

Dutchess County
Local Solid Waste Management Plan
Biennial Update
Planning period 2021-2024



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Dutchess County Local Solid Waste Management Plan

2025 Biennial Update

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INTRODUCTION

The 2021 – 2030 Dutchess County Local Solid Waste Management Plan (LSWMP) set goals to promote waste reduction and diversion programming for our residents as well as enforcing the Dutchess County Solid Waste Management Regulations. The Division of Solid Waste Management continually strives to integrate programs that will better the environment in a sustainably responsible manner. This Local Solid Waste Management Plan Biennial Update encompasses the work of the planning unit from 2021 – 2024.

The county continued its recycling campaign, but it also looked to form new collaborative projects in reduction and reuse as a means to divert more material from the waste stream. In 2023 the county partnered with the Hudson Valley Repair Café; and, in 2025, entered into an agreement with Helpsy, a textile collection and recycling public benefit corporation, enabling new educational and outreach opportunities. The county began attending Repair Cafés in Dutchess County, educating residents on textile donation and recycling. This has become a successful partnership and looks to continue throughout the planning period.

Finding new and innovative ways to connect with the community and specifically school aged children can be challenging. To keep the interest of the public we need to find different ways to reach a broad spectrum of interest. In 2024 the Recycling Educator developed a program for children, the “America Recycles Day Art Challenge”, using art as a way to rethink waste. Additional ways we have been successful in connecting with residents has been attending farmer markets. At these events we focus outreach on composting education and recycling. Meeting residents in their communities has proven to be a valuable component in our ability to educate on an individual basis and engage in beneficial conversations.

The implementation schedule of the LSWMP is a working document, meaning tasks and timelines have the potential to change due to new ideas or at times constraints. Prior to the adoption and approval of the Dutchess County LSWMP, we conducted a public comment period. The county received an overwhelming request to expand the ability and accessibility for residential composting. Our schedule listed a task to conduct a feasibility study to assess the potential for a composting facility. In the fall of 2023 and after careful examination the County Legislature approved the county’s 2024 Operating Budget to include funding for a composting grant with the purpose of assisting local municipalities and school districts with developing a composting program. This fiscal assistance allows direct access to municipal residents, whereas large regional compost facilities restrict private residents from accessing the site.

In planning for the future of waste management in Dutchess County, we have continued to communicate with New York State Department of Environmental Conservation (NYSDEC).

In the summer of 2022, Dutchess County staff and the Dutchess County Resource Recovery Agency (RRA), met with NYSDEC representatives to discuss anticipated regulations in the New York State Climate Leadership and Community Protection Act with regard to the RRA and the waste to energy facility. At the time of the meeting, it was communicated that such regulations were still under review. The county and the RRA requested a follow up meeting in 2023, which NYSDEC accepted. Although little further information could be shared, the county did receive reassurance that NYSDEC will work collaboratively with us in determining future steps when the guidance and regulations are determined.

In June of 2022 the RRA experienced a power loss caused by an external electric power supply failure. The abrupt power failure caused significant damage to the machinery. The repairs began immediately however the extent of the damage was not immediately realized. After extensive assessment and testing it was determined that some equipment would need to be disassembled and sent elsewhere for repair. It was at this time that the opportunity presented itself to upgrade aging components to the facility and move up the scheduled maintenance timeline. Although the facility couldn't process the same quantity of waste in 2022 and 2023, the resulting repairs and upgrades have assured the ability of the facility to operate within all current state and federal regulations for years to come.

Dutchess County is committed to continually exploring new methods for reducing waste and sustainable living. Programs for the remainder of the planning period such as a waste diversion feasibility study, food waste collaboration workshops with a local educational institution, and expanding textile recycling promises to bring new waste reduction opportunities for our local communities.

1. SUMMARY REPORT

1.A Changes in Planning Unit

Dutchess County is comprised of twenty (20) towns, two (2) cities, and eight (8) villages. At the time of writing the Dutchess County Local Solid Waste Management Plan (LSWMP) the population was stated to be 295,911. It was noted that an increase in population was expected due to the Covid pandemic. The current American Community Survey has estimated the Dutchess County population has increased to 297,150, a 0.4% increase since the 2020 Census.

For the purpose of this biennial update there are no notable changes in planning unit members.

1.B Waste Generation, Recycling and Disposal Data

1.B.1 Municipal Solid Waste (MSW)

Dutchess County collects recycling as single stream and relies on data submitted by solid waste licensed haulers, private and municipal owned transfer stations, as well as private businesses. The county does not own or operate waste facilities. The data used in the approved LSWMP was based on 2020 data. Due to the Covid Pandemic the data was believed to be irregular when compared to previously reported years. This assumption was validated in the following four (4) years. In 2020 much was still unknown about the transmission of the Covid-19 Virus and therefore more materials were disposed of. In addition to that there was more of the population staying home and doing projects creating more waste.

Most of the recycling in Dutchess County is collected curbside and therefore as single stream. Transfer stations allow for dual stream however these require the residents to drive their waste to the facility. Due to Dutchess County not owning a materials recovery facility (MRF) nor having flow control, data for separated materials such as plastics, paper, and aluminum must be estimated by percentage assuming the trends witnessed nationally and at the state level are consistent with Dutchess County.

Figure 1. displays tonnage data acquired from annual municipal solid waste reports received from the following: local municipal transfer stations, privately owned transfer stations, privately owned MRF, Dutchess County licensed haulers, and privately owned businesses. Please note some material tonnage varies greatly from year to year. Businesses are not obligated to share their data with Dutchess County; therefore, some years have a higher participation in reporting than others.

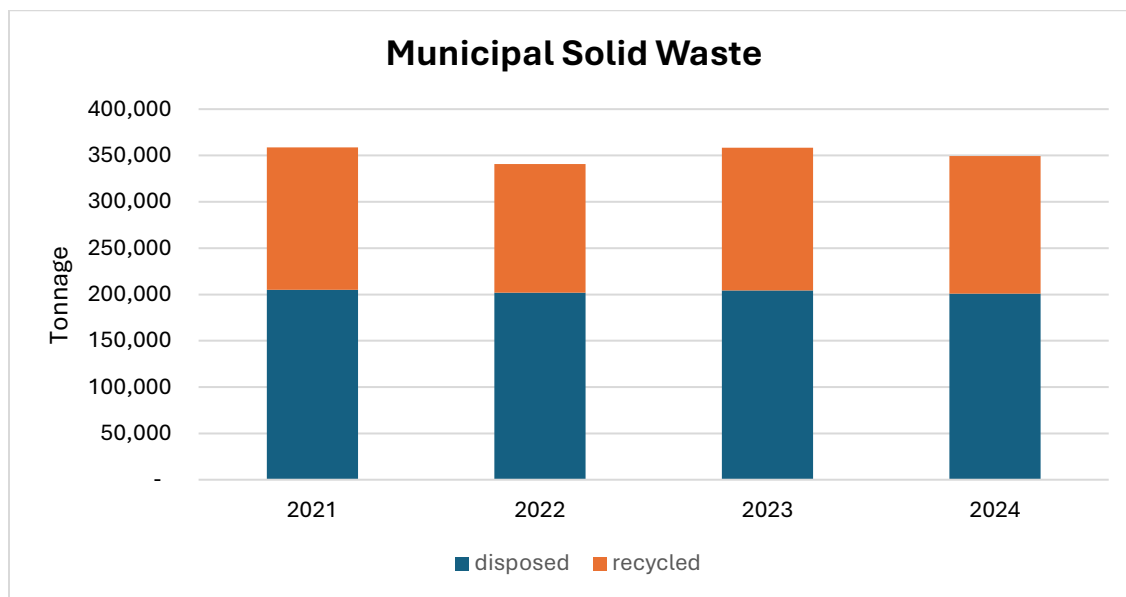


Figure 1. Dutchess County Municipal Solid Waste 2021 - 2024

The waste stream materials in Table 1 were compiled from the annual reports received by the planning unit. The Municipal Solid Waste (MSW) data shows the total tonnage of waste post recycling.

Table 1. Results of annual reports 2021 - 2024

Municipal Solid Waste (MSW)	2021 Tons	2022 Tons	2023 Tons	2024 Tons
Disposed	205,096	202,015	204,217	201,000
Diversion Subcomponents				
Single Stream	25,334	21,473	22,027	22,057
Commingle	14,363	7,910	12,470	11,170
Organic Material	45,895	52,558	57,293	57,393
Oil/Rendering	218	70	1,971	216
Lead Acid Batteries	50	1	1,340	305
Scrap Metal	58,639	45,483	47,582	47,025
Motor Oil/Antifreeze	127	94	42	260
White Goods	315	148	773	1,455
Tires	2,119	3,905	2,687	2,229

Municipal Solid Waste (MSW)	2021 Tons	2022 Tons	2023 Tons	2024 Tons
Electronics	437	686	546	697
Wood Pallets	35	35	15	35
Diversion Total	147,532	132,363	146,746	142,842
Generation Total (Disposed and Diverted)	352,628	334,378	350,963	343,842

Tables 2 and 3 along with Figures 3 and 4 shown below compare the projected total tonnage of MSW generated and diverted as reported in the Dutchess County LSWMP versus the actual tonnage reported.

Figure 3 displays the projections for waste generation in 2021-2024 underestimated the actual reporting received. Of note, the data collected during this time frame demonstrates a consistent pattern.

Table 2. MSW Tonnage Projected vs. Actual

Year	Projected	Actual
2021	330,632	352,628
2022	326,910	334,378
2023	323,230	350,963
2024	319,591	343,842

Table 2. 2021-2024 MSW tonnage projected and actual

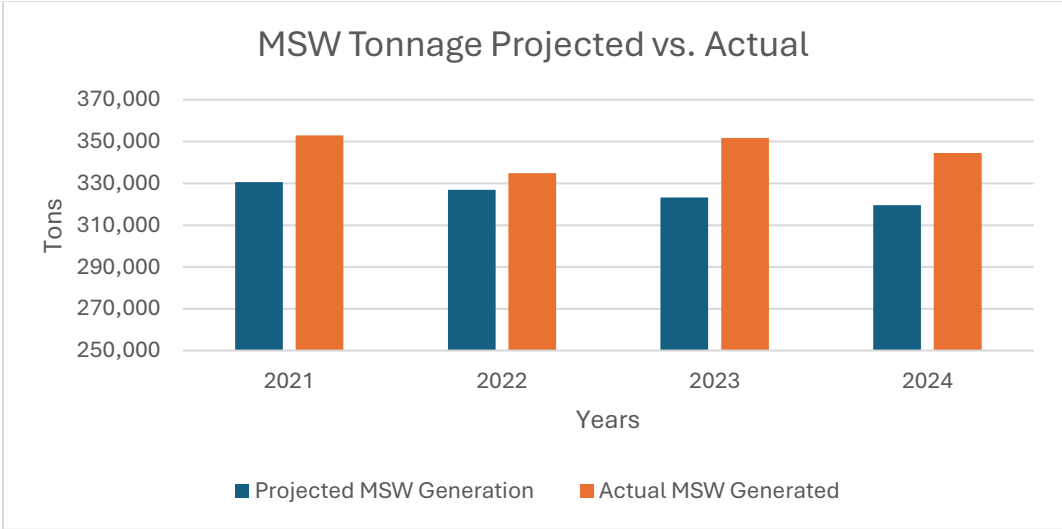


Figure 3. Total MSW tonnage projected vs. actual

As mentioned previously projections for waste diversion were established in 2020 for the current Dutchess County LSWMP. During that uncertain time, the planning unit took a conservative outlook in determining what the public practices of recycling would result in. Table 3 and Figure 4 display the projected waste diversion versus the actual diversion reported. In each year the actual tonnage diverted out-paced the estimated projection. This is believed to be a result of the planning unit’s continued efforts in a robust education campaign.

