

Kentucky Department for Environmental Protection
Division of Waste Management
Recycling and Local Assistance Branch
300 Sower Boulevard – Frankfort KY 40601
(502) 564-6716

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Area Solid Waste Management Plan - Five Year Update
Years 2023 - 2027

1. BACKGROUND INFORMATION

A. Area Designation

1. Name of County or Regional Solid Waste Management Area ("RSWMA") Louisville/Jefferson County Metro Government Waste Management District

Check One: County Regional Solid Waste Management Area ("RSWMA")

If area designation is a RSWMA, list counties: N/A

2. List all incorporated cities within the solid waste management area and the population of each.

1.) See attachment	2.)	3.)
4.)	5.)	6.)
7.)	8.)	9.)

B. Governing Body Information

1. Designation Type: Fiscal Court 109 Board (Taxing) 109 Board (Non-taxing) Regional Area City/County Merger

2. Name of chairperson of the governing body (judge executive, chairperson, etc.) Robert Schindler

3. List each member of the governing body:

1.) Debra Thompson	2.) Carl Brazley	3.) Mary Rose Evans
4.) Susan Hart	5.) Robert Lee	6.) Deathra Shipley
7.) Robert Schindler	8.)	9.)
10.)	11.)	12.)

4. Address: 600 Meriwether Avenue

City: Louisville State: Kentucky Zip Code: 40217

5. Telephone: 502-574-3290 6. Fax: 502-574-4155 7. Email: SWMD@Louisvilleky.gov

C. Solid Waste Coordinator Information

1. Name of Coordinator: Pete Flood

2. Address: 600 Meriwether Avenue

City: Louisville State: Kentucky Zip Code: 40217

3. Telephone: 502-574-3290 4. Fax: 502-574-4155 5. Email: pete.flood@louisvilleky.gov

6. Work Status (check one): Volunteer Full-time Part-time 7. Hours worked per week: 40

D. Advisory Committee

List the names and representative bodies of the advisory committee members.

Name	Representing
1.) Bruce Burrow, Committee Chair	Waste Collectors (Unrestricted)
2.) Bryan Slade	Waste Collectors (locally owned)
3.) Marie Burnett	Landfills and Transfer Stations
4.) Kim Martinez	Materials Recovery Facility (MSW)
5.) Matt Smith	Materials Recovery Facilities (Organics)

- 6.) Adam Storey
- 7.) Bruce Blue
- 8.) Sarah Lynn Cunningham
- 9.) Tim Darst
- 10.) Marie Eff
- 11.) Pat Stallard
- 12.) Kedrick Stanfield
- 13.) Greg Zahradnik
- 14.) Sandra Leonard
- 15.) Sumedha Rao

Materials Recovery Facilities (construction/demo)
 General Solid Waste Management Industries
 Citizen Environmental
 Citizen Environmental
 Citizen
 Citizen
 Citizen Environmental
 Citizen
 Jefferson County League of Cities (JCLC)
 Louisville Metro Government

E. Preparer Information

Complete this section, if the preparer is different than the solid waste coordinator.

1. Name: Pete Flood

2. Address: 600 Merwiether Avenue

City: Louisville

State: Kentucky

Zip Code: 40217

3. Telephone: 502-574-3290

4. Fax: 502-574-4155

5. Email: pete.flood@louisvilleky.gov

F. Resolution/Ordinance to Adopt Solid Waste Management Plan 5-Year Update

1. Check one: Resolution Ordinance

2. Public Notice Date: 10/21/2022

3. Date Signed: 12/8/2022

4. The following documents must be attached. Check all that have been attached and place at the end of the report with a cover sheet labeled "Chapter 1 Attachments."

- A signed and dated copy of the resolutions/ordinance adopting the 5-year update
- A dated original of the public notice, or a copy and an affidavit from the newspaper by whom the notice was originally published
- Area Designation

2. COLLECTION SYSTEM

A. Collection System

1. Ordinance Type (*check one*): Mandatory Universal

Date passed: 4/19/2005

2a. Provide a detailed description of all the collection systems in your SWMA (collection systems include franchise, permit, municipality owned/operated, private, staffed transfer stations and staffed convenience centers, etc.)

Residential Curbside Collection System (All County)

Louisville Metro has a complex solid-waste-management system to include general rules, municipal collection, contracted collection, and subscription collection. General rules governing waste collection are contained in ordinances and apply to all territory within the boundaries of Jefferson County.

General SWMA Collection Rules

Louisville Metro Codes Ordinance (LMCO) 51.300 requires all waste haulers collecting in the Solid Waste Management Area (SWMA) be licensed by the waste district and as a condition of the license must offer a residential service package to include once per week collection of garbage, a minimum of once every other week collection of recycling, and at least seasonal collection of yard waste. All privately licensed waste haulers are required to offer a variable service rate pricing structure for residential customers.

LMCO 51.500 requires all households, commercial and industrial properties in the SWMA maintain weekly garbage collection and should be able to produce evidence of compliance in the form of a paid receipt from their collector.

LMCO 51.507 (A)(1) requires all garbage and recycling set out for collection to be in containers designed for the express purpose of solid waste storage and removal.

LMCO 51.507 (A)(2) Reusable containers that are emptied manually cannot not exceed 60 pounds when filled and must be capable of being serviced without the waste hauler coming into physical contact with the solid waste.

LMCO 51.507 (A)(3) All yard waste must be set out in reusable containers of 30- 40-gallon with lifting handles and a lid, in compostable paper bags designed for yard waste collection, or in bundles of limbs less than 4' long and 2" or less in diameter and weighing less than 60 pounds.

LMCO 51.507 (A)(5) Containers used for mechanized waste collection, including stationary compactors, shall be equipped with a closefitting lid, and be kept leak-proof and rodent-proof. They shall also follow the U.S. Consumer Product Safety Commission design criteria for refuse bins.

LMCO 51.507 (A)(6) All household's garbage must be set out for collection by 6:00 am the day of collection and removed by 4:00 pm the day after collection.

LMCO 51.509 states waste collectors may not comingle yard waste with any other waste in a collection vehicle and that any yard waste or bulky woody waste collected in the SWMA must be deposited at a licensed recycling composting, landfarming or some other beneficial reuse facility.

LMCO 51.509 states no yard waste may be disposed of or deposited at any landfill or solid waste management facility in the SWMA, except for a compost facility. De minimis amounts of yard waste in otherwise mixed loads of solid waste (LESS THAN 5% OF LOAD) is not considered a violation.

Residential Curbside Collection

Municipal Collection

Residential collection within the Urban Services District (USD) and the City of Shively is provided by city employees of their respective cities using municipally owned vehicles. Collection is funded by taxes generated from within the boundaries of their respective cities.

