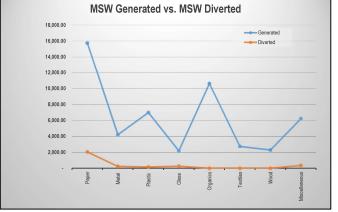
3,055.29

Montgomery County

2024-2033

			2023	
		MSW Materials Composition (%)	MSW Generated (Tons)	MSW Diverted (Tons)
	Material	100.0%	51,028	3,055.29
	Newspaper	3.7%	1,881	600.11
<u>_</u>	Corrugated Cardboard	9.8%	5,001	667.11
Paper	Other Recyclable Paper (Total)	10.8%	5,533	778.87
eg.	Other Compostable Paper	6.6%	3,345	0.00
	Total Paper	30.9%	15,759	2,046.09
	Ferrous/Aluminum Containers (Total)	1.7%	865	68.95
<u> </u>	Other Ferrous Metals	5.3%	2,720	166.06
Metal	Other Non-Ferrous Metals (Total)	1.2%	624	2.55
_	Total Metals	8.2%	4,209	237.56
	PET Containers	0.9%	460	74.06
	HDPE Containers	0.8%	429	71.50
i S	Other Plastic (3-7) Containers	0.2%	94	12.77
Plastic	Film Plastic	5.7%	2,905	0.00
□	Other Plastic (Total)	6.1%	3,096	0.00
	Total Plastics	13.7%	6,983	158.33
- (0	Glass Bottles, Jars and Containers	3.9%	1,991	255.37
388	Other Glass (Flat glass, dishware, light bulbs, etc.)	0.4%	198	0.00
Glass	Total Glass	4.3%	2,189	255.37
ਲ	Food Scraps	13.6%	6,958	0.00
<u>:</u>	Leaves and Grass / Pruning and Trimmings	7.2%	3,668	0.00
Textiles Organics	Total Organics	20.8%	10,626	0.00
SS	Clothing Footwear, Towels, Sheets	3.9%	1,983	1.27
⊫	Carpet	1.5%	758	0.00
Tex	Total Textiles	5.4%	2,741	1.27
Wood	Total Wood (Pallets, crates, adulterated and non-adulterated wood)	4.5%	2,293	0.00
	DIY Construction & Renovation Materials	5.1%	2,582	0.00
<u>S</u>	Diapers	1.6%	839	0.00
Miscellaneous	Electronics	1.5%	779	55.89
ane	Tires	1.7%	845	293.26
₩	HHW	0.3%	172	7.53
SC	Soils and Fines	0.3%	164	0.00
Ξ	Other Composite Materials - Durable and/or inert	1.7%	845	0.00
	Total Miscellaneous	12.2%	6,227	356.68





Attachment #6
Detailed MSW Composition

Detailed MSW Composition Analysis

This tab will be used to create goals for the amount of material the planning unit will divert for each year of the planning period. These goals will be entered as percentages, based on how much of the material generated will be diverted for recycling or heneficial use

The diversion goal percentages will be entered in the purple cells for each material and each year of the planning period.

Montgomery County

2024-2033

Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected MSW Generation (Tons/yr)	50,940	50,362	49,790	49,225	48,666	48,113	47,567	47,027	46,493	45,965	00,000	00,000
MSW Diverted (Tons/yr)	3,370	3,709	4,027	4,272	4,496	4,694	4,888	5,076	5,290	5,499	5,703	5,997