Table 3. Diverted MSW Tonnage Projected vs. Actual

Year	Projected	Actual
2021	116,123	147,532
2022	116,051	132,363
2023	116,044	146,746
2024	116,023	142,842

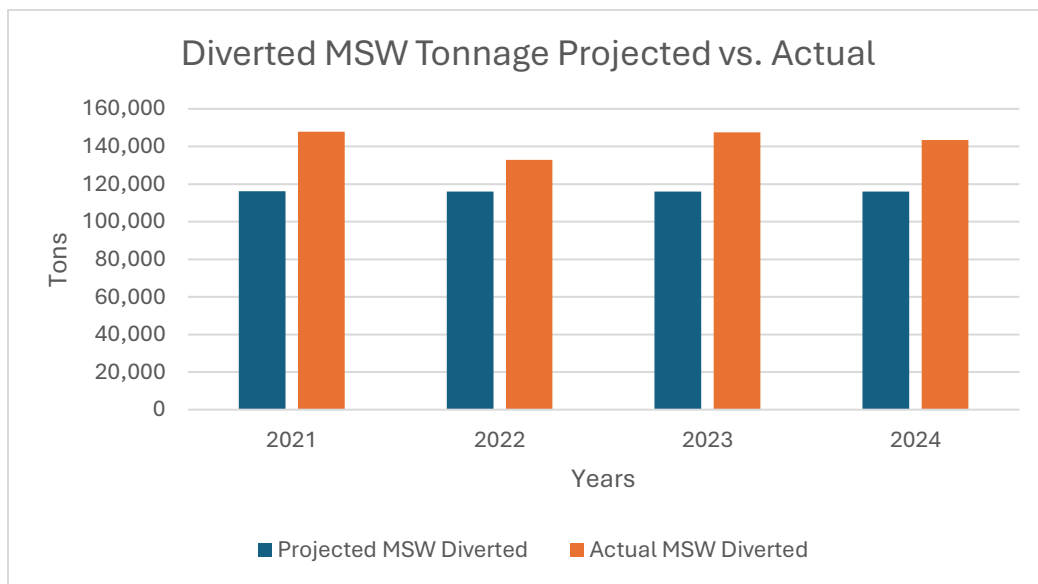


Figure 4. Total MSW waste diverted from the waste stream. Projected vs. actual

1.B. 2 Construction and Demolition Debris (C&D)

Dutchess County has had a consistently high diversion rate with C&D materials. Although the planning unit does not have a C&D diversion program, there are privately owned facilities that accept the debris for recycling and repurposing. This allows a large percentage of C&D debris to be diverted from landfills. Table 4 shows the breakdown of C&D handling of materials while Table 5 and Figure 5 depicts the projected C&D waste

generated versus the actual reported for 2021 through 2024. Projections closely aligned with actuals during 2021 and 2022. In 2023 fewer than normal voluntary annual reports were submitted, causing a decrease in data. However, in 2024 an influx of data was received due to vigorous outreach and appeal from the planning unit’s office.

Table 4. Breakdown of C&D Debris Materials

C&D Debris	2021 Tons	2022 Tons	2023 Tons	2024 Tons
Disposed	60,416	47,831	51,918	71,791
Diverted	99,741	99,762	41,336	95,183
Generated	160,157	147,593	93,254	166,974

Table 5. Tonnage of C&D Projected vs. Actual

Year	Projected	Actual
2021	150,000	160,157
2022	151,000	147,593
2023	152,000	93,254
2024	153,000	166,974

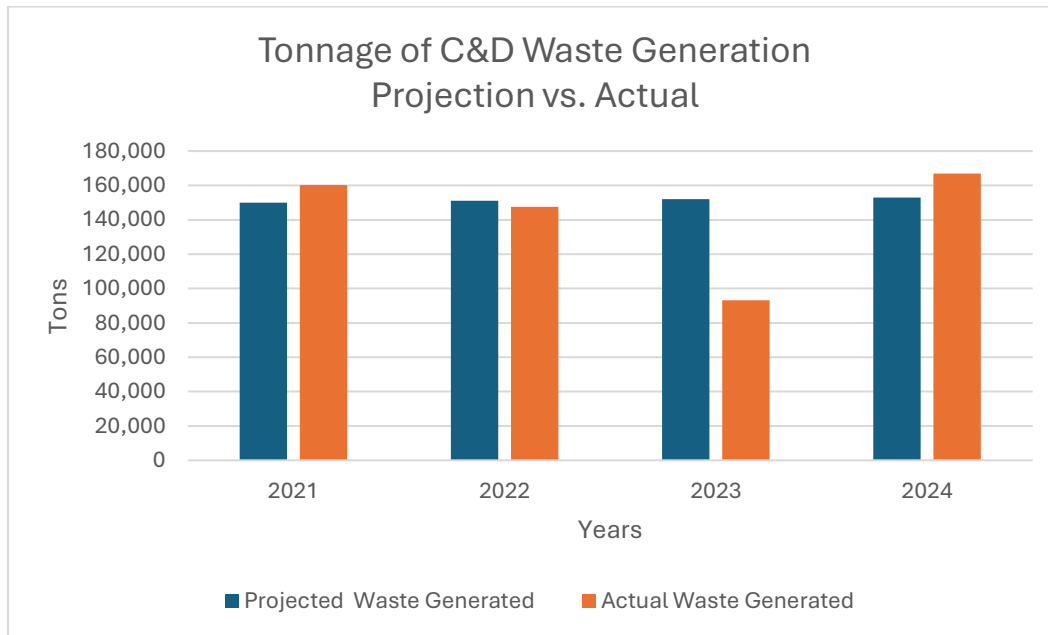


Figure 5. Total Construction & Demolition tonnage projected vs. actual

Table 6 and Figure 6 show the projected C&D diversion versus the actual reported for the same years. Data received for diversion has been inconsistent. As mentioned previously, privately owned businesses are not obligated to report their tonnage records to the County,

except for privately owned transfer stations. Despite this obstacle, the data does demonstrate a diversion rate consistently above 50%.

Table 6. Tonnage of C&D Waste Diverted

Year	Projected	Actual
2021	65,151	99,741
2022	66,476	99,762
2023	67,131	41,336
2024	67,789	95,183

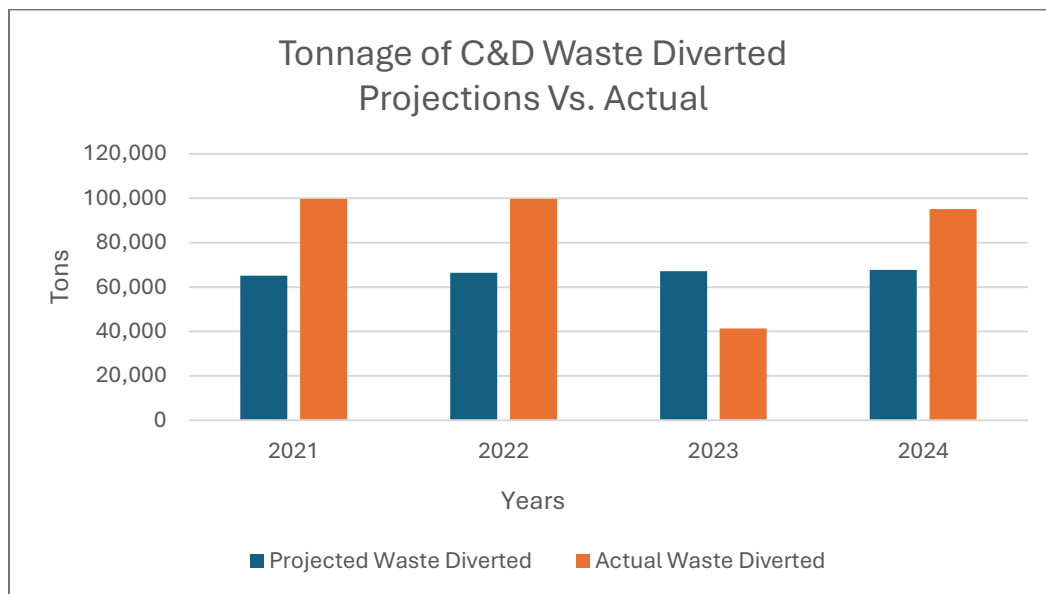


Figure 6. Total waste Construction & Demolition diverted from the waste stream. Projected vs. actual

1.B.3 Industrial Waste

Industrial waste includes discarded materials generated by manufacturing or industrial processes. One of the larger manufacturers in Dutchess County is IBM. Solid waste materials generated include electronics, corrugated cardboard and office paper. We collect data annually from individual industrial entities such as IBM and Central Hudson. This is considered commercial waste and is reflected as part of our MSW tables of materials totals. In 2020 the NYSDEC annual reports had a very small quantity of 1,900 tons of industrial waste originating from Dutchess County. It is the division’s assumption that if there is this type of waste originating within the County it is not being transported to New York State facilities. Due to these industries not being required to submit data to the division, and the County not being a large industrial location we are not able to produce

data in this waste category. The Division will explore new methods of obtaining industrial waste data from facilities within the county. Task 37 in this report’s implementation schedule, identifies this as an action for project years 2025 – 2026.

1.B. 4 Biosolid Waste

The only biosolid data we can incorporate into this report is produced by Wastewater Treatment facilities. This waste is processed and then composted onsite. These facilities do not list a quantity for generated sludge but rather for the resulting dried product. Task 8a in this report’s implementation schedule references the Division will continue to work in obtaining the quantity of sludge generated prior to the drying process. Table 7 shows the quantity of resulting dried tonnage.

Table 7. Biosolid Waste diverted

Sludge	2021 Tons	2022 Tons	2023 Tons	2024 Tons
Diverted	7,019	6,862	7,547	7,905

1.B. 5 Household Hazardous Waste (HHW) and E-Waste

Dutchess County continues to host three (3) HHW and E-waste events annually. These popular events accommodate 1,200 households each year. Annually over 100,000 pounds of hazardous materials are collected. In addition to the events for households, the county hosts one annual event for Conditionally Exempt Small Quantity Generators (CESQG). This event is attended by schools, municipalities and small businesses.

1.C Changes to Solid Waste Management Practices

Coming out of the pandemic, the planning unit quickly realized there was a need to re-educate the community on materials management best practices. While in the depths of the pandemic when little was known about the spread of the virus, many opted to discard materials rather than recycle or reuse. Most public institutions did not allow outside visitors to give public presentations until 2022. By regaining the ability to do group presentations the planning unit reflected on past success while expanding programs for the future.

To expand upon the planning unit’s materials management practices, the county launched a Composting Grant in 2024 for all public K-12 schools and local municipalities. The

program offered the choice of applying for either a 50-percent matching grant to purchase and install an in-vessel aerobic composter (up to \$50,000 per project) or start-up funding to establish food waste drop-off sites (up to \$20,000 per award).

In December 2024 the Town of Wappinger and Village of Red Hook were awarded funding to implement a composting program. The Town of Wappinger plans to purchase and install an in-vessel composting machine. The machine will convert the organic waste into compost onsite. The Village of Red Hook will be using the grant funds to purchase materials for setting up a food waste drop off program. These were the only municipalities to apply for this opportunity and therefore the only ones to receive funding.