The Louisville Metro Department of Public Works (DPW) operates according to LMCO Chapter 51.400-405. Eligible customers are defined in ordinance as being single family households in buildings or complexes having eight (8) or fewer units. Services include once per week garbage and yard waste, once every other week collection of recyclables, and either three (3) times per year announced collection of an unlimited number of items or a once per week appointment-based collection of up to four (4) items too large for the garbage cart. Residents living in condominium buildings of any size within the USD are considered single family homes. Those in condominium buildings of eight (8) or fewer are included in the residential curbside garbage and recycling collection system. Condominium buildings having nine (9) or more units have their garbage collected using front load dumpsters by private waste haulers contracted by DPW. Recycling collection at condominiums of nine (9) or more is provided in carts and part of the Louisville Metro provided residential curbside recycling collection system.

The City of Shively operates according to Shively Municipal Code 50. Eligible households are single family properties having four (4) or fewer units. Residents receive weekly garbage, recycling, and seasonal yard waste collection. Large items are collected once per month and residents can set out up to three (3) large items. All multi-family properties having five (5) or more units in Shively are considered commercial and collected by private waste haulers.

Contracted Collections

Residential collection services in many home-rule cities and some homeowners' associations (HOAs) are provided by exclusive contracts with WMD licensed private waste collectors. Services are highly variable and too numerous to be listed in this document but must, at a minimum, include weekly garbage collection. Recycling and yard waste collection are optional but must be offered by the waste collector. The services are funded through property taxes or HOA fees. Many home rule cities have ordinances relating to waste management. These ordinances vary significantly in scope and can be comprehensive or very limited. Typically, ordinances include times of set out and removal of containers, requiring containers containing solid waste be covered and constructed for safe removal, stating waste set out for collection becomes the property of the city, and a penalty section for failure to comply. Some contracts include how services are funded which may be a set amount paid once per year by the individual homeowner or simply that it is the responsibility of the city to contract for services.

Subscription Collection

Residential collection in unincorporated areas, some home-rule cities, and some HOAs is provided by multiple haulers in an overlapping manner in the same area. Services are subscription based where households or landlords must obtain services directly from a WMD licensed private waste hauler. Residents must have the mandatory weekly garbage collection as required under ordinance 51.500. Recycling and yard waste collection services are optional for the resident to subscribe to but must be offered by the waste collector as required under ordinance 51.300. Pricing is based on open market principles.

Residential Collection Education and Outreach for Waste Collection (All County)

Education and information to the resident regarding available services and recycling items collected depends on where a resident is located (municipal/home-rule cities/HOAs, unincorporated areas). For municipality and some home-rule cities

or HOAs it can be in the form of websites and newsletters and call to the organization. It could also be from the individual waste collector if the home-rule city or HOA sets up the contract to require calls go directly to them. Some call centers for residents to subscribe or to address concerns are local (Metro311 or some home-rule cities or HOAs) and some national centers serving many communities across the country.

Commercial Collection System

Industrial, commercial, and institutional (ICI) properties within the SWMA must contract directly with a private waste hauler that is licensed by WMD. This collection is in large capacity dumpsters, some with compactors. Recycling at these properties must be offered by the private waste hauler but it is not mandatory through ordinance. Garbage collection is mandatory for ICI properties. Collection of source-separated recycling must be offered to all ICI customers by private waste haulers under 51.300 (C)(5). Pricing is based on open market principles. Multi-family properties having nine (9) or more units throughout the SWMA, unless otherwise stated under ordinance of a home-rule city within their jurisdiction, are considered commercial properties. All such areas are non-exclusive and have multiple private haulers operating in the same areas. The exception is small businesses in the USD that are served by the DPW and some home-rule cities where collection is completed in the same vehicles as curbside residential. A small business in the USD is considered a business that generates less than four (4) 95-gallon carts of waste per week.

Collection in the Central Business District (CBD) is provided to all businesses that acquire DPW containers and can place carts out for service where the DPW can collect them. Businesses that cannot place the carts where they can be collected or for businesses that choose not to acquire the Metro provided services must contract with a private waste collector. The Metro system is a modified wet/dry system where businesses place both trash and recycling in the same 95-gallon orange roll carts in either a black bag (bathroom waste and breakroom wet waste) or clear bag/loose (all remaining waste). All waste collected in the orange carts are taken to a recycling center for processing as dry waste. Food-generating businesses such as restaurants or caterers are given 65-gallon black carts for bagged food waste. This service is considered wet waste and is taken to be landfilled. This collection is funded through taxes.

Residential/Commercial Bulky Waste Collection System

Collection of large items from curbside is handled in several different manners depending on where the items are located. In the USD bulky waste is collected by DPW and is governed by LMCO 51.405 (D) and residents can set out an unlimited number of items based on an announced three (3) times per year system or by making a weekly appointment for up to four (4) items that do not fit into a garbage cart. Yard waste, construction & demolition materials, household hazardous waste (HHW), 55-gallon drums, items that contain or once contained Freon are not allowed.

In contracted areas, such as home-rule cities and some HOAs, it would depend on the contract but could include weekly collection of one (1) item by appointment, once a month collection of a limited number of items on a designated day, or annual or periodic bulky waste set-out days.

In unincorporated areas and HOAs, bulky waste collection depends on the subscription agreement between the individual property owner and their private waste collector.

For clean-outs or do-it-yourself (DIY) work citizens will contract directly with one of many bulk roll off companies.

Litter Baskets

Litter baskets are provided along pedestrian corridors mainly inside the USD at bus stops but also in areas with very high pedestrian foot traffic. The DPW collects litter baskets in the USD using existing residential recycling routes and the contents are taken to a recycling facility. Some home-rule cities also handle collection of litter baskets within their jurisdiction. In the suburban area, any litter basket that is placed by an agency or organization must empty them themselves or have a collection agreement with a private waste hauler or nearby company in place to ensure emptying on a regular basis.

Drop-off System

Louisville Metro Government and the WMD operate both self-service and full-service recycling centers strategically located across the county. The self-service sites accept the same commodities as is collected in the residential single-stream program and the collection is funded by general fund revenue by the DPW. The full-service centers collect the same materials as collected in the residential curbside program except in a source-separated manner. The full-service centers also accept used cooking oil, used motor oil, used oil filters, and used anti-freeze. They are open Tuesday-Saturday 10:00am-5:00pm to all citizens of Louisville Metro. The full-service centers are funded through license fees collected by the WMD.