				2023		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
		MSW Materials Composition (%)	MSW Generated (Tons)	MSW Diverted (Tons)	% MSW Diverted	% MSW Diverted											
	Material	100.0%	51,028	3,055	6.0%	6.6%	7.4%	8.1%	8.7%	9.2%	9.8%	10.3%	10.8%	11.4%	12.0%	12.6%	13.3%
	Newspaper	3.7%	1,881	600	31.9%	32.9%	33.9%	34.9%	35.9%	36.9%	37.9%	38.9%	39.9%	40.9%	41.9%	42.9%	43.9%
<u></u>	Corrugated Cardboard	9.8%	5,001	667	13.3%	14.3%	15.3%	16.3%	17.3%	18.3%	19.3%	20.3%	21.3%	22.3%	23.3%	24.3%	25.3%
Paper	Other Recyclable Paper (Total)	10.8%	5,533	779	14.1%	15.1%	16.1%	17.1%	18.1%	19.1%	20.1%	21.1%	22.1%	23.1%	24.1%	25.1%	26.1%
<u>~</u>	Other Compostable Paper	6.6%	3,345	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	2.0%	3.0%	4.0%
	Total Paper	30.9%	15,759	2,046	13.0%	13.8%	14.6%	15.3%	16.1%	16.9%	17.6%	18.3%	19.0%	19.9%	20.8%	21.7%	22.6%
	Ferrous/Aluminum Containers (Total)	1.7%	865	69	8.0%	9.0%	10.0%	11.0%	12.0%	13.0%	14.0%	15.0%	16.0%	17.0%	18.0%	19.0%	20.0%
重	Other Ferrous Metals	5.3%	2,720	166	6.1%	7.1%	8.1%	9.1%	10.1%	11.1%	12.1%	13.1%	14.1%	15.1%	16.1%	17.1%	18.1%
Metal	Other Non-Ferrous Metals (Total)	1.2%	624	3	0.4%	1.4%	2.4%	3.4%	4.4%	5.4%	6.4%	7.4%	8.4%	9.4%	10.4%	11.4%	12.4%
	Total Metals	8.2%	4,209	238	5.6%	6.6%	7.6%	8.6%	9.6%	10.6%	11.4%	12.2%	13.0%	13.8%	14.6%	15.4%	16.2%
	PET Containers	0.9%	460	74	16.1%	17.1%	18.1%	19.1%	20.1%	21.1%	22.1%	23.1%	24.1%	25.1%	26.1%	27.1%	28.1%
o	HDPE Containers	0.8%	429 94	72	16.7%	17.7%	18.7%	19.7%	20.7%	21.7%	22.7%	23.7%	24.7%	25.7%	26.7%	27.7%	28.7%
Plastic	Other Plastic (3-7) Containers	0.2% 5.7%	2,905	13	13.6%	14.6%	15.6% 1.0%	16.6%	17.6% 3.0%	18.6% 4.0%	19.6% 5.0%	20.6%	21.6% 7.0%	22.6% 8.0%	23.6% 9.0%	24.6%	25.6%
6	Film Plastic Other Plastic (Total)	6.1%	3.096	0	0.0%	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	11.0% 11.0%
_	Total Plastics	13.7%	6,983	158	2.3%	2.4%	3.4%	4.4%	5.4%	6.4%	7.4%	8.3%	9.2%	10.2%	11.1%	12.1%	13.0%
	Glass Bottles, Jars and Containers	3.9%	1.991	255	12.8%	13.8%	14.8%	15.8%	16.8%	17.8%	18.8%	19.8%	20.8%	21.8%	22.8%	23.8%	24.8%
388	Other Glass (Flat glass, dishware, light bulbs, etc.)	0.4%	198	0	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	11.0%	12.0%
Glass	Total Glass	4.3%	2,189	255	11.7%	12.7%	13.7%	14.7%	15.7%	15.8%	15.9%	16.0%	16.1%	16.2%	16.2%	16.3%	16.4%
<u>.೮</u>	Food Scraps	13.6%	6,958	0	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	11.0%	12.0%
a a	Leaves and Grass / Pruning and Trimmings	7.2%	3,668	0	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	11.0%	12.0%
Organics	Total Organics	20.8%	10,626	0	0.0%	1.0%	2.0%	3.0%	3.3%	3.7%	4.0%	4.3%	4.7%	5.0%	5.3%	5.6%	5.9%
Se	Clothing Footwear, Towels, Sheets	3.9%	1,983	1	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ĕ	Carpet	1.5%	758	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Textiles	Total Textiles	5.4%	2,741	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wood	Total Wood (Pallets, crates, adulterated and non-adulterated wood)	4.5%	2,293	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DIY Construction & Renovation Materials	5.1%	2,582	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2	Diapers	1.6%	839	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
90	Electronics	1.5%	779	56	7.2%	8.2%	9.2%	10.2%	11.2%	12.2%	13.2%	14.2%	15.2%	16.2%	17.2%	18.2%	19.2%
aŭ	Tires	1.7%	845	293	34.7%	35.7%	36.7%	37.7%	38.7%	39.7%	40.7%	41.7%	42.7%	43.7%	44.7%	45.7%	46.7%
⊕	HHW	0.3%	172	8	4.4%	5.4%	6.4%	7.4%	8.4%	9.4%	10.4%	11.4%	12.4%	13.4%	14.4%	15.4%	16.4%
Miscellaneous	Soils and Fines	0.3%	164 845	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Σ	Other Composite Materials - Durable and/or inert	1.7%		0						0.0%							0.0%
	Total Miscellaneous	12.2%	6,227	357	5.7%	6.0%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%

Attachment #7
MSW & Recyclables Projections

MSW & Recycleables Projection

The first result of the Population and Municipal Composition Calculator is presented on the last fail. This lab contains data for the current year regarding waste generated and seate deviated from disposal. This lab also shows the projected waste diversion promotings, and of the amount of waste in time these percentages will develor to recycling "and amounts" or waste functed with the calculated are contained and early part of the principal great per of the principal great great