Prior to the Dutchess County Composting Grant, in 2022 the City of Beacon, Village of Rhinebeck, and Town of Red Hook initiated pilot food waste drop-off sites for their residents. Collected food waste was hauled to a compost facility. During this reporting period the City of Beacon collected over 262,000 pounds, the Town of Rhinebeck collected 20,000 pounds and the Town of Red Hook collected over 65,600 pounds. Several farmers markets within the County now offer patrons an opportunity to drop off their food waste seasonally. Additionally, within Dutchess County, there are some municipal transfer stations that accept yard waste to be composted.



The county continues to offer backyard composting bins for residents to purchase at cost. Since the implementation of this program in 2018, roughly 120 bins have been sold. In addition to selling the 80-gallon compost bins, the county gives away smaller table-top bins at no cost during farmers markets and other public programming events. Roughly 60 table-top bins were given away in 2024, with the same amount anticipated in 2025.

The planning unit not only focused its programming on proper disposal, composting and recycling, but expanded to reuse. In 2023 the county formed a partnership with Hudson Valley Repair Café as a co-host; we currently take part in three cafés annually.



In 2023, as part of the push for reuse, the Dutchess County Resource Recovery Agency and the Division of Solid Waste Management collaborated to establish a Helpsy textile donation site at their office location. The county is working to expand textile collection in the near future.

1.D Outreach and Educational Activities

Dutchess County’s Division of Solid Waste Management continues to promote and educate the public about materials management in Dutchess County. Staff provide programming throughout the County including educational presentations to schools, libraries, senior friendship centers and community groups. In addition, we offer free recycling containers for use at community events. The Division’s website provides information on how to properly dispose of different waste materials and resources on sustainable practices. This includes a bi-monthly newsletter pertaining to seasonal topics on how to reduce and responsibly recycle or dispose of specific materials. All publications can be found on the planning unit’s [recycling education](#) webpage.



The Recycling Educator continued to provide presentations regarding recycling practices and waste generation from 2021 to 2024, following Covid restrictions and guidelines in 2021 and 2022. To abide by these regulations, the Recycling Educator pivoted to virtually connecting with the public and municipalities by hosting webinars and recording YouTube videos. In the following years as restrictions were lifted, the Recycling Educator was able to visit many more classrooms and engage with a wider audience.

Prior to 2020, the Recycling Educator had developed and conducted the “Dutchess County School Recycling Challenge”. The challenge was presented to schools around Earth Day, where many students already saw the Recycling Educator’s recycling presentation. Students were asked to record the weight of their generated recyclables twice a week for one month. Over the course of the month, the weight was assumed to have increased as students became more aware of their waste generation and were keen on recycling practices. Winners of the challenge were selected based on their recycling rate – the higher the rate, the more they recycled. In the years following the pandemic, from 2021 to 2024, the Division worked on resuming this program, however it had become more difficult for schools to find time to participate. For this reason, the program was discontinued to allow staff to develop new programming for school aged children centered around recycling.

In 2022 and 2023 the division partnered with the Lagrange Lions Club in recognition of America Recycles Day, collecting over 200 pairs of eyeglasses for the Recycle for Sight campaign. With the adopted New York State PaintCare program staff began promoting the

paint stewardship program and mailed informational flyers to all Dutchess County municipalities.

As the county continues its work with environmental and sustainability awareness, staff assisted the Dutchess County Department of Planning & Development with support in materials management actions to achieve the Climate Smart Community silver certification. Examples of such actions include installing a Helpsy textile donation receptacle outside of the division’s office and attending Repair Cafés with a textile collection bin. These methods repurpose clothing to reduce waste and emissions involved with the transport of these materials.



In 2023 the division initiated and organized the Dutchess County Earth Day Event. The event brought together twenty-four (24) environmental based organizations to table. In 2024 the division collaborated with Vassar College Environmental Cooperative to host the Earth Day event on the Vassar College campus. Twenty-seven (27) tables attended with over two hundred (200) guests in attendance. Those in attendance were composed of local organizations ranging from those focused on ecology

and wildlife, water and soil quality, municipal and governmental programs, volunteer groups, and much more.

The Recycling Educator developed and administered the County’s first “America Recycles Day Art Challenge” in 2024. The program was designed as a hands-on way for students, K-12, to engage with recyclable materials in a creative and innovative manner. The goal was to educate young people about recycling in Dutchess County while influencing them to reimagine materials they may often throw away. Materials for each project were collected throughout the program, bringing attention to how much waste accumulates daily and how much can be recycled or reused. Students were asked to create a work of art made entirely out of recyclable materials. One first place and second place winner from each grade level (K-2, 3-5, 6-8, 9-12) were selected. Winners then had the opportunity to showcase their work at the Franklin D. Roosevelt National Historic Site for 3 weeks. County Executive Sue Serino



awarded winners of the competition with certificates at an evening reception thanking participants for their efforts.

In 2024 staff began attending local farmers markets educating on the benefits of composting practices, garbage and recycling disposal, and promoting upcoming events. In addition to providing education, the division's presence strengthens relationships with residents as well as municipalities.

The division continually works to keep relevant information up to date in our outreach materials and on our webpage. Staff members annually tour the individual transfer stations to ensure we convey the most accurate information. During these tours we are able to offer assistance and updates to the local municipalities on available materials management opportunities.

Residents and organizations contact the division to participate in the Recycling Bin Loan Program. This program enables groups to borrow recycling bins for events and parties, at no cost to them. Having recycling bins at their gatherings promotes environmental awareness and provides opportunities to dispose of materials responsibly in an economic manner

1.E A Description of Efforts to Comply with Local Recycling Laws

The Division of Solid Waste continues to employ a full-time compliance inspector who investigates complaints and enforces the licensing law. Since the adoption of the Dutchess County LSWMP, the number of licensed haulers has steadily increased; in January 2021 the County had forty-four (44), by December 2024 the number grew to fifty-six (56). This increase is due to the diligence of staff investigations.

In 2024, staff collaborated with the Resource Recovery Agency (RRA) to begin tipping floor inspections at their waste to energy facility. Having this access allows the division to witness and document loads that are in violation of the source separation regulations pertaining to the [Dutchess County Local Law No.3 of 2014](#).

1.F Obstacles Preventing the Planning Unit from Implementing Tasks of the LSWMP

Pay as you throw (PAYT) continues to be a program that is not feasible to institute on a countywide basis, being that Dutchess County does not operate or facilitate hauling of

waste. Although a waste-to-energy facility exists within the county, the facility was not constructed to accept all in-county waste.

Some local municipalities operate a PAYT system at their transfer stations, however the system only applies to private residents who transport their waste to the transfer station at their own doing. Hauling companies do not dispose of the curbside collected materials at local municipally owned transfer stations. There are three privately owned transfer stations in Dutchess County which do not operate a PAYT system.

1.G The Status of Conformance with the Implementation Schedule

The division has made substantial progress in implementing programs as scheduled in the LSWMP. While the planning unit conducts most tasks on a continuing basis, they have made strides in expanding programs and staying on the established schedule of the adopted LSWMP.

Through community partnership the division has been co-hosting Repair Cafés with the Town of Poughkeepsie's Café beginning in 2023. The Division's website keeps an up-to-date schedule of Repair Cafés held within the County. Additionally in 2024 outreach materials specifying resources for donation and reuse, were produced and listed on the [website](#).

As legislation for Extended Producer Responsibility (EPR) programs are implemented, the planning unit produces outreach materials to correspond with these programs. In 2022 New York State initiated the PaintCare program. Staff communicated with PaintCare for collaboration in outreach materials, ensuring education on the program was distributed to the local municipalities.

Task 10 states the planning unit will continue to look for an alternative method of ash disposal. This is not an achievable task until New York State permits alternative uses for the resulting ash of waste to energy facilities.

As explained in section 1.C, the 2024 Dutchess County budget included \$200,000 in funding for developing a composting program. This was a deviation from Task 21 in the LSWMP implementation schedule. This approach was seen as a more strategic and financially responsible manner to utilizing county funds to assist local municipalities directly in handling organic waste on a local.

At this time, Dutchess County does not plan on moving forward with a feasibility study to examine a county composting facility. Conducting a study of this magnitude would be

costly and would not guarantee a resulting facility. Further funding would be needed to conduct environmental impact assessments as well as getting state approval, adherence to municipal building codes, and re-zoning.

Task 27 is on hold as the county does not have a need for additional animal mortality composting sites.

Task 31 references working with the private construction and demolition (C&D) recyclers in the county to promote reduction and reuse. Within the county there are privately owned transfer stations that are permitted to accept C&D materials. Alternatively, most recycling of C&D is handled by private entities. For example, paving companies can deconstruct asphalt and recycle it on site. At this time the county does not have a dedicated facility to handle C&D, however the planning unit consistently collects data demonstrating a high C&D recycling rate.

Task 36b. states the planning unit will collaborate with Dutchess County Cornell Cooperative Extension (DCCCE) to develop countywide recycling campaigns. As the county has taken on the role of public outreach focused on recycling, DCCCE has been able to transfer its educational campaigns on various other sustainable initiatives.

2. Waste & Recyclables Data

As stated previously, Dutchess County does not own or operate transfer stations or a materials recovery facility, therefore this data is reliant on annual reports obtained from privately owned entities, licensed waste haulers, municipal transfer stations and the Dutchess County Resource Recovery Agency.

2.A 2021 Waste & Recyclables Data

2021 Annual Waste & Recycling Summary Report

Materials	2021 Tons
Municipal Solid Waste (MSW)	205,096
Construction & Demolition Debris (C&D)	160,157
Single Stream	25,334
Commingle	14,363
Organic Material	45,895
Oil/Rendering	218
Lead Acid Batteries	50
Scrap Metal	58,639
Motor Oil/Antifreeze	127
White Goods	315
Sludge	7,019
Tires	2,119
Electronics	437
Wood Pallets	35

2021 Summary of Collected Waste & Recycling Final Destination

Municipal Solid Waste (MSW)

Tonnage	Final Destination
143,679	Dutchess County Resource Recovery Facility, Poughkeepsie, NY
13,836	Ontario County Landfill, Stanley, NY
8,303	Chemung County Landfill, Elmira, NY

30,746	Seneca Meadows Landfill, Waterloo, NY
8,532	Unknown

Construction & Demolition Debris (C&D)

Tonnage	Final Destination
32	Ontario County Landfill, Stanley, NY
63	Seneca Meadows Landfill, Waterloo, NY
52,671	LaMela Sanitation Service, Marlboro, NY
7,650	Chemung County Landfill, Elmira, NY
99,741	Recycled

Single Stream

Tonnage	Final Destination
22,154	Hudson Baylor Beacon LLC, Beacon, NY
3,180	Unknown – Sent to out of County Facilities

Commingled

Tonnage	Final Destination
7,745	Hudson Baylor Beacon LLC, Beacon, NY
294	Ulster County Resource Recovery Agency, Kingston NY
1,036	TOMRA NY Recycling, Schenectady, NY
5,288	Unknown – Sent to out of County Facilities

Organic Material

Material	Tonnage	Final Destination
Food Waste	1,138	Ulster County Resource Recovery Agency, Kingston NY
Manure	15,401	Liberta Brothers Inc, Pine Plains, NY
Manure	20,510	Welsh Sanitation, Amenia, NY
Manure	4,092	Duffy Layton Contracting, Stanfordville, NY
Yard Waste	500	City of Beacon Transfer Station, Beacon, NY
Yard Waste	540	City of Poughkeepsie, Poughkeepsie, NY