The Household Hazardous Waste drop-off center is provided for all households in Louisville Metro at no cost. The center

is operated Tuesday-Saturday 9:30-4:00. The site is funded through license fees collected by the WMD. The site accepts the most common household hazardous materials purchased through retail outlets. The site does not accept out of county waste nor waste from businesses or governments.

Louisville Metro Government operates one municipal transfer station disposal/recycling facility called the Louisville Waste Reduction Center. The center accepts junk items from self-haul citizens and businesses, electronics for recycling or refurbishment, yard waste, pallets, clean wood, and tree debris for composting, waste tires for manufacturing of crumb rubber or for fuel at a cement kiln, batteries for recycling, metal for recycling, shingles for recycling or other beneficial reuse, and white goods where Freon is removed before the metal is recycled. Citizens can drop off up to four (4) bulky household items or electronics for free each day. Four (4) waste tires are considered one item. More than four (4) items from any resident or from a commercial business requires a fee based on size of vehicle or number of items (electronics).

Landfill, Transfer Stations, Recycling, and Compost Drop Off

There is one (1) landfill located within Louisville Metro called the Outer Loop Recycling & Disposal Facility (OLRDF) that accepts drop-off waste from citizens in Louisville Metro. Items accepted include municipal solid waste (MSW) and yard waste for composting.

There are two (2) private WMD licensed solid waste transfer station facilities in Louisville Metro that allow drop off of residential and commercial MSW. MSW is transported to Medora Landfill in Indiana or to Valley View Landfill in Trimble County, Kentucky. Two (2) accept and process medical waste to render it safe for disposal as MSW. One of the two (2) that accept MSW also accepts yard waste, curbside single-stream and source-separated recycling.

Some waste from the SWMA is transported directly out of county to Clark-Floyd Landfill in Indiana.

Inert waste such as construction and demolition (C&D) material may go to the Vogt Avenue for beneficial use under an Agreed Order between the owner/operator and the Kentucky Energy & Environment Cabinet to fill and close the site permanently. The agreed order requires the filling to be completed by the end of 2023.

There are twenty-seven (27) WMD licensed recycling facilities accepting various materials from curbside single-stream materials to C&D materials.

Education and Outreach for Collection System

General education for the SWMA collection system is provided by the WMD with individual entities such as Louisville Metro Government, some home-rule cities, and all private waste collectors focusing on their individual collection system rules. This information mostly focuses on residential curbside garbage, recycling, yard waste, and bulky waste collection in single family homes.

The WMD offers information on recycling and household hazardous materials drop off sites, special events such as Pop-Up Drop-Offs. The WMD educates using print media, social media, and through a mobile or web app called Recycle Coach. Recycle Coach includes collection schedule reminders, a what-goes-where search tool, and event notification.

Some home-rule cities provide general information about collection services and recycling tips in newsletters or websites, or they rely on contracts with their private waste hauler to do so. Private waste collectors may rely on their own education and outreach services in the form of websites or messaging from national call centers.

2b. Attach a signed and dated copy of the current solid waste management ordinance(s) including all related amendments. Place at the end of the report with a cover sheet labeled "**Chapter 2 Attachments.**"

3. Describe your annual waste hauler registration process including the annual requirement to file reports:

All waste haulers must obtain a license to operate in Louisville Metro according to LMCO Chapter 51.200.

To obtain and maintain a license a curbside waste hauler is required to offer a basic service package to include once a week collection of household waste, once a week seasonal yard waste collection, and once a week recycling collection. Other alternative collection scenarios must be approved by the Board.

All waste haulers must have a variable rate service structure for all residential customers.

All waste haulers must offer collection of source-separated recyclable materials to all commercial and industrial customers.

All waste haulers must be in compliance with all state, federal, and local laws and regulations pertaining to waste haulers and waste hauling.

The license fee is \$100 and \$10 per vehicle. Licenses are renewed annually based upon fiscal year.

Licensed waste haulers must report their previous year's activities by February 15th using an online program called ReTRAC Connect. The program is free for the licensees. The program contains all the information required in DEP 5033 Municipal Solid Waste Collector and Recycler Registration Report Form in addition to local reporting requirement information.

B. Collection System Strengths

Describe the strengths of your collection system:

1. **Garbage collection is mandatory across the SWMA.** All owners of residential properties and the owners or occupants of ICI properties must provide for weekly collection of all garbage generated at the property. Percentage of residential customers with garbage service averages 97%.
2. **All waste must be contained.** All garbage and recycling set out for collection are required to be in containers designed for the express purpose of solid waste storage and removal. This reduces litter and improves the safety for collection crews.
3. **Yard waste is composted or used in a beneficial manner.** Yard waste must be in reusable containers or paper yard waste bags and the collector must take it to a compost facility or to be used for beneficial use. This allows the yard waste to be composted and potentially sold to the community/region.
4. **Municipal and contracted collection is used in more than half of the SWMA.**
 - a. Municipality operated residential collection provided (~40% of households) within the USD and the City of Shively Departments by their respective Departments of Public Works offer full services of once per week garbage, every other week recycling, yard waste, and periodic bulky waste collection to all residents to include any multi-family units of eight (8) or less (four (4) or less in the city of Shively) and condominiums of any size within the USD. The DPW offers garbage and recycling to small businesses generating four (4) or less 95-gallon containers of waste per week. These service offerings are comparable services offered by most peer cities. Services offered to multi-family residential and small businesses is above that of peer cities.
 - b. A significant portion (~20%) of residential properties in the SWMA utilize exclusive competitively bid and contracted collection for waste management services to include garbage, recycling, yard waste, and bulky waste. These areas have service levels on par with peer cities and at lower cost compared to subscription-based services in the rest of the SWMA. These competitively bid exclusively contracted entities have higher participation rates for diversion programs like recycling and yard waste collection. A few exclusive competitively bid and contracted collection contracts include twice per week collection of garbage, recycling, and yard waste or even back door collection. These contracts are above service levels of other peer cities where these services do not exist.
5. **Open Market Competition.** The SWMA has enough competition (open market) in subscription-based areas to keeps rate competitive. Citizens can choose one of five (5) private WMD licensed waste haulers and can move from one to the other when they so choose. They can also choose the level of services from a menu of required offerings.
6. **Most of the SWMA has recycling collected in large capacity carts.** Most private waste and municipal collectors have switched to large capacity carts for the collection of recyclable materials. For the citizen with an eighteen (18) gallon bin, this change significantly increases the number of materials that can be placed into the recycling stream. The large capacity containers also have attached lids which reduce litter from loose materials being blown from open-top bins and keep animals from scavenging and spreading materials.
7. **Many drop-off opportunities exist for residents across the SWMA.**
 - a. The WMD offers three (3) full-service recycling drop off sites accepting source separated and some comingled materials as well as used motor oil, used oil filters, used antifreeze, and used cooking oil. The

WMD offers all residents a full-service household hazardous waste drop off location that operates five (5) days per week and eight (8) hours per day.