																	Mor	ntgomei	ry Cou	nty						2	024-203	3												
		MSW Material Composition	s MSW Generated		% MSW Diverted	MSW generated	2024 MSW Diverted	% MSW Diverted	MSW generated	2025 MSW Diverted	% MSW Diverted	MSW generated	2026 MSW Diverted	% MSW Diverted	MSW generated	2027 MSW Diverted	% MSW Diverted	MSW generated	2028 MSW Diverted	% MSW Diverted	MSW generated	2029 MSW Diverted	% MSW Diverted	generated ,		movi gen	SW MS		generate	2032 MSW Diverted	% MSW Diverted	MSW generated	2033 MSW Diverted	% MSW Diverted	MSW generated	2034 MSW Diverted	% MSW Diverted	MSW generated	2035 MSW Diverted	% MSW Diverted
	Material	100.00%	(Tons) 51,028	(Tons) 3,055	6.0%	(Tons) 50,940	3,370	6.6%	(Tons) 50,362	3,709	7%	(Tons) 49,790	4,040	8.1%	(Tons) 49,225	4,363	8.9%	(Tons) 48,666	4,797	9.9%	(Tons) 48,113	4,985	10.4%	(Ions)		(T	,027 5,5		(Ions)		12.7%	(Tons) 45,965	6,200	13.5%	(Tons) 45,443	6,633	14.6%	(Tons) 44,927	6,874	15.3%
	Newspaper	3.69%	1,881	600	31.9%	1,878	618	32.9%	1,856	629	34%	1,835	641	34.9%	1,814	651	35.9%	1,794	662	36.9%	1,773	672	37.9%	1,753	682 3	8.9% 1	733 65	2 39.99	1,714	701	40.9%	1,694	710	41.9%	1,675	719	42.9%	1,656	727	43.9%
_	Corrugated Cardboard	9.80%	5,001	667	13.3%	4,992	716	14.3%	4,935	757	15%	4,879	797	16.3%	4,824	836	17.3%	4,769	875	18.3%	4,715	912	19.3%	4,662	948 2	0.3% 4	609 96	3 21.39	4,556	1,018	22.3%	4,505	1,051	23.3%	4,556	1,109	24.3%	4,403	1,116	25.3%
8	Other Recyclable Paper (Total)	10.84%	5,533	779	14.1%	5,523	833	15.1%	5,460	878	16%	5,398	922	17.1%	5,337	965	18.1%	5,277	1,007	19.1%	5,217	1,047	20.1%	5,157			099 1,1			1,163	23.1%	4,984	1,200	24.1%	5,041	1,264	25.1%	4,871		26.1%
<u>~</u>	Other Compostable Paper	6.56%	3,345	0	0.0%	3,339	0	0.0%	3,301	0	0%	3,264	0	0.0%	3,227	0	0.0%	3,190	0	0.0%	3,154	0	0.0%	3,118	0	1.0% 3	083 (0.0%	3,048	30	1.0%	3,013	60	2.0%	3,048	91	3.0%	2,945	118	4.0%
	Total Paper	30.88%	15,759		13.0%	15,732	2,166	13.8%	15,554	2,264	15%	15,377	2,360	15.3%	15,202	2,453	16.1%	15,030	2,543	16.9%	14,859	2,632	17.7%	14,690			,524 2,8				20.3%	14,196	3,022	21.3%	14,320	3,183	22.2%	13,875	3,231	23.3%
	Ferrous/Aluminum Containers (Total)	1.69%	865			863	77	9.0%	853	85		844		11.0%	834					13.0%	815		14.0%		121 1		97 12					779			788		19.0%	779		20.0%
<u>a</u>	Other Ferrous Metals	5.33%	2,720		6.1%	2,715	193	7.1%	2,685	218	8%	2,654	242	9.1%	2,624	265	10.1%	2,594	288	11.1%	2,565	310	12.1%	2,536			507 35				15.1%	2,450	395	16.1%	2,478	424	17:1%	2,450		18.1%
홍	Other Non-Ferrous Metals (Total)	1.22%	624	3	0.4%	623	9	1.4%	616	15	2%	609	21	3.4%	602	27	4.4%	595	32	5.4%	589	38	6.4%	582	43	1.4%	75 4	8.4%	569	54	9.4%	562	59	10.4%	569	65	11.4%	562	70	12.4%
_	Total Metals	8.25%	4,209	238	5.6%	4,202	279	6.6%	4,154	318	8%	4,107	355	8.6%	4,060	392	9.6%	4,014	427	10.6%	3,969	462	11.6%	3,924	496 1	2.6% 3	879 53	9 13.69	3,835	562	14.6%	3,791	593	15.6%	3,835	638	16.6%	3,791	669	17.6%