Yard Waste	45	Village of Red Hook, Red Hook, NY
Yard Waste	133	Royal Carting, Hopewell Junction, NY
Yard Waste	2,807	Duffy Layton Contracting, Stanfordville, NY
Yard Waste	520	Robb Brothers Farm LLC, Poughkeepsie, NY
Yard Waste	209	Unknown

Oil Rendering

Tonnage	Final Destination
218	Unknown – Collected by industry specific entities for recycling. Final site of recycling not known

Lead Acid Batteries

Tonnage	Final Destination
19	Retriev Technologies, Lancaster OH
24	Catalytic Recovery
3	Verizon
2	American Lamp Recycling LLC, Marlboro, NY
2	Unknown - Final site of recycling not known

Scrap metal

Tonnage	Final Destination
50,347	Baroni Recycling, Poughkeepsie, NY
502	Eisner Brothers Scrap Metal Inc, Poughkeepsie, NY
102	Global Foundries, Malta, NY
7,203	AW Scrap Processors Inc, Wappinger Falls, NY
42	Complete R&R Inc, Newburgh, NY
209	Scrap Metal Removers, Mahopac, NY
234	Unknown - Final site of recycling not known

Motor oil/Antifreeze

Tonnage	Final Destination
5	Vaz-Co Reclaiming Service, Gardiner, NY
1	Patierno Recycling, Lagrangeville, NY

20	Advanced Waste Oil Recovery, Milford, PA
43	Mac-Son Industrial, Selkirk, NY
58	Unknown - Final site of recycling not known

White Goods

Tonnage	Final Destination
315	Interstate Refrigerant Recovery Inc

Sludge

Tonnage	Final Destination
4,970	Duffy Layton Contracting, Stanfordville, NY
1,666	Eldredge Inc., West Chester, PA
383	Naturcycle, Plainville, NY

Tires

Tonnage	Final Destination
59	Don Stevens Tires, Southington, CT
502	Bob's Tires, Hawthorne, NJ
1,525	Casings Inc., Catskill, NY
32	Empire Tire of Edgewater, Plainfield, CT

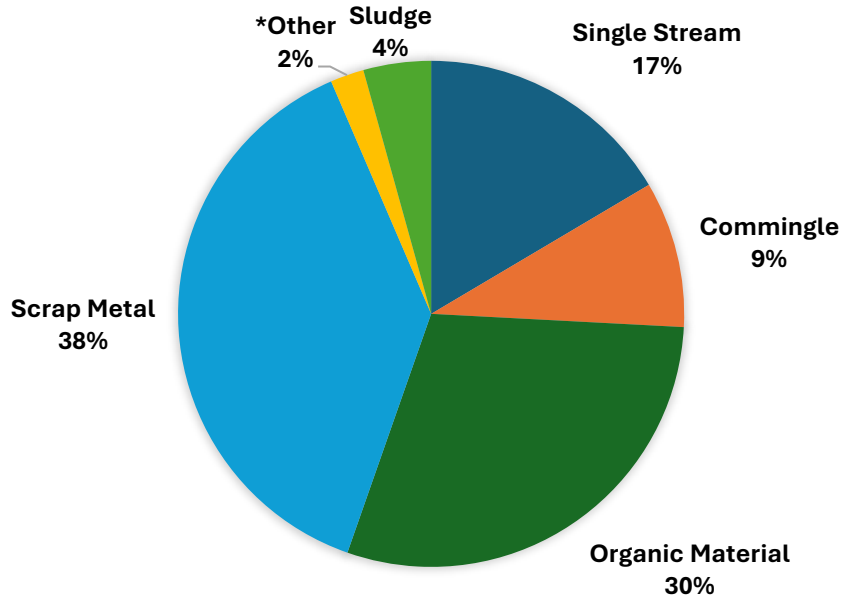
Electronics

Tonnage	Final Destination
209	Electronic Recycling International, Long Island City, NY
181	EWaste, Scotia, NY
4	American Lamp Recycling, Marlboro, NY
4	NLR Inc, Windsor, CT
9	Global Foundries, Malta, NY
30	Unknown – Final site of recycling not known

Wood Pallets

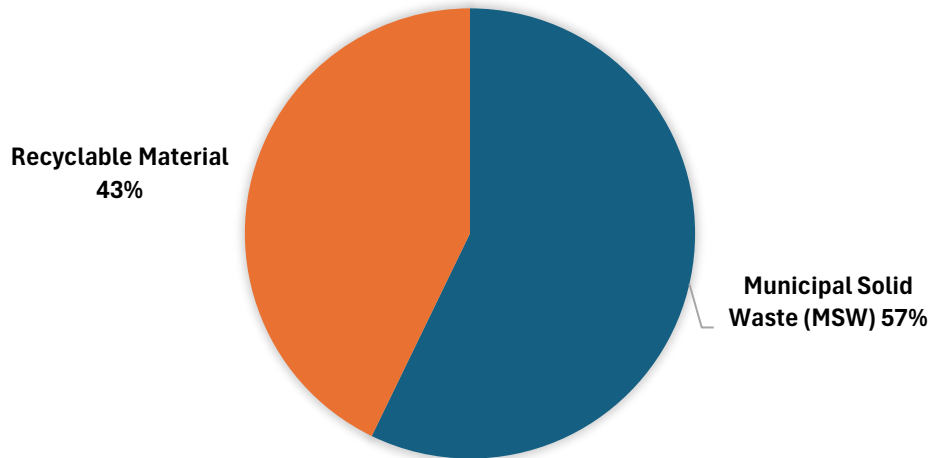
Tonnage	Final Destination
35	Staples Corporate

2021 RECYCLED MATERIALS



*Other includes: White Goods, Motor oil/ Antifreeze, Chemicals, Lead Acid Batteries, Wood Pallets and Oil/Rendering

2021 MSW WASTE & RECYCLING



2.B 2022 Waste & Recyclables Data

2022 Annual Waste & Recycling Summary Report

Materials	2022 Tons
Municipal Solid Waste (MSW)	202,016
Construction & Demolition Debris (C&D)	147,593
Single Stream	21,473
Commingle	7,910
Organic Material	52,558
Oil/Rendering	70
Lead Acid Batteries	1
Scrap Metal	45,483
Motor Oil/Antifreeze	94
White Goods	148
Sludge	6,862
Tires	3,905
Electronics	686
Wood Pallets	35

2022 Summary of Collected Waste & Recycling Final Destination

Municipal Solid Waste (MSW)

Tonnage	Final Destination
105,317	Dutchess County Resource Recovery Facility, Poughkeepsie, NY
10,193	Ontario County Landfill, Stanley, NY
10,436	Chemung County Landfill, Elmira, NY
38,517	Seneca Meadows Landfill, Waterloo, NY
10,160	Ulster County Resource Recovery Agency, Kingston, NY
5,437	Keystone Landfill, PA

19,037	Wheelabrator Westchester, Peekskill, NY
2,919	Unknown

Construction & Demolition Debris (C&D)

Tonnage	Final Destination
55	Ontario County Landfill, Stanley, NY
19,301	Seneca Meadows Landfill, Waterloo, NY
5,122	LaMela Sanitation Service, Marlboro, NY
109	Chemung County Landfill, Elmira, NY
99,762	Recycled
23,244	Unknown

Single Stream

Tonnage	Final Destination
21,473	Hudson Baylor Beacon LLC, Beacon, NY

Commingled

Tonnage	Final Destination
6,611	Hudson Baylor Beacon LLC, Beacon, NY
302	Ulster County Resource Recovery Agency, Kingston NY
913	TOMRA NY Recycling, Schenectady, NY
84	Unknown – Sent to out of County Facilities

Organic Material

Material	Tonnage	Final Destination
Food Waste	1,023	Ulster County Resource Recovery Agency, Kingston NY
Manure	12,690	Liberta Brothers Inc, Pine Plains, NY
Manure	36,466	Welsh Sanitation, Amenia, NY
Yard Waste	7	Welsh Sanitation, Amenia, NY
Yard Waste	700	City of Beacon Transfer Station, Beacon, NY

Yard Waste	500	City of Poughkeepsie, Poughkeepsie, NY
Yard Waste	325	Village of Red Hook, Red Hook, NY
Yard Waste	159	Royal Carting, Hopewell Junction, NY
Yard Waste	23	Duffy Layton Contracting, Stanfordville, NY
Yard Waste	165	Town of Poughkeepsie, Poughkeepsie, NY
Yard Waste	500	Robb Brothers Farm, Poughkeepsie, NY

Oil Rendering

Tonnage	Final Destination
70	Unknown- Final site of recycling not known

Lead Acid Batteries

Tonnage	Final Destination
1	Verizon

Scrap metal

Tonnage	Final Destination
44,320	Baroni Recycling, Poughkeepsie, NY
500	Eisner Brothers Scrap Metal Inc, Poughkeepsie, NY
151	Global Foundries, Malta, NY
16	Verizon
83	West Kingston Recycling, Kingston, NY
213	Expressway Recycling, Cold Spring, NY
16	Fortune Metal Recycling, Rahway NJ
184	Unknown - Final site of recycling not known

Motor oil/Antifreeze

Tonnage	Final Destination
2	Welsh Sanitation, Amenia, NY
35	Royal Carting, Hopewell Junction, NY
36	Advanced Waste Oil Recovery, Milford, PA
21	Mac-Son Industrial, Selkirk, NY

White Goods

Tonnage	Final Destination
59	Interstate Refrigerant Recovery Inc
89	AW Scrap, Wappingers Falls, NY

Sludge

Tonnage	Final Destination
4,041	Duffy Layton Contracting, Stanfordville, NY
2,391	Eldredge, West Chester, PA
430	Naturcycle, Plainville, NY

Tires

Tonnage	Final Destination
23	Don Stevens Tires, Southington, CT
775	Bob's Tires, Hawthorne, NJ
2,434	Casings Inc., Catskill, NY
19	Baroni Recycling, Poughkeepsie, NY
654	CRM, LLC, Albany, NY

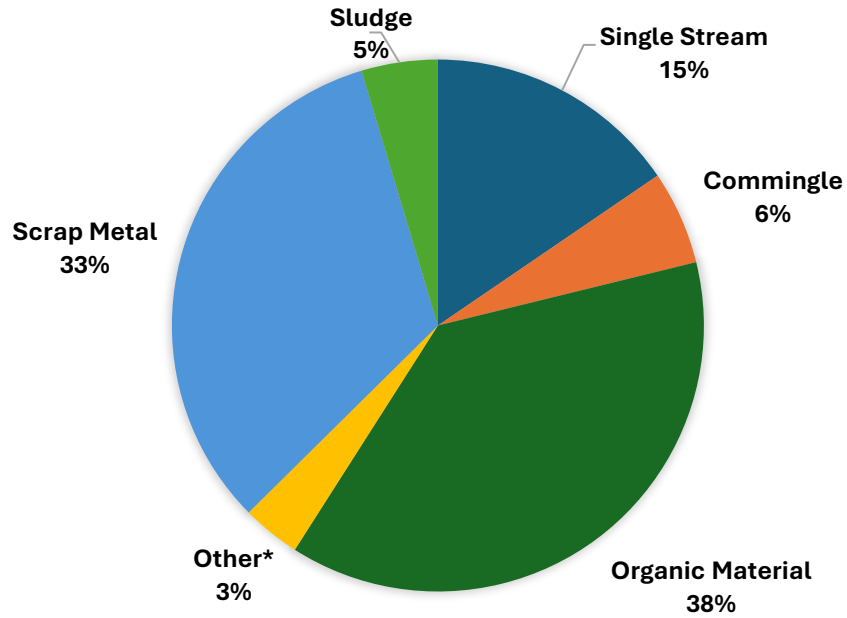
Electronics

Tonnage	Final Destination
481	Electronic Recycling International, Long Island City, NY
105	EWaste, Scotia, NY
3	Verizon
7	Central Hudson Gas and Electric, Poughkeepsie, NY
4	American Lamp Recycling, Marlboro, NY
5	NLR Inc, Windsor, CT
25	Matt's Used Auto Parts, Hyde Park, NY
25	Global Foundries, Malta, NY
4	HV Shred, Hopewell Junction, NY
27	Unknown - Final site of recycling not known