- b. Metro Government makes available to all citizens thirteen (13) self-service sites accepting single-stream recycling materials both inside and outside of the USD. Metro Government also has available a self-haul drop-off site for electronic waste to be recycled or refurbished, waste tires, metals, and four (4) free bulky items each day.
- c. Pop-Up Drop-Off Events: Louisville Metro offers up to ten (10) drop off collection events each year with nine (9) of them in the unincorporated or in or near home-rule city areas with an emphasis on recovery of residential self-haul materials. The events accept bulky items and expired medication for proper disposal, and used tires, yard waste, document shredding, metals, and electronics for recycling.
- d. The numerous drop off sites and relatively short hauling distances for recycling and disposal to include the listed landfill and transfer stations in the community makes it easy for people to dispose, recycle, or compost their waste correctly.

C. Collection System Weaknesses

Describe the weaknesses of your collection system:

- 1.) **The subscription-based collection system in unincorporated areas (~40% of the SWMA) provided by multiple haulers in an overlapping manner is inefficient compared to contracted areas using a single hauler.** This inefficiency is noted in the Solid Waste Management System Evaluation Section 7.3 where it states:

- a. *“Strictly from an operational standpoint, a well-managed, competitively bid exclusive (i.e., single provider) collection program will be less expensive than an equally well-managed open collection system, where multiple hauling organizations compete for business. This is because single provider systems most efficiently deliver standard collection services across a consolidated set of customers within a defined service area.”*

Detailed examples can be found in the 10 Year Solid Waste Study-Solid Waste System Evaluation Table 3-6, contracted areas table 4-2 thru 4-7 and Exhibit 4-1, and unincorporated areas Table 5-2-3-4-5) (<https://louisvilleky.gov/public-works/document/10yearcollectionsystemstudypdf>.) and in the 10 Year Solid Waste Management Study starting on page 49 <https://louisvilleky.gov/public-works/document/solidwasterecommendationspdf>

A review of peer cities during the 10 Year Solid Waste Management Study (Waste Collection System Evaluation Table 6-2) shows all are operating organized collection systems using public sector employees, franchising, or competitively bid contracting.

- 2.) **Non-Participation in Subscription-Based Services has many negative impacts.** The subscription-based collection service in the SWMA has a significant number of households that do not obtain waste services as required by ordinance (~3% of households or about 9,000 households). These non-participating customers lead to the following problems for the SWMA:

- 1. Increased disposal and compliance cost to businesses or citizens from non-participants utilizing their waste dumpsters.
- 2. Increased cost to government to investigate and enforce code violations for trash accumulation and/or to clean up illegal dumping when the non-participant places their waste on someone else’s property.
- 3. Increased cost for vector control to prevent the potential negative health consequences to anyone living next door to locations with poor waste management.
- 4. Increased cost to government for road repair from more than necessary heavy collection vehicles on small feeder roads.
- 5. Increased cost and health problems of vulnerable populations from particulate emissions from large collection vehicles.
- 6. Increased greenhouse gas emissions impacting our climate from more collection vehicles than is needed to service the area.
- 7. Increased potential for accidents while operating large collection vehicles in residential neighborhoods.

- 3.) **Inconsistent or overly complex communication and messaging associated with recycling, trash, organics, and reuse programs in the SWMA causes confusion and increased contamination of recycling streams.** Many waste collectors use national information systems (websites/call centers) to let customers know what services are

available or what items are acceptable for recycling. This messaging may not be correct for the SWMA. Additionally, the Resin Identification Code for plastic containers (recycling symbol plus the #1-7) that was developed for recycling centers and processing facilities to identify the resin type has become a generally acceptable method for consumers to determine acceptability of an item in the SWMA recycling stream. However, while an item may be the right resin it may not always be acceptable in our local system. Language barriers, especially in certain areas of the SWMA, compounds issues with communications.

- 4.) **The SWMA has not established an official technical assistance or outreach program for residents, businesses, and multifamily property owners that includes best practice guides or tool kits.** While the WMD currently will assist customers on a case-by-case basis there is no widespread offering of materials and assistance to customers on their responsibility to obtain services, how to obtain services, how to perform waste audits or reduce their waste management cost, and what services must be offered by the private waste collector.
- 5.) **As noted in the 10 Year Solid Waste Study-Collection System Evaluation (page 2-7) the bulky waste collection system in the USD does not effectively manage the accumulation of solid waste and litter.** Some inefficiencies and issues of the current periodic collection system are a function of:
 - b. The frequency of bulky waste collection and level of service provided does not align with the generation rates for bulky waste items. The result is a complicated problem of accumulated wastes in many public areas, streets, and alleys that negatively impacts the community.
 - c. Accumulated bulky waste items are not limited to specified or typical bulky waste items. Bulky waste crews spend extensive time collecting many small items. Illegally dumped construction debris and brush along bulky waste collection routes must also be collected.
- 6.) It is evident by material types, volume, and distribution that contractors (e.g., construction, landscapers, deconstruction, cleanout, etc.) including some operating outside the USD frequently take advantage of the bulky waste collection program. This was observed to be a major problem.
- 7.) The number of collection scenarios provided under residential contracts are too numerous to list in this plan.

D. Collection System Implementation Schedule

List a detailed account of specific actions or projects the governing body will complete to maintain or improve the collection system, the frequency at which such actions will take place, a date for commencement of the activities and a date at which the activities will cease. **Include educational efforts.**

Specific Actions	Frequency	Month/ Year to Begin	Month/ Year to End
<p>1.) Determine, through a third-party consulting firm and with the sole purpose to create a trusted set of facts, if changing from multi-hauler subscription-based collection to single hauler contracted collection zones in the unincorporated and uncontracted areas of the SWMA would provide service levels and cost per household comparable to other contracted areas of the SWMA.</p> <p>Determine, to the extent possible, any potential community benefits or detriments of creating single hauler contracted collection zones in the current multi-hauler subscription-based collection areas.</p> <p>The third-party consulting firm will be determined by a request for proposal (RFP) designed by the Waste Management District Board and through its committees.</p> <p>The third-party consulting firm should consider existing service levels and cost per household at the zip code level. It would be followed by impartial recommendations for improvements for residents and future Five-Year Solid Waste Management Plans (SWMP).</p>	Once	July 2023	July 2025