	PET Containers	0.90%	460	74	16.1%	459	79	17.1%	454	82	18%	449	86	19.1%	444	89	20.1%	439	93	21.1%	434	96	22.1%	429	99 2	3.1%	24 10	2 24.19	419	105	25.1%	414	108	26.1%	419	114	27.1%	414	116	28.1%
	HDPE Containers	0.84%	429	72	16.7%	428	76	17.7%	424	79	19%	419	82	19.7%	414	86	20.7%	409	16	3.9%	405	92	22.7%	400	95 2	3.7%	196 9	24.79	391	100	25.7%	387	103	26.7%	391	108	27.7%	387	111	28.7%
<u>۽</u>	Other Plastic (3-7) Containers	0.18%	94	13	13.6%	94	14	14.6%	93	14	16%	91	15	16.6%	90	16	17.6%	89	12	13.0%	88	17	19.6%	87		0.6%	86 1	21.69		19	22.6%	84	20	23.6%	85	21	24.6%	84	22	25.6%
88	Film Plastic	5.69%	2,905	0	0.0%	2,900	0	0.0%	2,867	29	1%	2,834	57	2.0%	2,802	84	3.0%	2,770	308	11.1%	2,739	137	5.0%	2,708	162	3.0% 2	677 11			212	8.0%	2,617	236	9.0%	2,647	265	10.0%	2,617	288	11.0%
_ □	Other Plastic (Total)	6.07%	3,096	0	0.0%	3,090	0	0.0%	3,055	31	1%	3,020	60	2.0%	2,986	90	3.0%	2,952	118	4.0%	2,919	146	5.0%	2,886	173	3.0% 2	853 21	0 7.0%	2,820	226	8.0%	2,788	251	9.0%	2,820	282	10.0%	2,788	307	11.0%
	Total Plastics	13.68%	6,983	158	2.3%	6,971	168	2.4%	6,892	235	3%	6,814	300	4.4%	6,736	364	5.4%	6,660	546	8.2%	6,584	488	7.4%	6,510	547	1.4% 6	436 60	5 9.4%		662	10.4%	6,290	718	11.4%	6,363	789	12.4%	6,290	843	13.4%
· · ·	Glass Bottles, Jars and Containers	3.90%	1,991			1,987	275		1,965	291		1,942		15.8%	1,920			1,899	338	17.8%	1,877		18.8%		368 1		835 38				21.8%			22.8%	1,814		23.8%	1,793		24.8%
88	Other Glass (Flat glass, dishware, light bulbs, etc.)	0.39%	198	0	0.0%	198	2	1.0%	196	4	2%	194	6	3.0%	191	8	4.0%	189	9	5.0%	187	11	6.0%	185	13	1.0%	83 1	8.0%	181	16	9.0%	179	18	10.0%	181	20	11.0%	179	21	12.0%
5	Total Glass	4.29%	2,189	255	11.7%	2,185	277	12.7%	2,161	295	14%	2,136	313	14.7%	2,112	331	15.7%	2,088	348	16.7%	2,064	365	17.7%	2,041	381 1	8.7% 2	017 38	7 19.79	1,996	412	20.7%	1,972	427	21.7%	1,995	452	22.7%	1,972	467	23.7%
-5	Food Scraps	13.64%	6,958			6,946	69	1.0%	6,868	137		6,790	204	3.0%	6,712		4.0%	6,636	332	5.0%	6,561		6.0%	6,486			413 5				9.0%	6,268	627	10.0%	6,340	697		6,268		12.0%
ag .	Leaves and Grass / Pruning and Trimmings	7.19%	3,668	0	0.0%	3,662	37	1.0%	3,620	72	2%	3,579	107	3.0%	3,538	142	4.0%	3,498	175	5.0%	3,458	208	6.0%	3,419	239	7.0% 3	380 27	0 8.0%	3,342	301	9.0%	3,304	330	10.0%	3,342	368	11.0%	3,304	396	12.0%
ő	Total Organics	20.82%	10,626	0	0.0%	10,608	106	1.0%	10,488	210	2%	10,369	311	3.0%	10,251	410	4.0%	10,134	507	5.0%	10,019	601	6.0%	9,906	693	1.0% 9	793 71	3 8.0%	9,682	871	9.0%	9,572	957	10.0%	9,682	1,065	11.0%	9,572	1,149	12.0%
- 83	Clothing Footwear, Towels, Sheets	3.89%	1.983	1	0.1%	1.980	0	0.0%	1,957	0	0%	1,935	0	0.0%	1,913	0	0.0%	1,891	0	0.0%	1,870	0	0.0%	1,849	0	1.0% 1	828 (0.0%	1,807	0	0.0%	1.786	0	0.0%	1,807	0	0.0%	1,786	0	0.0%
#	Carpet	1,48%	758	0	0.0%	756	0	0.0%	748	0	0%	739	0	0.0%	731	0	0.0%	723	0	0.0%	714	0	0.0%	706			98 (0	0.0%	682	0	0.0%	690	0	0.0%	682		0.0%
ě	Total Textiles	5.37%	2,741	- 1	0.0%	2,736	0	0.0%	2,705	0	0%	2,674	0	0.0%	2,644	0	0.0%	2,614	0	0.0%	2,584	0	0.0%	2,555	0	1.0% 2	526 0	0.0%	2,497	0	0.0%	2,469	0	0.0%	2,497	0	0.0%	2,469	0	0.0%