Wooden Pallets

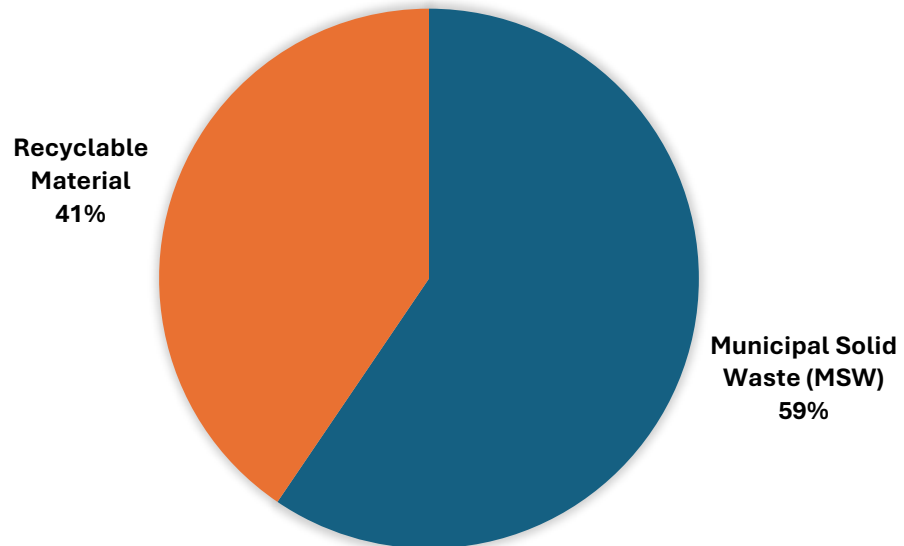
Tonnage	Final Destination
35	Staples Corporate

2022 RECYCLABLE MATERIALS



*Other includes: White Goods, Motor oil/ Antifreeze, Chemicals, Lead Acid Batteries, Wood Pallets and Oil/Rendering

2022 MSW WASTE & RECYCLING



2.C 2023 Waste & Recyclables Data

2023 Annual Waste & Recycling Summary Report

Materials	2023 Tons
Municipal Solid Waste (MSW)	204,217
Construction & Demolition Debris (C&D)	93,255
Single Stream	22,027
Commingle	12,470
Organic Material	57,293
Oil/Rendering	1,971
Lead Acid Batteries	1,340
Scrap Metal	47,582
Motor Oil/Antifreeze	42
White Goods	773
Sludge	7,547
Tires	2,687
Electronics	546
Wood Pallets	15

2023 Summary of Collected Waste & Recycling Final Destination

Municipal Solid Waste (MSW)

Tonnage	Final Destination
121,838	Dutchess County Resource Recovery Facility, Poughkeepsie, NY
12,584	Ontario County Landfill, Stanley, NY
4,483	Chemung County Landfill, Elmira, NY
34,441	Seneca Meadows Landfill, Waterloo, NY
5,527	Keystone Landfill, PA
25,344	Wheelabrator Westchester, Peekskill, NY

Construction & Demolition Debris (C&D)

Tonnage	Final Destination
18,581	Seneca Meadows Landfill, Waterloo, NY
5,120	LaMela Sanitation Service, Marlboro, NY
17	Chemung County Landfill, Elmira, NY
28,201	Mid-Hudson Structural Concrete, Cold Spring, NY
41,336	Recycled

Single Stream

Tonnage	Final Destination
22,027	Hudson Baylor Beacon LLC, Beacon, NY

Commingled

Tonnage	Final Destination
6,372	Hudson Baylor Beacon LLC, Beacon, NY
985	TOMRA NY Recycling, Schenectady, NY
5,113	Unknown – Sent to out of County Facilities

Organic Material

Material	Tonnage	Final Destination
Food Waste	1,081	Ulster County Resource Recovery Agency, Kingston NY
Manure	12,690	Liberta Brothers Inc, Pine Plains, NY
Manure	33,744	Welsh Sanitation, Amenia, NY
Manure	2,752	Duffy Layton Contracting, Stanfordville, NY
Yard Waste	325	Village of Red Hook, Red Hook, NY
Yard Waste	12	Royal Carting, Hopewell Junction, NY
Yard Waste	4,874	Duffy Layton Contracting, Stanfordville, NY
Yard Waste	640	City of Beacon, Beacon NY
Yard Waste	500	Robb Brothers Farm LLC, Poughkeepsie, NY

Food Waste	660	Unknown
Yard Waste	15	Unknown

Oil Rendering

Tonnage	Final Destination
1,971	Unknown – Final site of recycling not known

Lead Acid Batteries

Tonnage	Final Destination
1,340	Unknown – Final site of recycling not known

Scrap metal

Tonnage	Final Destination
37,911	Baroni Recycling, Poughkeepsie, NY
225	Eisner Brothers Scrap Metal Inc, Poughkeepsie, NY
836	West Kingston Recycling, Kingston, NY
8,610	Unknown - Final site of recycling not known

Motor oil/Antifreeze

Tonnage	Final Destination
18	Royal Carting, Hopewell Junction, NY
11	Heritage Crystal Clean LLC, Hoffman Estates, IL
7	Safety Kleen, West Nyack, NY
3	Miller Environmental, Rock Tavern, NY
3	Unknown – Final site of recycling not known.

White Goods

Tonnage	Final Destination
773	Interstate Refrigerant Recovery Inc

Sludge

Tonnage	Final Destination
4,292	Duffy Layton Contracting, Stanfordville, NY
2,521	Eldredge, West Chester, PA
734	Naturcycle, Plainville, NY

Tires

Tonnage	Final Destination
420	Bob's Tires, Hawthorne, NJ
535	Casings Inc., Catskill, NY
1,512	Recycle Depot, Poughkeepsie
39	Larkin Tires, West Haven, CT
37	CRM, LLC, Albany, NY
144	Unknown - Final site of recycling not known

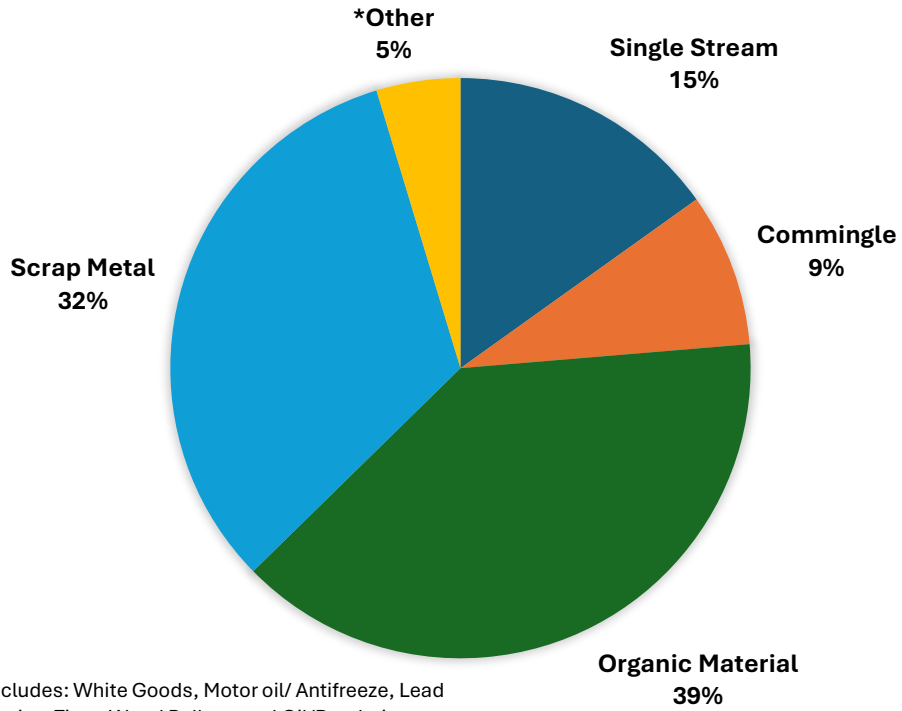
Electronics

Tonnage	Final Destination
358	Electronic Recycling International, Long Island City, NY
159	EWaste, Scotia, NY
7	Verizon
8	Central Hudson Gas and Electric, Poughkeepsie, NY
7	American Lamp Recycling, Marlboro, NY
4	NLR Inc, Windsor, CT

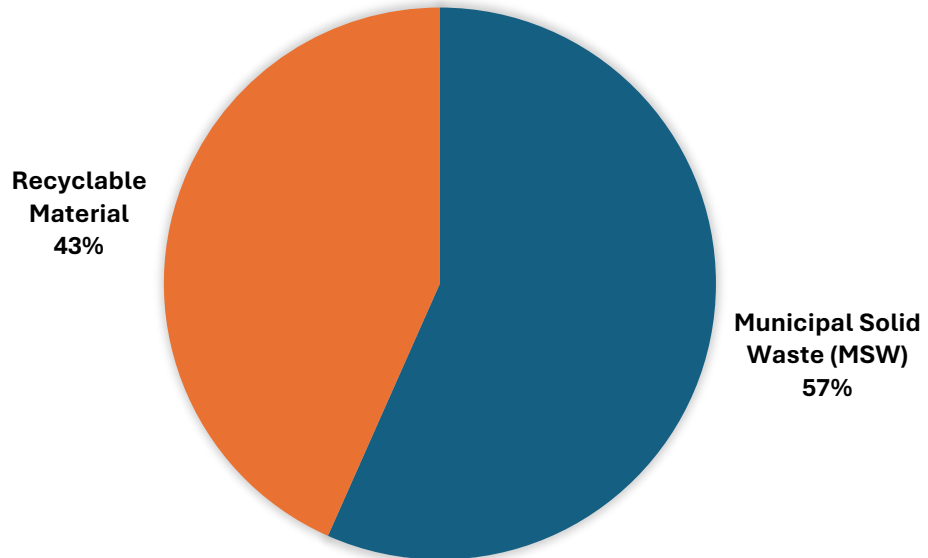
Wood Pallets

Tonnage	Final Destination
15	Staples Corporate

2023 RECYCLABLE MATERIALS



2023 MSW WASTE & RECYCLING



2.D 2024 Waste & Recyclables Data

2024 Annual Waste & Recycling Summary Report

Materials	2024 Tons
Municipal Solid Waste (MSW)	201,000
Construction & Demolition Debris (C&D)	166,794
Single Stream	22,057
Commingle	11,170
Organic Material	57,393
Oil/Rendering	216
Lead Acid Batteries	305
Scrap Metal	47,025
Motor Oil/Antifreeze	260
White Goods	1,455
Sludge	7,905
Tires	2,229
Electronics	697
Wood Pallets	35

2024 Summary of Collected Waste & Recycling Final Destination

Municipal Solid Waste (MSW)