1.) The collection hauler list will be updated on an annual basis through form 6061, Annual Report form required by the Cabinet.	Yearly	Jan 2023 Jan 2024 Jan 2025 Jan 2026 Jan 2027	Dec 2023 Dec 2024 Dec 2025 Dec 2026 Dec 2027
2.) Create outreach programs for each waste sector that include best practice guides or tool-kits focusing on responsible waste management, how to obtain services, how to perform waste audits and/or potential to reduce their waste management cost, and what services must be offered by the private waste collector.	Continuous	Jan 2023	Dec 2025
3.) Create a technical assistance program for each waste sector who need help in setting up programs. This program would work in conjunction with the outreach program.	Continuous	Jan 2024	Dec 2026
4.) Create a marketing program to standardize solid waste collection messaging across the SWMA and to reinforce overall messaging of putting waste in its place that includes elements of the outreach and technical assistance programs listed in actions three (3) and four (4).	Continuous	Jan 2023	Dec 2027
5.) NWRA and municipal collectors will continue efforts to increase size of recycling containers to increase capacity for collection. Education should be focused to ensure citizens understand the value and efforts.	<u>Continuous</u>	<u>Jan 2023</u>	<u>Dec 2027</u>

3. DISPOSAL SYSTEM

A. Disposal System

1. Provide SWMA population and municipal solid waste disposal projections for five (5), ten (10), and twenty (20) years in the future.

Population 2027: 810,368	Population 2032: 847,245	Population 2042: 901,256
Waste Generation Projection 2023 – 2027: 4,136,735 Tons	Waste Generation Projection 2028 – 2032: 4,324,983 Tons Ten Year Waste Projection 2023 - 2032: 8,461,718 Tons	Waste Generation Projection 2033 – 2043: 8,940,238 Tons (Twenty Year Waste Projection) 2023 - 2043: 17,401,956 Tons

2. List all contained landfills, including out-of-state landfills that will be used by your governing body during the 5-year update period. Provide capacity assurance letters demonstrating a minimum of 10 years of capacity from the landfill(s) and copies of any contractual agreements with those disposal facilities. Place at the end of the report with a cover sheet labeled “**Chapter 3 Attachments.**”

1.) Landfill Name: See attachments	Permit #:
Address:	
City:	State: Kentucky Zip Code:
2.) Landfill Name:	Permit #:
Address:	
City:	State: Zip Code:
3.) Landfill Name:	Permit #:
Address:	
City:	State: Zip Code:

3. Provide a complete inventory of all disposal facilities currently operating in your SWMA. Facilities to include are contained landfills, construction/demolition debris landfills greater than one acre, incinerators or other technologies that accept municipal solid waste and medical waste incinerators that accept medical waste from other sources.

1.) Facility Name: See attachment with list		Ownership:	
Address:			
City:		State:	Zip Code:
Cost to users: (\$/Ton)		Life expectancy: Years	
Level of compliance with state and federal laws:			
2.) Facility Name:			
Address:		Ownership:	
City:			
Cost to users: (\$/Ton)		State:	Zip Code:
Level of compliance with state and federal laws:		Life expectancy: Years	
3.) Facility Name:			
Address:		Ownership:	
City:			
Cost to users: \$ (\$/Ton)		State:	Zip Code:
Level of compliance with state and federal laws:		Life expectancy: Years	
4. SWMA's hosting a landfill must complete question 4. All other SWMA's may proceed to question 5.			
4a. Identify the following for each contained solid waste disposal facility hosted in your SWMA:			
Landfill: Outer Loop Recycling & Disposal Facility		Permit #: 056-00028	
Total capacity authorized to date: 10,000,000 Tons (for 2023-2033 plan cycle)			
Amount disposed in landfill to date: 0 Tons			
Remaining authorized capacity: 10,000,000 Tons (for 2023-2033 plan cycle)			
5. Describe any proposal(s) for new disposal facilities or expansions of existing disposal facilities (landfill, incinerators, or other approved technologies, etc.) planned during the 5-year update period: Nothing Planned			
6. Describe the county's emergency disaster plan to address solid waste concerns in the event of natural disasters (flooding, snow/ice storms, tornadoes, earthquakes, etc.):			
Louisville Metro adopted the Louisville/Jefferson County Metro Government Emergency Operations Plan (EOP) Annex B in 2020			
Concept of Operations:			
Under this plan Louisville/Jefferson County Metro will be responsible for removing debris from property under its own authority, as well as from private property when it is deemed to add to safety of the community. Debris management efforts conducted post-storm in Louisville/Jefferson County Metro are performed in accordance with the five general guidelines listed below:			
<ol style="list-style-type: none"> 1. Facilitate and coordinate the removal, collection, and disposal of debris following a disaster 2. Mitigate against any potential threat to the health, safety, and welfare of the impacted citizens 3. Expedite recovery efforts in the impacted area 4. Address any threat of significant damage to improved public or private property. 5. Provide a coordination process under the operational functions of the Louisville/Jefferson County Metro EMA Department and Emergency Operations Center (EOC), which will act as an interagency clearinghouse to match needs with resources. 			
In a small-scale event, if Louisville/Jefferson County Metro resources are assessed to be adequate to meet the required demand, the Louisville/Jefferson County Metro Public Works Department will coordinate priorities for pick-up schedules and locations.			
Debris Management Strategies:			
The debris management strategy will be to divert as much material from disposal as possible through recycling, composting, and other approved diversion options, including:			
<ul style="list-style-type: none"> • Utilize volume reduction techniques to improve debris management efficiencies and maximize hauling capacity, • Use Louisville's disposal capacity for disposal of disaster debris as efficiently as possible • Allow for temporary tonnage increases at permitted in-State solid waste facilities on an emergency basis 			

- Rely on permitted transfer stations to transfer waste that cannot be re-used, recycled, or composted to permitted waste handling facilities
- Rely on permitted volume reduction facilities to reduce and transfer waste that cannot be diverted from disposal sites to permitted waste handling facilities
- Consider alternative technologies for managing portions of the debris waste stream (i.e., biomass facilities)
- Use Commonwealth of Kentucky (“Commonwealth”) approved DMS for processing debris for recycling and disposal

Activation of Debris Management Plan:

The Director of PWA, or designee, will activate the debris management plan and utilize the private contractors to support response and recovery operations. Solid Waste Management Division of PWA will oversee the Debris Management Task Force (DMTF) and their specific duties and responsibilities. The EOC Manager, or designated representative, in conjunction with the DMTF, will determine the extent of damage and resulting debris and issue appropriate directives to implement the Debris Management Plan.

Application of ICS to Debris Operations:

Louisville Metro will utilize the Incident Command System (ICS) for disasters. The Debris Management Plan has been developed as a functional annex to the jurisdiction’s Emergency Operations Plan to facilitate multiagency coordination as they apply specifically to debris operations.