Wood	Total Wood (Pallets, crates, adulterated and non-adulterated)	4.49%	2,293	0	0.0%	2,289	0	0.0%	2,263	0	0%	2,238	0	0.0%	2,212	0	0.0%	2,187	0	0.0%	2,162	0	0.0%	2,138	0 1	1.0% 2	113 (0.0%	2,089	0	0.0%	2,066	0	0.0%	2,089	0	0.0%	2,066	0	0.0%
	DIY Construction & Renovation Materials	5.06%	2,582	0	0.0%	2,578	0	0.0%	2,549	0	0%	2,520	0	0.0%	2,491	0	0.0%	2,463	0	0.0%	2,435	0	0.0%	2,407	0	0.0% 2	380 (0.0%		0	0.0%	2,326	0	0.0%	2,353	0	0.0%	2,326	0	0.0%
ဟ	Diapers	1.64%	839	0	0.0%	838	0	0.0%	828	0	0%	819	0	0.0%	809	0	0.0%	800	0	0.0%	791	0	0.0%	782			73 (0.0%		0	0.0%	756	0	0.0%	764	0	0.0%	756	0	0.0%
ᇹ	Electronics	1.53%	779	56	7.2%	778	64	8.2%	769	71	9%	761	77	10.2%	752	84	11.2%	743	90	12.2%	735	97	13.2%	727			18 10			115	16.2%	702	121	17.2%	710	129	18.2%	702		19.2%
=	Tires	1.66%	845		34.7%	844	301	35.7%	834	306	37%	825	311	37.7%	815	316	38.7%	806	320	39.7%	797	324	40.7%	788			79 3				43.7%	761	340	44.7%	770	352	45.7%	761	356	
**	HHW	0.34%	172		4.4%	172	9	5.4%	170	11	6%	168	12	7.4%	166	14	8.4%	164	15	9.4%	162	17	10.4%	160			58 2				13.4%	155	22	14.4%	157	24	15.4%	155		16.4%
တ္တ	Sols and Fines	0.32%	164 845	0	0.0%	164 844	0	0.0%	162 834	0	0%	160 825	0	0.0%	158 815	0	0.0%	156 806	0	0.0%	155 797	0	0.0%	153 788			151 0 179 0	0.0%			0.0%	148 761	0	0.0%	149 770	0	0.0%	148 761	0	0.0%
2	Other Composite Materials - Durable and/or inert			_			0			0			-				0.0%		_	0.0%							_	_		_							0.0%			0.0%
	Total Miscellaneous	12.20%	6,227	357	5.7%	6,216	374	6.0%	6,146	387	6%	6,076	401	6.6%	6,007	413	6.9%	5,939	426	7.2%	5,871	438	7.5%	5,805	450	7.7% 5	739 4	1 8.0%	5,674	472	8.3%	5,609	483	8.6%	5,674	505	8.9%	5,609	515	9.2%
				2023			2024			2025			2026			2027			2028			2029			2030		20			2032			2033			2034			2035	
	Population		_	49,329		-	49,329			49,262			49,194			49,127			49,060			48,993			48,925		48,			48,792		-	48,725		-	48,658			48,592	
	MSW Generated (tons) Per Capita MSW Generated (bis/person/year)		-	51,028.29 2.069		-	50,940 2,065			50,362 2,045			49,790			49,225 2,004			48,666 1,984			48,113 1.964			47,567 1.944	_	47)		-	46,493 1,906		-	45,965 1,887		-	45,443 1.868			44,927 1,849	
	Per Capital MSW Generated (Ibsiperson/year)			2,069			Z,065			z,u45			2,024			2,004			1,984			1,964			1,944	_	1,5	0		1,906			1,887			1,868			1,849	
	MSW Diverted (tons)		I	3,055.29			3,370			3,709			4,040	- 1		4,363	- 1		4,797			4,985			5,285		5,5			5,892			6,200		1	6,633			6,874	
	Per Capita MSW Diverted (bs/person/year)			124			137			151			164			178			196			204			216		2	8		242			254			273			283	
	MSW Disposed (fons)		_	47.973.00		_	47.570	_		46.653	_		45.750			44.862			43.869			43.128			42.282		41.	50	_	40.601		_	39.765		_	38.810	_		38.053	$\overline{}$
	Per Capita MSW Disposed (bisberson/year)			1,945			1.929			1,894			1.860			1.826	-		1,788	_		1.761			1.728	_	1.6		+-	1.664			1,632			1,595			1,566	