Tonnage	Final Destination
143,153	Dutchess County Resource Recovery Facility, Poughkeepsie, NY
2,351	Ulster County Resource Recovery Facility, Kingston, NY
19,365	Ontario County Landfill, Stanley, NY
3,555	Chemung County Landfill, Elmira, NY
27,570	Seneca Meadows Landfill, Waterloo, NY
5,006	Unknown

Construction & Demolition Debris (C&D)

Tonnage	Final Destination
42,517	Mid-Hudson Structural Concrete, Cold Spring, NY
258	Chemung County Landfill, Elmira, NY
13,029	Seneca Meadows Landfill, Waterloo, NY
95,183	Recycled
15,807	Unknown

Single Stream

Tonnage	Final Destination
18,998	Hudson Baylor Beacon LLC, Beacon, NY
3,059	Unknown

Commingled

Tonnage	Final Destination
6,122	Hudson Baylor Beacon LLC, Beacon, NY
981	TOMRA NY Recycling
636	Ulster County Resource Recovery Agency, Kingston, NY
3,431	Unknown – Sent to out of County Facilities

Organic Material

Material	Tonnage	Final Destination
Food Waste	719	Ulster County Resource Recovery Agency, Kingston NY
Food Waste	1,852	McEnroe Organic, Millerton, NY
Food Waste	630	Royal Carting, Hopewell Junction, NY
Manure	225	Liberta Brothers Inc, Pine Plains, NY
Manure	33,846	Welsh Sanitation, Amenia, NY
Manure	772	Ellerslie Stables, Rhinebeck, NY
Yard Waste	5,800	Duffy Layton Contracting, Stanfordville, NY
Yard Waste	325	Village of Red Hook, Red Hook, NY
Yard Waste	500	City of Beacon, Beacon, NY
Yard Waste	2	Royal Carting, Hopewell Junction, NY
Yard Waste	1	Ellerslie Stables, Rhinebeck, NY
Yard Waste	518	Robb Brother’s Farm, Poughkeepsie, NY
Yard Waste	7,183	Unknown

Manure	5,020	Unknown
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Oil Rendering

Tonnage	Final Destination
216	Unknown – Final site of recycling not known

Lead Acid Batteries

Tonnage	Final Destination
285	Safety Kleen, West Nyack, NY
6	Advanced Auto Parts
9	Clean Harbors, Newburgh, NY
5	Unknown – Final site of recycling not known

Scrap metal

Tonnage	Final Destination
39,680	Baroni Recycling, Poughkeepsie, NY
125	Eisner Brothers Scrap Metal Inc, Poughkeepsie, NY
44	West Kingston Recycling, Kingston, NY
185	Expressway Recycling, Cold Spring, NY
15	Fortune Metal Recycling, Rahway, NJ
6,976	Unknown – Final site of recycling not known

Motor oil/Antifreeze

Tonnage	Final Destination
50	Royal Carting, Hopewell Junction, NY
10	Heritage Crystal Clean LLC, Hoffman Estates, IL
51	Safety Kleen, West Nyack, NY
4	Vaz-Co Reclaiming Service, Gardiner, NY
145	Unknown – Final site of recycling not known.

White Goods

Tonnage	Final Destination
1,455	Interstate Refrigerant Recovery Inc

Sludge

Tonnage	Final Destination
4,832	Duffy Layton Contracting, Stanfordville, NY
2,466	Unknown – Final site of recycling not known.
607	Naturcycle, Plainville, NY

Tires

Tonnage	Final Destination
538	Bob's Tires, Hawthorne, NJ
338	Casings Inc., Catskill, NY
23	Don Stevens Tires, Southington, CT
69	Larkin Tires, West Haven, CT
5	Taylor Recycling, Montgomery, NY
30	CRM, LLC, Albany, NY
1,226	Unknown – Final site of recycling not known.

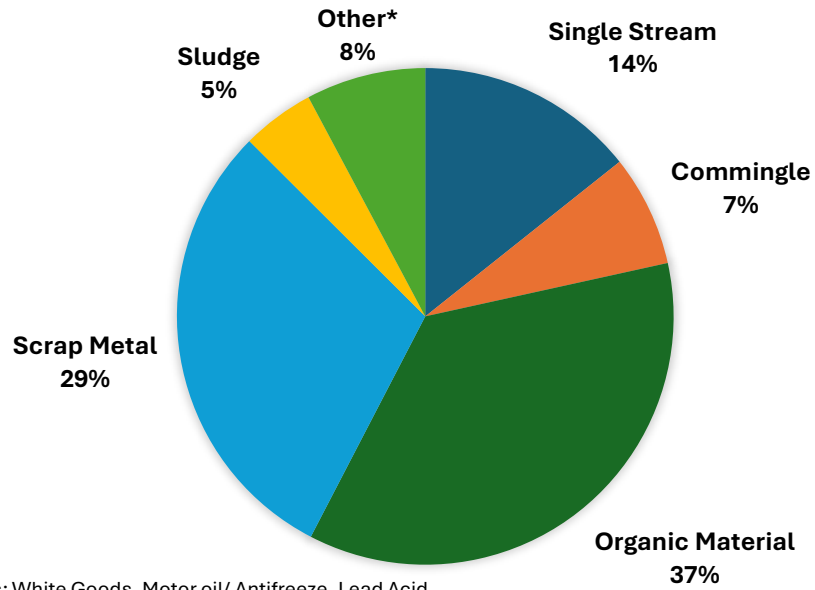
Electronics

Tonnage	Final Destination
378	Electronic Recycling International, Long Island City, NY
270	EWaste, Scotia, NY
38	IBM, Poughkeepsie, NY
2	Verizon
4	Central Hudson Gas and Electric, Poughkeepsie, NY
5	American Lamp Recycling, Marlboro, NY

Wood Pallets

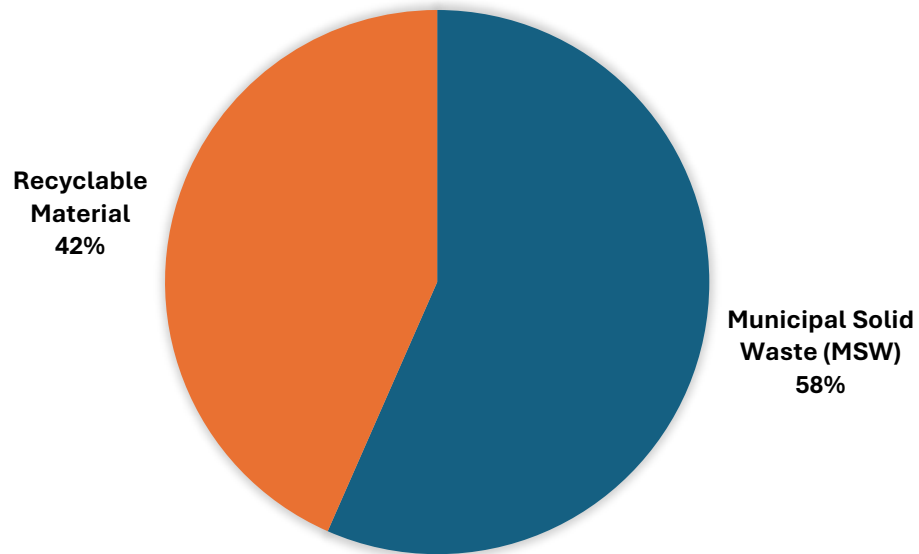
Tonnage	Final Destination
35	Staples Corporate

2024 RECYCLED MATERIAL



*Other includes: White Goods, Motor oil/ Antifreeze, Lead Acid Batteries, Tires, Wood Pallets and Oil/Rendering

2024 MSW WASTE & RECYCLING



3. Significant Section Updates

With the Dutchess County Biennial update being inclusive of four years, there are several section updates that can be found spanning from 2021 through 2024.

3A. Transfer Stations

Since the plan's adoption, there have been four municipal transfer stations that have closed. Three of these stations, located in the Towns of Hyde Park, Lagrange, and Clinton, were operated by an outside company which ended their contracted services in the effected locations on January 1, 2023. The fourth transfer station, located in the City of Poughkeepsie, suffered a destructive fire in November 2022 which destroyed the site and has not reopened as of the time of this report.

The closure of these transfer stations has caused residents residing in these municipalities to either drive farther to another facility for the same services or hire a Dutchess County Licensed Hauler to collect their waste and recycling curbside. City of Poughkeepsie residents are afforded the collection services by city-operated hauling.

3B. Dutchess County Resource Recovery Agency

In June of 2022 the waste-to-energy facility at the DCRRA was affected by an abrupt external electric power supply failure. The sudden loss of power from the local electric utility infrastructure caused damage to operational machinery inside of the facility and led to a prolonged outage. Due to the time needed to facilitate the work, waste that would have normally been received at the DCRRA was sent elsewhere as is documented in Sections 2b and 2c. At the time of the repairs, the opportunity to make upgrades and conduct routine maintenance presented itself. This work resulted in maximizing the effectiveness of the facility to continue operations for many years to come.

3C. Organic Recovery Programming

The Dutchess County Local Solid Waste Management Plan mentions a feasibility study for a county composting facility. After careful consideration, it was determined that the most economically responsible way to service our residents would be to assist municipalities directly. During the public review of the draft Dutchess County Local Solid Waste Management Plan, the planning unit received many requests from residents asking the county to devise a solution for homeowners to dispose of their food waste. To facilitate a

program on a local level, allowing residents to have access to organic recycling while using county funds in a way that would yield a feasible result, was of utmost importance to the planning unit.

In the 2024 Dutchess County budget, funding was provided to establish a composting grant program. The grant was established as a matching grant program where municipalities and K-12 public schools could apply for funding. The grant program included the option of instituting a food waste drop-off program or funding to install and operate an in-vessel aerobic composter.

3D. Reuse and Waste Reduction Programming

In 2023 the Dutchess County Division of Solid Waste Management began collaborating with the Hudson Valley Repair Café. This partnership was introduced as a way for the county to assist already existing cafes. The county is fortunate to have many community run Repair Cafes organized by dedicated volunteers with a shared vision of sustainable living.

Repair cafés offer residents an opportunity to fix their items, become more educated on the repair process, and connect with local community members. Since partnering with local repair cafés in 2023, residents have been provided with a chance to engage with our office and learn about proper disposal practices, textile recycling and other programming offered through the Division of Solid Waste Management. Staff also assisted in collecting textiles for donation and recycling at these events, as well as public outreach and advertising.

4. Revised Implementation Schedule and Waste Projections

The county's implementation schedule, found in Appendix A, Table 1, is a working document based on the goals of materials management throughout the county. Most tasks are part of the ongoing operation of the planning unit. These tasks expand as successful program implementation is achieved. This schedule changes over time due to new ideas, opportunities, and/or constraints. Adjustments will be updated as necessary in future biennial updates.

The projection tool which is provided by the NYSDEC does not allow for modifications in the Detailed Composition Analysis, Appendix B Table 1. While Dutchess County does not receive data that details the composition of paper, metal, plastic, and glass, we can estimate the tonnage of these materials based on the state and national statistics in relation to the single stream and dual stream collection data received.

The county projections in the adopted LSWMP reflected a modest diversion rate based on the 2020 data. As documented in this update, the county has surpassed these diversion rates. According to the NYSDEC Population and MSW Composition Calculator, the annual rate of population is projected to decrease 0.05%. The MSW generation is projected to decrease 0.5% resulting in a decrease of 11,400 tons between 2024 and 2030.