Debris Removal Priorities:

The debris removal process should be initiated promptly and conducted in an orderly, effective manner to protect public health and safety following a major or catastrophic event. Critical routes need to be identified that are essential to emergency operations and areas identified that State and Federal assistance can target. To achieve this objective, debris removal priorities are as follows:

1.) First Priority

- Key roads critical to the community posted emergency snow routes
- State and Metro Arterial Roads
- Certain Collector Roads

2.) Second Priority

- Provide access to critical facilities such as, EOC/E-911 facility, Metro facilities, emergency services facilities, water and sewer distribution facilities, electrical distribution facilities, shelters, and schools

3.) Third Priority

- Eliminate debris threats to public health and safety through actions that include the repair, demolition, or barricading of heavily damaged and structurally unstable buildings, systems, or facilities that pose a danger to the public. If access to the area can be controlled, the necessary actions can be deferred.

Recovery Operations

In the initial response debris is simply pushed to the shoulders of the roadway key routes to provide for the safe movement of emergency and support vehicles into and out of the disaster area.

As removal operations progress, the DMTF will transition from Response Operations to Recovery Operations through the Disaster Debris Management Services contract and Disaster Debris Monitoring contract.

The responsibility for the debris removal during the recovery operations of a declared disaster will likely rest with the contractor and/or vendor but may also include State and/or Federal resources. The debris removal phase of the recovery operations is the most difficult segment to accomplish and requires a closely coordinated effort by Emergency Management, Public Works, applicable contractors, and all other entities involved.

Debris on private property is the responsibility of the property owner. Information regarding pickup times and locations for private property owners shall be distributed so that debris removal activities proceed efficiently. If property owners move disaster-related debris to a public right-of-way, Metro may be reimbursed for debris pickup, haul, and disposal from the right-of-way for a limited period. If Metro does not have the legal responsibility to maintain a right-of-way, then debris removal from that right-of-way is not eligible for reimbursement (e.g., a private road and gated community).

Household Hazardous Wastes (HHW) Removal

A separate staging area for HHW materials, contaminated soils, and contaminated debris should be established at each

DMS site. The staging area should be lined with an impermeable material and bermed to prevent contamination of the groundwater and surrounding area. Materials should be removed and disposed of using qualified HHW personnel/contractors in accordance with local, tribal, State and Federal regulations.

Debris Collection Methods

The debris type, amount and urgency determine which collection method is used. The two main methods of debris collection are curbside collection and collection centers. The Debris Management Team may tailor the collection operation depending on specific jurisdictions, quantities, and types of debris.

Mixed Debris Collection Options:

- Curbside Collection Mixed Debris: Collecting mixed debris by Metro allows the residents to place all debris types in one specified area, usually along the public right-of-way in front of their residence.
- Curbside Source–Segregated Debris Collection: Residents are directed to sort the debris by material type and place it at the curb in separate piles. Trucks designated for a particular debris type collect the assigned debris and deliver it to a temporary staging area, or debris management site, reduction, recycling, or disposal facility. This method is important when collecting hazardous and environmentally sensitive debris, such as household hazardous waste and white goods.
- Drop-off collection centers
- Debris management sites

Debris Classification and Separation:

- Electronics. Examples: television, computer, audio equipment, phone, DVD player
- Large Appliances or “white goods”. Examples: refrigerator, washer/dryer, air conditioner, stove, water heater, dishwasher. (Note: Do not leave doors unsealed or unsecured.)
- Construction & Demolition debris. Examples: lumber, roofing, and other structural debris strewn by storm
- Household Hazardous Waste. Examples: oil, batteries, pesticides, cleaning supplies, compressed gas, paints. (Note: If you suspect that materials contain lead-based paint, keep them moist or contain materials in plastic bags so that the paint does not become airborne.)
- Vegetative Debris. Examples: trees, tree branches, logs, plants, leaves

Communication and Outreach:

Communicating with residents should begin prior to an incident and storm seasons.

Important information to include in public service announcements or other public communication on disaster debris collection:

- Where to put materials for collection (e.g., at curbside, not obstructing vehicle traffic)
- How to separate and prepare materials for collection
- When will regular collection for household trash, recycling, and yard waste resume and how to manage those materials until regular collection begins
- Other collection mechanisms available for public use, if applicable (e.g., drop-off centers, specific debris management site areas for use by residents)
- Expected dates and schedules for collection (when specific dates are known)
- Contact information for questions on managing debris.

Communicating with the public in times of emergency is challenging and public messaging must also be clear, timely and coordinated. Louisville Metro is composed of a diverse population and demographics and messaging should be prepared with this in mind.

7. Describe plans to research alternative approaches to solid waste management: None identified at this time.

B. Disposal Practices Strengths.

Describe the strengths of your existing disposal practices:

The SWMA has a privately owned and operated landfill within the county. The facility has an authorized capacity that will ensure the county has a disposal option for the next ten (10) years.

The SWMA has several solid waste transfer stations where waste is loaded and shipped to other out of county and state landfills within the region. These landfills provide additional capacity assurance for waste generated in the county.

The SWMA has a waste to energy facility (WTE) which uses waste tires ensuring an outlet that may reduce waste tire dumps.

The numerous drop off sites and relatively short hauling distances for disposal makes it easy for people to dispose of their waste correctly.

Several beneficial use facilities exist that accept inert materials.

C. Disposal Practices Weaknesses.

Describe the weaknesses of your existing disposal practices:

Landfill bound (MSW) and (C&D) waste contains high amounts of materials that, if recovered, could be sent to existing facilities within the SWMA for reuse, recycling, or beneficial use. Waste composition studies conducted in 2016 show that up to 62% of MSW waste sent to disposal could be reused, recycled, or composted through curbside, donation, or drop-off collection programs.

The final closure plan for Southern Materials on Vogt Avenue is nearly complete. This site has accepted C&D and other inert materials as beneficial use under an agreed order with the Commonwealth of Kentucky Energy & Environment Cabinet. The completion of the project could send an undetermined amount of the waste stream to landfill if other beneficial use or recycling markets are not found. In a worse case the closure of Vogt Avenue could potentially reduce our overall diversion rate from 50.2% to an estimated 48%.