Attachment #8
Single Stream Composition Estimate

Single Stream Composition	% of single stream	Actual Diverted
Newspaper (ONP)	23.50%	600.11
Corrugated Cardboard (OCC)	26.00%	663.95
Paperboard	7.60%	194.08
Office Paper	7.30%	186.42
Junk Mail	5.70%	145.56
Other Commercial Printing	5.30%	135.34
Magazines (OMG)	3.50%	89.38
Books	0.10%	2.55
Paper Bags	0.10%	2.55
Phone Books (OTD old telephone directory)	0.50%	12.77
Poly-Coated	0.40%	10.21
Ferrous Containers	2.40%	61.29
Aluminum Containers	0.30%	7.66
Other Ferrous Metals	1.00%	25.54
Other aluminum	0.10%	2.55
PET Containers	2.90%	74.06
HDPE Containers	2.80%	71.50
Other Plastic (3-7) Containers	0.50%	12.77
Glass Containers	10.00%	255.37

Reported as single stream 2,553.66

^{100.00% 2553.66}

^{1.} Single Stream breakdown percentages provided by the Department (Dave Vitale, 12.4.13)

Attachment #9
Construction & Demolition Debris Composition

Construction & Demolition (C&D) Debris Material Composition

In order to Identify the Materials Composition of the C&D Debris waste stream, it is necessary to define the sources of the waste first.

Construction and demolition (C&D) Debris consists of waste that is generated during renovation, demolition or new construction of residential and non residential properties.

It also includes the new construction and/or renovation of municipal infrastructure, such as roadways, park facilities, bike trails, bridges, etc. The user should estimate these values and purple cells.

The results are presented on the last right column under C&D Debris Waste Stream Composition. Be aware of color changes on the cells, whenever a category represents over 15% of the total generation, the cell will red to easy identify key categories on the waste stream. It will also aid with the selection of isolated initiatives, programs, and infrastructure for the solid waste management system.

Note:

Montgomery County

• The graphic displays the planning unit's C&D Debris generation data by material categories. It has been designed to help visualize the more representative categories of the waste stream.

2024-2033

		Generation source													
			Resid	lential		(c	Other Municipal Infras- tructure								
			30.0	00%			40.00%								
		New Construction	Renovation	Demolition	Combined Residential	New Construction	Renovation								
		20.00%	20.00%	60.00%	100.00%	60.00%	20.00%	20.00%	100.00%	100.00%					
	Concrete/ Asphalt /Rock/Brick	9.80%	16.10%	21.50%	18.08%	30.70%	19.10%	23.10%	26.86%	46.00%					
	Wood	29.90%	19.10%	25.70%	25.22%	22.70%	12.40%	24.20%	20.94%	10.50%					
	Roofing	6.00%	22.00%	6.10%	9.26%	2.10%	21.20%	5.10%	6.52%	0.00%					
SE	Drywall	15.60%	7.90%	5.10%	7.76%	4.60%	6.40%	4.30%	4.90%	0.00%					
Materials	Soil/Gravel	11.30%	7.10%	18.50%	14.78%	13.10%	6.50%	15.60%	12.28%	38.00%					
Ma	Metal	5.30%	11.30%	5.20%	6.44%	12.00%	15.50%	11.10%	12.52%	2.40%					
	Plastic	1.50%	0.70%	0.30%	0.62%	0.50%	0.70%	0.30%	0.50%	0.30%					
	Corrugated cardboard/	9.30%	2.90%	3.10%	4.30%	7.10%	4.60%	4.20%	6.02%	0.30%					
	Other	11.30%	12.90%	14.50%	13.54%	7.20%	13.60%	12.10%	9.46%	2.50%					

100.00%

100.00%

100.00%

100.00%

100.00%

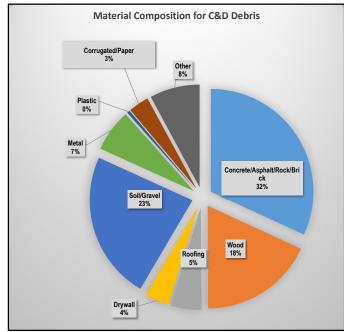
100.00%

100.00%

100.00%

C&D Debris Materials Composition (%)	
100.00%	
31.88%	
18.05%	
4.73%	
3.80%	
23.32%	
6.65%	
0.46%	
3.22%	
7.90%	

100.00%



Attachment #10
Construction and Demolition Debris Generation Projections

Construction & Demolition (C&D) Debris Generation Projections

This step will estimate the amount of waste generated for each material based on the total amount of waste generated in that year. In the planning Unit. It will be a known amount for the first year, 2023 and an estimate of what will be generated for each year of the planning period, 2024-2033