The MSW projections for the remainder of the planning period are demonstrated in Appendix B, Table 2. Progress in achieving these diversion rates will be reviewed annually and adjusted as needed.

Appendix A

The following schedule is a culmination of tasks the Division performs on a daily basis and has a number of potential tasks which will be evaluated in the timeframe. The Implementation Schedule provides a general timeline and sequence of all these tasks.

The Plan is considered a living document that will be updated throughout the planning period as elements of the Plan are pursued and implemented, which includes the Implementation Schedule. The following provides a summary of each Implementation Schedule included in this section.

Implementation Schedule:

Local Solid Waste Management Plan and Reporting

- Biennial LSWMP Update
- Draft LSWMP 10-year plan
- Adopted 10- plan
- Biennial summary update to County

Laws and Legislation

- Enforcement of Local Law No. 3
 - Ensure compliance with requirement that haulers be licensed
 - On-site and visual inspection of compliance with hauler licensing
 - Review current law and make amendments as needed
 - Respond to reports of non-compliance with mandatory source separation of recyclable material law
 - On-site inspection of compliance with law
 - Fine enforcement
- Promote NYS laws and legislation concerning solid waste management
 - Help to promote and enforce NYS Food Donation and Food Scrap Recycling Act
 - Help to promote the PaintCare paint stewardship program
 - Keep up-to-date on NYS legislation concerning product stewardship and solid waste initiatives

Data Management

- Process and monitor hauler licensing
- Annual collection of MSW data
 - Continue to work in obtain sludge generation data
 - Continue to look for ways to enhance data collection
 - Continue to track if additional recycling bins given to entities increases recycling

- Solid Waste Management website
 - Listing of licensed haulers
 - License application and renewal forms on website
 - Annual County-wide MSW report on website
 - Latest product stewardship legislation and promotion
 - Up-to-date information on recycling, reuse and reduction
 - Household Hazardous Waste and Electronics collection events promotion

Waste-to-Energy Facility

- Continue to look for an alternative method of ash disposal
- Update the tipping fee rates to continue to remain without a Net Service Fee
- Continue to accept pharmaceutical wastes, including from surrounding counties for proper destruction
- Assess waste disposal technology and options
 - Assess the lifespan of the current facility
 - Review current technology for options of waste disposal
 - Plan for future disposal of waste within the County
 - Conduct a waste reduction and diversion feasibility study

Reduce and Reuse

- Support PAYT concept and help initiate a program if there is a municipal interest
- Extended Producer Responsibility (EPR) product/packaging initiatives
 - Work with the state on EPR compliance (e-waste, plastic bags, etc.)
 - Identify and promote local EPR opportunities
- Keep the website up-to-date concerning reduce and reuse opportunities
 - Co-host a repair café
 - Enhance programming for textile donations
 - Promote reuse centers within the County

Recycling Education

- Public presentations & attend green events to promote recycling
 - Participate in recycling events
 - Continue public presentations to schools, libraries, businesses and public sector
 - Continue America Recycles Day activities and promotions
 - Continue Annual School Recycling Programming
- Website promotion of recycling

- Identify and promote the list of what can be recycled in the County
- Create additional videos for recycling education
- Continue bi-monthly newsletter concerning recycling and reuse topics
- Create infrastructure for more public space recycling
 - Continue bin loan program for public events
 - Identify tourism impacts and need for additional recycling infrastructure

Organics Management

- Work with a consulting firm to assess the feasibility of a composting facility
 - Apply to grant sources to help with consulting firm and study fees
 - Identify and quantify major generators of organics, including biosolids
 - Identify a possible site for an organics composting facility
 - Identify the type of compost facility that would be feasible
 - Identify funding sources for a facility if applicable
- Promote mulching leaves and grass clippings at the source
- Identify opportunities for food diversion to local pantries/kitchens
- Continue to promote backyard composting and the sale of at-cost compost bins
 - Develop backyard composting workshops

Special Wastes

- Continue HHW and Electronics collection events for County residents
- Continue to hold an annual CESQG event for small businesses, schools and farms
- Evaluate the need for additional animal mortality composting

Partnerships

- Maintain active participation in Hudson Valley Regional Council Solid Waste Committee meetings
- Maintain active participation in the Climate Smart program
- Communicate with municipalities to assist them with solid waste management and transfer station operations
 - Inform about local and state recycling laws
 - Keep up-to-date with what is accepted, and what is not, at transfer stations
 - Promote grant opportunities for drop off center upgrades & reuse centers
 - Provide technical assistance with yard waste management
 - Work with municipalities developing zoning and building code language that requires construction & demolition debris recycling

- Work with the private C&D recyclers in the county to promote reduction & reuse

Education Sector

- Elementary and secondary schools:
 - Verify all public and private schools are in compliance with local law
 - Assist with drafting recycling contracts as needed to incentivize recycling
 - Develop elementary and secondary school recycling for fundraising
 - Develop protocols for end of year "cleanouts" to divert more materials for recycling
 - Provide signage, brochures, flyer to individual schools for recycling promotion
- Colleges:
 - Promote college, county and community relationships regarding solid waste sustainability programs

Commercial / Institutional Sector

- Conduct compliance inspections of malls, shopping centers, government and business centers*
- Identify barriers to recycling compliance and strategies to overcome them

Agricultural Sector

- Work with DC Cornell Cooperative Extension
 - Composting education and promotion
 - County-wide recycling campaigns
- Working with local farms on recycling and composting initiatives

Industrial Sector

- Identify major industrial generators in the county
- Explore areas of expanding reuse/recycling and composting initiatives

Appendix D: Table 1																					
Dutchess County Solid Waste Management Plan Implementation Schedule																					
#	TASK	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
		Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec
Local Solid Waste Management Plan and Reporting																					
1.	Biennial LSWMP Update																				
2.	Draft LSWMP 10-year plan																				
3.	Adopted 10- plan																				
4.	Biennial summary update to County																				
Laws and Legislation																					
5.	Enforcement of Local Law No. 3																				
a.	Ensure compliance with requirement that haulers be licensed																				
b.	On-site and visual inspection of compliance with hauler licensing*																				
c.	Review current law and make amendments as needed																				
d.	Respond to reports of non-compliance with mandatory source separation of recyclable material law*																				
e.	On-site inspection of compliance with law*																				
f.	Fine enforcement*																				
6.	Promote NYS laws and legislation concerning solid waste management																				
a.	Help to promote and enforce NYS Food Donation and Food Scrap Recycling Act																				
b.	Help to promote the PaintCare paint stewardship program																				
c.	Keep up-to-date on NYS legislation concerning product stewardship and solid waste initiatives																				
Data Management																					
7.	Process and monitor hauler licensing																				
8.	Annual collection of MSW data																				
a.	Continue to work in obtain sludge generation data																				
b.	Continue to look for ways to enhance data collection																				
c.	Continue to track if additional recycling bins given to entities increases recycling																				
9.	Solid Waste Management website																				
a.	Listing of licensed haulers																				
b.	License application and renewal forms on website																				
c.	Annual County-wide MSW report on website																				
d.	Latest product stewardship legislation and promotion																				
e.	Up-to-date information on recycling, reuse and reduction																				
f.	Household Hazardous Waste and Electronics collection events promotion																				
Waste-to-Energy Facility																					
10.	Continue to look for an alternative method of ash disposal																				
11.	Update the tipping fee rates to continue to remain without a Net Service Fee																				
12.	Continue to accept pharmaceutical wastes, including from surrounding counties for proper destruction																				
13.	Assess waste disposal technology and options																				
a.	Assess the lifespan of the current facility																				
b.	Review current technology for options of waste disposal																				
c.	Plan for future disposal of waste within the County																				
Reduce and Reuse																					
14.	Support PAYT concept and help initiate a program if there is a municipal interest																				
15.	Extended Producer Responsibility (EPR) product/packaging initiatives																				
a.	Work with the state on EPR compliance (e-waste, plastic bags, etc.)*																				
b.	Identify and promote local EPR opportunities**																				
16.	Keep the website up-to-date concerning reduce and reuse opportunities**																				
a.	Co-host a repair café**																				
b.	Enhance programming for textile donations																				
c.	Promote reuse centers within the County**																				
17.	Conduct a waste reduction and diversion feasibility study																				
Recycling Education																					
18.	Public presentations & attend green events to promote recycling																				
a.	Participate in recycling events**																				
b.	Continue public presentations to schools, libraries, businesses and public sector**																				
c.	Continue America Recycles Day activities and promotions**																				
d.	Continue Annual School Recycling Programming**																				

Appendix D: Table 1																					
Dutchess County Solid Waste Management Plan Implementation Schedule																					
#	TASK	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
		Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec
19.	Website promotion of recycling																				
a.	Identify and promote the list of what can be recycled in the County**																				
b.	Create additional videos for recycling education**																				
c.	Continue monthly newsletter concerning recycling and reuse topic**																				
20.	Create infrastructure for more public space recycling																				
a.	Continue bin loan program for public events																				
b.	Identify tourism impacts and need for additional recycling infrastructure**																				
Organics Management																					
21.	Work with a consulting firm to assess the feasibility of a composting facility																				
a.	Apply to grant sources to help with consulting firm and study fees																				
b.	Identify and quantify major generators of organics, including biosolids																				
c.	Identify a possible site for an organics composting facility																				
d.	Identify the type of compost facility that would be feasible																				
e.	Identify funding sources for a facility if applicable																				
22.	Promote mulching leaves and grass clippings at the source																				
23.	Identify opportunities for food diversion to local pantries/kitchens																				
24.	Continue to promote backyard composting and the sale of at-cost compost bins																				
a.	Develop backyard composting workshops																				
Special Wastes																					
25.	Continue HHW and Electronics collection events for County residents																				
26.	Continue to hold an annual CESQG event for small businesses, schools and farms																				
27.	Evaluate the need for additional animal mortality composting																				
Partnerships																					
28.	Maintain active participation in Hudson Valley Regional Council Solid Waste Committee meetings																				
29.	Maintain active participation in the Climate Smart program																				
30.	Communicate with municipalities to assist them with solid waste management and transfer station operations																				
a.	Inform about local and state recycling laws*																				
b.	Keep up-to-date with what is accepted, and what is not, at transfer stations**																				
c.	Promote grant opportunities for drop off center upgrades & reuse centers**																				
d.	Provide technical assistance with yard waste management																				
e.	Work with municipalities developing zoning and building code language that requires construction & demolition debris recycling																				
31.	Work with the private C&D recyclers in the county to promote reduction & reuse**																				
Education Sector																					
32.	Elementary and secondary schools:																				
a.	Verify all public and private schools are in compliance with local law*																				
b.	Assist with drafting recycling contracts as needed to incentivize recycling**																				
c.	Develop elementary and secondary school recycling for fundraising**																				
d.	Develop protocols for end of year "cleanouts" to divert more materials for recycling**																				
e.	Provide signage, brochures, flyer to individual schools for recycling promotion**																				
33.	Colleges:																				
a.	Promote college, county and community relationships regarding solid waste sustainability programs																				
Commercial/Institutional Sector																					
34.	Conduct compliance inspections of malls, shopping centers, government and business centers*																				
35.	Identify barriers to recycling compliance and strategies to overcome them																				
Agricultural Sector																					
36.	Work with DC Cornell Cooperative Extension																				
a.	Composting education and promotion																				
b.	County-wide recycling campaigns																				
c.	Working with local farms on recycling and composting initiatives																				
Industrial Sector																					
37.	Identify major industrial generators in the county																				