D. Disposal Implementation Schedule

List a detailed account of specific actions or projects the governing body will complete to maintain or improve its disposal system, the frequency at which such actions will take place, a date for commencement of the activities, and a date at which the activities will cease. **Include educational efforts.**

Specific Actions	Frequency	Month/Year to Begin	Month/Year to End
1.) Assist Metro Government in updating the Debris Management Plan for disasters for the SWMA. This should include reviewing existing ordinances that would give Louisville Metro more flexibility for collecting, processing, and disposing of waste during declared emergencies.	Continuous	Jan 2022	Dec 2028
2.) Hire a consultant to improve local and regional end use opportunities for gypsum (drywall), concrete, and shingles with the end goal of establishing improved conditions for mixed C&D waste recycling. It is hoped this will reduce the estimated 2% impact of the closing of Vogt Avenue will have on our diversion rate.	Continuous	July 2023	Dec 2024
3.) Negotiate a new Community Host Agreement	Once	Mar 2023	Mar 2025
4.) Consider amending ordinance to allow flexibility during emergency situations such as the recent pandemic.	Once	Jan 2023	Jul 2025

4. RECYCLING AND REDUCTION

A. Recycling/Reduction Program

1. Is recycling offered in your SWMA? Yes No

2. Describe your SWMA's annual recycler registration process including the annual requirements to file reports:

Registration Process

All recyclers and compost facilities must obtain a license to operate in Louisville Metro according to ordinance LMCO Chapter 51.200.

Recyclers and composters are licensed annually based upon fiscal year.

The licensee fee is set at \$100.

Annual Reporting Process

Each licensee must report recycling activities from the previous year by February 15th using an online program called ReTRAC Connect. The program contains all the information required in DEP 5033 Municipal Solid Waste Collector and Recycler Registration Report Form in addition to local reporting requirement information. The program aims to ensure recyclable materials are not double counted. The program is free for the licensees.

Louisville Metro also surveys businesses that conduct recycling programs secondary to their main purpose of operation. These operations only report on materials sent directly to recycling facilities outside of Louisville Metro.

3. Do you have a plan to reduce the need for land disposal of yard waste? Yes No
If yes, describe:

Louisville Metro has adopted ordinance 51.509 which describes how all yard waste and bulky woody waste will be handled in the SWMA and has outreach and education programs to reduce generation and set-out for collection.

Louisville Metro ordinance 51.509 Landfill Disposal Ban

- A. *No yard waste may be disposed of or deposited at any landfill or solid waste management facility in the county, except for a compost facility. De minimis amounts of yard waste in otherwise mixed loads of solid waste shall not be considered a violation of this section. For purposes of this section, de minimis shall mean 5% or less, by volume, of yard waste mixed throughout a load of solid waste.*
- B. *Mixture with other waste.*
 - 1. *No yard waste may be mixed with any other solid waste and placed out for collection within the county.*
 - 2. *No yard waste may be commingled in the same waste collection vehicle with any other solid waste placed out for collection in the county unless the vehicle is a "single-pass" or "co-collection" type of vehicle.*
 - 3. *No yard waste may be commingled with other waste in any vehicle hauling out of any transfer facility in the county.*
- C. *Bulk woody waste. No bulk woody waste may be disposed of at any landfill or solid waste management facility in the county.*
- D. *Recycling. All yard waste and bulk woody waste collected in the county must be deposited at a permitted facility for recycling, composting, landfarming or some other beneficial reuse.*

Louisville Metro also provides home composting education and outreach which includes the sale of home composters. <https://louisvilleky.gov/government/public-works/composting-home>.

Education and outreach efforts also include a program called Love 'Em and Leave 'Em that encourages homeowners to mulch leaves back into the lawn instead of putting them into the collection system. <https://louisvilleky.gov/government/public-works/love-em-and-leave-em-louisville>.

4. Does your SWMA collect or manage yard waste for the purpose of diverting it from a landfill? Yes No

5. List the counties and cities within your SWMA that collect or manage yard waste for the purpose of diverting it from the landfill?

LMCO 51.300 requires yard waste collection to be offered to all residential customers, cities, and HOAs within the SWMA. In 2021, annual reporting by licensed waste collectors and municipal operations indicated an estimated 52.1% of residents received yard waste collections through municipal/contracted/subscription services.

6. List all permitted composting operations currently operating in your SWMA. If no composting operation exists, detail any actions your SWMA plans to take to encourage composting:

Outer Loop Recycling & Disposal Facility located at 2673 Outer Loop. However, a large percentage of yard waste generated in the county is transported out of county for composting by Smith Creek, which is a large facility in Indiana. In 2021, 26,688 tons of yard waste from residential curbside collection and another 32,555 tons of tree debris from other sources were sent to composting facilities from the SWMA.

7. Describe your plan to reduce the need for land disposal through recycling, reuse and waste reduction (include drop off centers, curbside collection, interlocal agreements for regional alliances, etc.)

Curbside Collection System (Residential and Industrial/Commercial/Institutional)

The SWMA enacted LMCO 51.300 which requires all licensed waste haulers collecting putrescible waste operating within the county to offer a minimum of once every other week collection of recyclables. Items accepted include at a minimum: newspaper; aluminum and steel cans; clear, green, and brown container glass; HDPE and PETE plastic bottles and jugs. LMCO 51.300 also requires all private waste haulers to offer collection of source-separated recyclable materials to all commercial and industrial customers. While ordinance requires certain items, local material recovery facilities (MRFs) accept the following: office paper, magazines, mail, cups, flattened cardboard, empty food and beverage cartons, plastic empty kitchen/laundry/bath bottles and containers, glass bottles and jars, metal cans, pans, and wrap.

Residential Drop Off

The SWMA has three (3) full-service recycling centers strategically located across the county that are operated by the WMD through a Memorandum of Agreement (MOA) with the DPW. Funding is provided through fees generated from licensing of off-site solid waste management facilities under 51.200. Additional assistance with hauling is provided by Waste Management of Kentucky and sometimes DPW. The centers accept mixed paper, glass, plastic containers, corrugated cardboard (OCC) and paperboard, aluminum and steel cans, metals, used cooking oil, used motor oil, used oil filters, and used anti-freeze. They are available to all residents of the SWMA and are open Tuesday-Saturday 10:00-5:00.

Louisville Metro Government operates (13) self-service recycling drop off sites strategically located across the county both inside and outside of the USD. The self-service sites accept the same commodities as are collected in the residential single-stream program and the collection is funded by general fund revenue by the DPW. All sites are available to every resident within the SWMA.

Louisville Metro Government operates one municipal transfer station facility for disposal of waste and recycling called the Louisville Waste Reduction Center. Items accepted include electronics (for recycling or refurbishment), yard waste and tree debris for composting, waste tires, metal items, shingles, and white goods. Any citizen within the SWMA can drop off up to four (4) bulky household items or electronics for free each day. Four (4) waste tires are considered one item. More than four (4) items from any resident or any number of items from a commercial business requires a fee based on size of vehicle or weight of items (electronics).