Montgomery County

2024-2033

			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
		C&D Debris Materials Composition (%)	C&D Debris Generated (Tons)										
	Concrete/Asphalt /Rock/Brick	31.9%	335.8	332.5	329.2	325.9	322.6	319.4	316.2	313.0	309.9	306.8	303.7
	Wood	18.0%	190.1	188.2	186.3	184.5	182.6	180.8	179.0	177.2	175.4	173.7	171.9
<u>s</u>	Roofing	4.7%	49.9	49.4	48.9	48.4	47.9	47.4	46.9	46.5	46.0	45.6	45.1
ria	Drywall	3.8%	40.0	39.6	39.2	38.8	38.4	38.0	37.7	37.3	36.9	36.5	36.2
e l	Soil/Gravel	23.3%	245.6	243.2	240.7	238.3	235.9	233.6	231.3	228.9	226.6	224.4	222.1
Mate	Metal	6.6%	70.0	69.3	68.6	67.9	67.3	66.6	65.9	65.3	64.6	64.0	63.3
2	Plastic	0.5%	4.8	4.8	4.7	4.7	4.6	4.6	4.5	4.5	4.4	4.4	4.3
	Corrugated cardboard/Paper	3.2%	33.9	33.5	33.2	32.9	32.5	32.2	31.9	31.6	31.3	30.9	30.6
	Other	7.9%	83.2	82.4	81.6	80.7	79.9	79.1	78.3	77.6	76.8	76.0	75.3
	Total	100.0%	1,053.4	1,042.8	1,032.4	1,022.1	1,011.9	1,001.7	991.7	981.8	972.0	962.3	952.6

1% Depreciation each year

Attachment #11
Construction and Demolition Debris Diversion Analysis

Construction & Demolition (C&D) Debris Diversion Analysis

Based on the total amount of C&D debris generated in the Planning Unit, which was entered in Step 3, this step will be used to calculate the % of this material that is diverted from the C&D debris waste stream. For this step, enter the amount of waste diverted for each material in the purple cells.

0.9%

9.4

Montgomery County

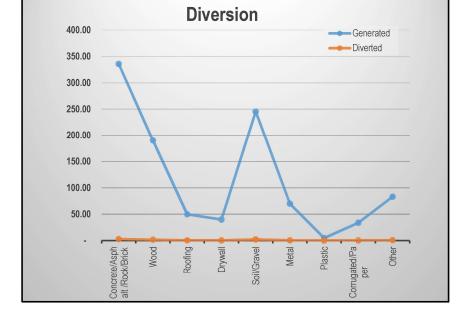
2024-2033

				2023	
		C&D Debris Materials Composition (%)	C&D Debris Generated (Tons)	C&D Debris Diverted (Tons)	% C&D Diverted
	Concrete/Asphalt /Rock/Brick	31.9%	335.8	3.0	0.9%
	Wood	18.0%	190.1	1.7	0.9%
S	Roofing	4.7%	49.9	0.4	0.9%
ial	Drywall	3.8%	40.0	0.4	0.9%
er	Soil/Gravel	23.3%	245.6	2.2	0.9%
Materials	Metal	6.6%	70.0	0.6	0.9%
2	Plastic	0.5%	4.8	0.0	0.9%
	Corrugated cardboard/Paper	3.2%	33.9	0.3	0.9%
	Other	7.9%	83.2	0.7	0.9%
				-	