Appendix D: Table 1																					
Dutchess County Solid Waste Management Plan Implementation Schedule																					
#	TASK	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
		Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec
38.	Explore areas of expanding reuse/recycling and composting initiatives																				
Legend:																					
Ongoing task: Have been implemented and will be ongoing throughout the ten-year plan.																					
Future task: Indicated by green highlight																					
Task no longer applicable in this plan																					
New Task																					
The Implementation Schedule timeline and tasks are dependent on staffing and funding.																					
The numbering of tasks is for reference use only, and do not indicate priority.																					
The asterisks indicate that the task could be, or should be, done by the Compliance Officer or Recycling Educator. No asterisk, the task is done or can be done, by everyone on staff.																					
* = Compliance Officer task																					
** = Staff task																					

Appendix B

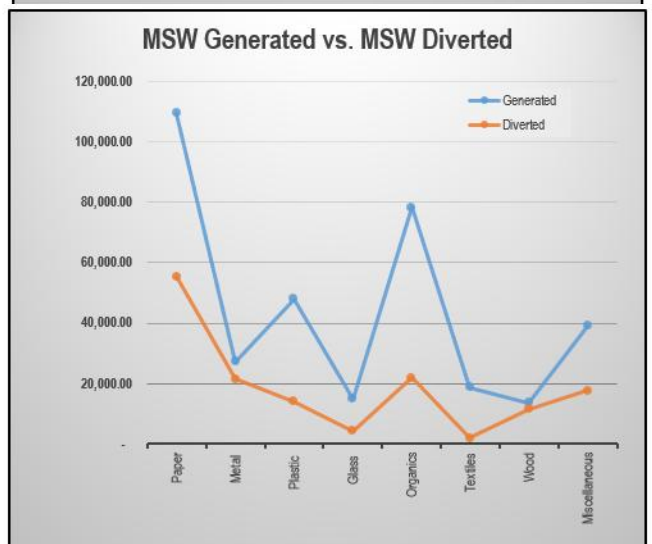
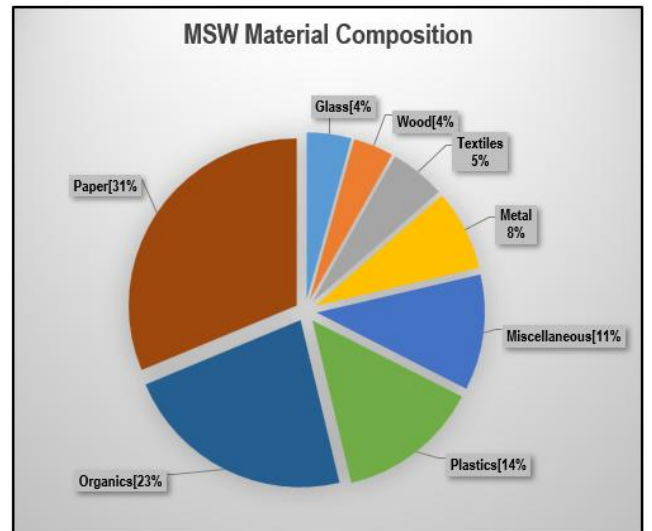
Appendix B: Table 1 Municipal Solid Waste (MSW) Detailed Composition Analysis

On this tab, the composition of the municipal waste stream will be estimated based on the amount of material generated in the planning unit and the state average of the different waste materials. A pie chart will be generated to clearly show the composition of the waste stream and to identify key categories of the waste stream for the planning unit.

The total tons of MSW diverted per year will be auto populated based on previous data inputs, while the amount tons diverted for each material by category should be populated by the user. Purple should be used for amounts of diverted waste by type of material, and a totaled number by category (e.g. paper, metal) should be put in the green cells. After inputting the data, a graphic will be generated to show the MSW generation and diversion streams in Tons.

Make sure that the total amounts at the bottom of the page are consistent with the data you already put into the calculator. If the cell is highlighted in red, you should revise the amounts of diverted waste by category.

		2024		
		MSW Materials Composition (%)	MSW Generated (Tons)	MSW Diverted (Tons)
	Material	100.0%	343,842	142,842.00
Paper	Newspaper	3.8%	13,049	5,427.99
	Corrugated Cardboard	9.8%	33,775	13,998.52
	Other Recyclable Paper (Total)	11.1%	38,319	15,855.46
	Other Compostable Paper	6.5%	22,475	9,284.73
	Total Paper	31.3%	107,618	44,566.70
Metal	Ferrous/Aluminum Containers (Total)	1.6%	5,466	2,285.47
	Other Ferrous Metals	5.1%	17,472	7,284.94
	Other Non-Ferrous Metals (Total)	1.1%	3,904	1,858.95
	Total Metals	7.8%	26,843	11,429.36
Plastic	PET Containers	0.9%	3,147	1,285.58
	HDPE Containers	0.8%	2,871	1,142.74
	Other Plastic (3-7) Containers	0.2%	659	285.68
	Film Plastic	5.7%	19,558	8,141.99
	Other Plastic (Total)	6.1%	21,001	8,713.36
	Total Plastics	13.7%	47,236	19,569.35
Glass	Glass Bottles, Jars and Containers	3.9%	13,450	5,570.84
	Other Glass (Flat glass, dishware, light bulbs, etc.)	0.4%	1,291	571.37
	Total Glass	4.3%	14,741	6,142.21
Organics	Food Scraps	14.7%	50,706	20,997.77
	Leaves and Grass / Pruning and Trimmings	7.7%	26,397	10,998.83
	Total Organics	22.4%	77,103	31,996.60
Textiles	Clothing Footwear, Towels, Sheets	3.9%	13,307	5,570.84
	Carpet	1.5%	5,141	2,142.63
	Total Textiles	5.4%	18,448	7,713.47
Wood	Total Wood (Pallets, crates, adulterated and non-adulterated)	3.9%	13,328	5,570.84
Miscellaneous	DIY Construction & Renovation Materials	4.3%	14,910	6,142.21
	Diapers	1.7%	5,785	0.00
	Electronics	1.5%	5,281	2,141.63
	Tires	1.5%	5,015	2,141.63
	HHW	0.3%	1,128	428.53
	Soils and Fines	0.2%	793	285.68
	Other Composite Materials - Durable and/or inert	1.6%	5,613	4,713.79
	Total Miscellaneous	11.2%	38,525	15,853.47
Total		100.0%	343,842	142,842.00



Appendix B: Table 2 Municipal Solid Waste (MSW) Diversion Projections

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 beneficial use.

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

Year	2025	2026	2027	2028	2029	2030
Projected MSW Generation (Tons/yr)	343,842	341,941	340,051	338,172	336,302	334,443
MSW Diverted (Tons/yr)	145,995	145,528	145,060	145,054	144,859	145,022

		Material	2024				2025	2026	2027	2028	2029	2030
			MSW Materials Composition (%)	MSW Generated (Tons)	MSW Diverted (Tons)	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted
			100.0%	343,842	142,842	41.5%	42.5%	42.6%	42.7%	42.9%	43.1%	43.4%
Paper		Newspaper	3.8%	13,049	5,428	41.6%	24.0%	23.7%	23.5%	23.0%	22.8%	22.8%
		Corrugated Cardboard	9.8%	33,775	13,999	41.4%	95.0%	95.0%	95.0%	95.0%	95.3%	96.0%
		Other Recyclable Paper (Total)	11.1%	38,319	15,855	41.4%	50.0%	50.0%	50.0%	50.8%	50.8%	51.0%
		Other Compostable Paper	6.5%	22,475	9,285	41.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		Total Paper	31.3%	107,618	44,567	41.4%	50.5%	50.5%	50.5%	50.7%	50.8%	51.1%
Metal		Ferrous/Aluminum Containers (Total)	1.6%	5,466	2,285	41.8%	52.2%	52.2%	52.2%	52.8%	52.8%	53.0%
		Other Ferrous Metals	5.1%	17,472	7,285	41.7%	89.5%	89.5%	89.5%	89.5%	89.5%	90.0%
		Other Non-Ferrous Metals (Total)	1.1%	3,904	1,859	47.6%	70.1%	70.5%	70.5%	71.0%	71.4%	72.0%
		Total Metals	7.8%	26,843	11,429	42.6%	79.1%	79.1%	79.1%	79.3%	79.4%	79.8%
Plastic		PET Containers	0.9%	3,147	1,286	40.8%	29.1%	29.1%	29.1%	29.1%	29.1%	30.0%
		HDPE Containers	0.8%	2,871	1,143	39.8%	29.3%	29.3%	29.3%	29.3%	29.3%	30.0%
		Other Plastic (3-7) Containers	0.2%	659	286	43.4%	5.5%	5.5%	5.5%	5.5%	5.5%	6.0%
		Film Plastic	5.7%	19,558	8,142	41.6%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%
		Other Plastic (Total)	6.1%	21,001	8,713	41.5%	49.5%	49.5%	49.5%	49.5%	49.5%	50.0%
		Total Plastics	13.7%	47,236	19,569	41.4%	29.4%	29.4%	29.4%	29.4%	29.4%	29.8%
Glass		Glass Bottles, Jars and Containers	3.9%	13,450	5,571	41.4%	31.3%	31.3%	31.3%	31.3%	31.8%	32.0%
		Other Glass (Flat glass, dishware, light bulbs, etc.)	0.4%	1,291	571	44.3%	0.5%	0.5%	0.5%	0.5%	0.8%	0.8%
		Total Glass	4.3%	14,741	6,142	41.7%	28.6%	28.6%	28.6%	28.6%	29.1%	29.3%
Organics		Food Scraps	14.7%	50,706	20,998	41.4%	5.5%	5.8%	5.8%	6.0%	6.2%	6.5%
		Leaves and Grass / Pruning and Trimmings	7.7%	26,397	10,999	41.7%	71.0%	71.0%	71.5%	72.0%	72.3%	72.5%
		Total Organics	22.4%	77,103	31,997	41.5%	27.9%	28.1%	28.3%	28.6%	28.8%	29.1%
Textiles		Clothing Footwear, Towels, Sheets	3.9%	13,307	5,571	41.9%	15.2%	16.2%	16.8%	17.5%	17.9%	18.2%
		Carpet	1.5%	5,141	2,143	41.7%	0.0%	1.0%	1.5%	2.0%	2.2%	2.5%
		Total Textiles	5.4%	18,448	7,713	41.8%	11.0%	12.0%	12.5%	13.2%	13.5%	13.8%
Wood		Total Wood (Pallets, crates, adulterated and non-adulterated wood)	3.9%	13,328	5,571	41.8%	84.8%	85.0%	85.0%	85.0%	85.5%	85.5%
Miscellaneous		DIY Construction & Renovation Materials	4.3%	14,910	6,142	41.2%	65.5%	65.5%	65.8%	66.5%	66.8%	67.0%
		Diapers	1.7%	5,785	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		Electronics	1.5%	5,281	2,142	40.6%	24.5%	24.5%	24.5%	24.5%	25.0%	25.5%
		Tires	1.5%	5,015	2,142	42.7%	42.0%	42.0%	42.6%	43.0%	43.5%	44.0%
		HMW	0.3%	1,128	429	38.0%	33.7%	33.7%	33.7%	33.7%	35.8%	36.0%
		Soils and Fines	0.2%	793	286	36.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		Other Composite Materials - Durable and/or inert	1.6%	5,613	4,714	84.0%	68.8%	68.8%	69.8%	70.5%	71.0%	71.5%
		Total Miscellaneous	11.2%	38,525	15,853	41.2%	45.2%	45.2%	45.5%	46.0%	46.3%	46.6%