100.0%

Total

1,053.4



C&D Debris Generation Vs. C&D Debris

Hiram Hollow

9.37 tons reported as C&D

Attachment #12
Construction and Demolition Debris Detailed Projections

Construction and Demolition (C&D) Debris Detailed Projections

												Montgomery County]		2024	-2033										
				2023			2024			2025			2026 2027 2028									2029	2030					2031	2031 2032				2033		
		C&D Debris Materials Composition (%)	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted																														
	Concrete/Asphalt /Rock/Brick	31.9%	335.8	3.0	0.9%	332.5	6.3	1.9%	329.2	9.5	2.9%	325.9	12.7	3.9%	322.6	15.8	4.9%	319.4	18.8	5.9%	316.2	21.8	6.9%	313.0	24.7	7.9%	309.9	27.5	8.9%	306.8	30.3	9.9%	303.7	33.1	10.9%
	Wood	18.0%	190.1	1.7	0.9%	188.2	3.6	1.9%	186.3	5.4	2.9%	184.5	7.2	3.9%	182.6	8.9	4.9%	180.8	10.6	5.9%	179.0	12.3	6.9%	177.2	14.0	7.9%	175.4	15.6	8.9%	173.7	17.2	9.9%	171.9	18.7	10.9%
	Roofing	4.7%	49.9	0.4	0.9%	49.4	0.9	1.9%	48.9	1.4	2.9%	48.4	1.9	3.9%	47.9	2.3	4.9%	47.4	2.8	5.9%	46.9	3.2	6.9%	46.5	3.7	7.9%	46.0	4.1	8.9%	45.6	4.5	9.9%	45.1	4.9	10.9%
쿋	Drywall	3.8%	40.0	0.4	0.9%	39.6	0.7	1.9%	39.2	1.1	2.9%	38.8	1.5	3.9%	38.4	1.9	4.9%	38.0	2.2	5.9%	37.7	2.6	6.9%	37.3	2.9	7.9%	36.9	3.3	8.9%	36.5	3.6	9.9%	36.2	3.9	10.9%
ž	Soil/Gravel	23.3%	245.6	2.2	0.9%	243.2	4.6	1.9%	240.7	7.0	2.9%	238.3	9.3	3.9%	235.9	11.5	4.9%	233.6	13.8	5.9%	231.3	15.9	6.9%	228.9	18.1	7.9%	226.6	20.1	8.9%	224.4	22.2	9.9%	222.1	24.2	10.9%
2	Metal	6.6%	70.0	0.6	0.9%	69.3	1.3	1.9%	68.6	2.0	2.9%	67.9	2.6	3.9%	67.3	3.3	4.9%	66.6	3.9	5.9%	65.9	4.5	6.9%	65.3	5.1	7.9%	64.6	5.7	8.9%	64.0	6.3	9.9%	63.3	6.9	10.9%
	Plastic	0.5%	4.8	0.0	0.9%	4.8	0.1	1.9%	4.7	0.1	2.9%	4.7	0.2	3.9%	4.6	0.2	4.9%	4.6	0.3	5.9%	4.5	0.3	6.9%	4.5	0.4	7.9%	4.4	0.4	8.9%	4.4	0.4	9.9%	4.3	0.5	10.9%
	Corrugated /Paper	3.2%	33.9	0.3	0.9%	33.5	0.6	1.9%	33.2	1.0	2.9%	32.9	1.3	3.9%	32.5	1.6	4.9%	32.2	1.9	5.9%	31.9	2.2	6.9%	31.6	2.5	7.9%	31.3	2.8	8.9%	30.9	3.1	9.9%	30.6	3.3	10.9%
	Other	7.9%	83.2	0.7	0.9%	82.4	1.6	1.9%	81.6	2.4	2.9%	80.7	3.1	3.9%	79.9	3.9	4.9%	79.1	4.7	5.9%	78.3	5.4	6.9%	77.6	6.1	7.9%	76.8	6.8	8.9%	76.0	7.5	9.9%	75.3	8.2	10.9%
	Total	100.0%	1,053.4	9.4	0.9%	1,042.8	19.7	1.9%	1.032.4	29.8	2.9%	1.022.1	39.8	3.9%	1.011.9	49.5	4.9%	1001.7	59.0	5.9%	991.7	68.3	6.9%	981.8	77.5	7.9%	972.0	86.4	8.9%	962.3	95.2	9.9%	952.6	103.7	10.9%

Attachment #13 2024 Rate Schedule

Montgomery County Solid Waste 2024 Rate Schedule 5/1/2024

Materials and Services	<u>Amount</u>
Official Tip Fee for All Non-Hazardous Waste	\$107.00/Ton
Scaled Municipal Solid Waste Minimum Fee (up to 370 pounds)	\$20.00
Municipal Solid Waste per Bag Fee (approximately 30 gallon bag/container)	\$5.00/Bag
Single Stream Recycling (over 10 containers) 05/1/24-12/31/24	\$100.00/Ton
Scaled Single Stream Recycling Minimum Fee	\$ 5.00
Single Stream Recycling bags (up to 10 containers)	\$ 5.00
Freon Removal (refrigerators and freezers)	\$20.00/Unit
Small Items Fee (air conditioners, dehumidifiers, water coolers, propane tanks)	\$5.00/Unit
Bulky White Goods mixed with Municipal Solid Waste	\$25.00/Unit + \$107.00/Ton
Tires 20 inch and below (off the rim)	\$8.00/Tire
Tires 20.5 inch – 24.5 (off the rim)	\$12.00/Tire
All Other Tires (off the rim)	\$325.00/Ton
Tires mixed with Municipal Solid Waste	\$20.00/Tire + \$107.00/Ton
Fluorescent Bulbs	\$0.40/Unit
Certified Weight Charge	\$5.00
Returned Check Charge	\$30.00
Uncovered Loads	Double Charge
Finance Charge on Past Due Unpaid Balances	1%/Month

NOTE: debit or credit cards NOT accepted

Mailing Address: Treasurer's Office Attn: Solid Waste P.O. Box 1500, Fonda, NY 12068 Phone: 518-853-8174 Website: www.co.montgomery.ny.us Fax: 518-853-8344

Amsterdam Transfer Station Western Transfer Station

 1247 Route 5S
 4583 Route 5S

 Amsterdam, NY 12010
 Sprakers, NY 12166

 518-843-3335
 518-673-4884

 Mon-Fri 7 am – 3 pm
 Mon-Fri 7 am – 3 pm

Sat 8 am – 11:30 am

Closed Sunday

Sat 8 am – 11:30 am

Closed Sunday

Subject to change without notice

The experience to listen The power to Solve