There are several facilities that accept C&D materials for recycling or reuse. These services are fee-based and citizens should contact them directly for pricing. This includes concrete, shingles, and asphalt. One facility accepts rubble in addition to concrete, bricks, and other inert materials that are beneficially used as fill materials. Other concrete may be processed at the site of generation and moved directly to road projects as road base.

Events

Through an agreement between the WMD and the DPW up to ten (10) Pop-Up Drop-Off events are conducted throughout the SWMA annually. Citizens can drop off bulky items and unused or expired medications for disposal but can also drop off materials for recycling. This includes waste tires, metals, yard waste, documents for shredding, and electronics. Numerous other events are conducted by other agencies or communities that accept common or hard to recycle materials.

Louisville Metro Government operates three (3) leaf drop off sites within the SWMA starting in early November and ending at the beginning of December. Any citizen can drop off leaves for free. If the leaves are in plastic bags citizens are asked to empty the leaves and take the plastic bags with them.

Louisville Metro Government operates three (3) Christmas tree drop off sites within the SWMA starting after Christmas and ending the last week of January. Any citizen can drop off Christmas trees for free. All ornaments and lights must be

removed before they are dropped off.

Other Recycling

Many companies offer recycling secondary to their normal operation. Citizens should contact these sites for more information on what is accepted and if there are fees associated with the service. Examples of these businesses includes:

- Auto repair and oil change companies that recycle used motor oil and antifreeze from customers.
- Vehicle batteries are collected at auto parts stores when purchasing new batteries.
- Compact fluorescent bulbs and small batteries at bulb and battery stores or home improvement stores.

Take Back Programs

- Batteries through Call2Recycle. <https://www.call2recycle.org/>
- Toner cartridges from suppliers of new ones.
- Electronics through some box stores who also repair and sell new computers.
- Other hard to recycle items through Terracycle. <https://www.terracycle.com/en-US/>

Food Waste

Food waste generated commercially may be collected and composted at a facility called Smith Creek in Indiana. A second education-based composting program called U of L's Community Composting Project accepts food waste from campus, residents, and from local coffee shops. The program invites the public and students to learn about composting. The Community Composting Project also receives materials from The Louisville Compost Co-op which collects food waste from residential properties. The Co-op provides containers and collection for a small monthly fee.

Education

Education and Outreach Related to Solid Waste Management in SWMA

<https://www.louisvillewastedistrict.org/>

<https://louisvilleky.gov/government/public-works/know-waste-louisville>

WMD provides general education and outreach for the entire SWMA. This includes programs which reduce waste, reduce contamination of recycling streams, and an app that shows how to dispose of any item ("What Goes Where" search tool) or where to find drop off sites for recycling and household hazardous waste disposal.

The WMD has established a social media presence on Facebook, Instagram, Twitter, and the Nextdoor app. This includes a weekly educational Nextdoor post called "kNOw Waste Wednesday" that utilizes the poll feature to pose a question about solid waste collection and allow citizens to choose an answer and learn more about the topic. Citizens are able to comment or ask additional questions. kNOw Waste Wednesday is extremely popular and typically gets between 1,000 to 2,000 votes and many comments. The same information is posted to other social media platforms.

Specific Education Programs

Recycle Right "Oops Tag" Program is a WMD pilot program to reduce contamination in the waste stream. The program currently focuses on curbside recycling and utilizes a tagging system (green/yellow/red) to let residents know how they are doing. The pilot program results showed a reduction of contamination in the curbside collection stream. More information can be found here: <https://www.louisvillewastedistrict.org/recycle-right>

Know Waste Ambassadors is a WMD volunteer program for residents who are passionate about reducing waste, recycling, and composting. Know Waste Ambassadors receive comprehensive training and serve as waste experts in the community. In addition to the online classes, they participate in educational tours of local waste facilities. They are expected to share information from the program with the community, attend periodic sessions to stay up to date, provide feedback, and meet other Know Waste Ambassadors. They must fulfill volunteer requirements to maintain certification. Training topics include:

- Louisville's waste characterization
- Louisville's waste collection system
- Who makes the rules?
- Where does the waste go?
- Recovery markets
- Behavior change

- Resourceful living
- Effective tabling and presentations
- Cultural competency

More information can be found here: <https://www.louisvillewastedistrict.org/know-waste-ambassadors>

School Outreach Programs are available, free, and adaptable to fit various ages, classroom topics, and interest. Outreach programs include presentations about the recycling process, guidance on improving school recycling programs, story time and discussion, visit from a community helper (solid waste employee), garbage/recycling truck demonstration, and how to do a classroom waste audit.

General Recycling Presentations are tailored to the specific interests and needs of any group such as neighborhood associations, church groups, or businesses.

Business Recycling Seminars are free for businesses, schools, and organizations with the goal of learning how to start or improve a workplace recycling program and include presentations and discussions about successes and challenges.

Compost Workshops & Bin Sales are typically scheduled in the spring and fall to educate about the science of composting and provide residents with how-to-compost instruction. Compost bin and rain barrel sales are ongoing.

Know Waste Trivia is an online quiz where users can answer questions and see their results. There is an explanation to each answer so the user can learn more. <https://www.louisvillewastedistrict.org/know-waste-trivia>

Recycle Coach is a smart phone app that allows residents to receive notifications, collection schedule and waste event reminders, and find drop off locations for any materials using the What Goes Where search tool. The app currently has 12,754 mobile users, 11,225 web app users, 42,269 communication users, and 13,880 calendar notification users.

Other Education

Home rule cities and homeowners' associations (HOA's) provide general information about collection services in their area on their websites or newsletters or they rely on contracts with their private waste hauler. Private waste collectors rely on their own messaging or messaging from national call centers or websites.

Materials Recovery Facility (MRF) tours may be provided by scheduling with WestRock Recycling and Rumpke Recycling.

Other Organizations operating within the SWMA with a mission of sustainability to include waste management

Brightside: Through volunteer work, and education initiatives, Brightside works to keep the Louisville community beautiful! Brightside's key education program, Eco-drama, allows 3rd grade classes to explore important environmental issues through a interactive, drama-based presentation. The issues emphasized include recycling, litter, composting, clean water, and energy awareness. Such topics are also shared in a less formal setting through volunteer work experiences. As an affiliate of "Keep America Beautiful", Brightside serves the local community in raising awareness of litter prevention and waste reduction. This affiliation also allows Brightside to support teachers by providing resources and lessons focused on such issues. More information here: <https://louisvilleky.gov/government/brightside>

Kentucky Science Center: The Kentucky Science Center hosts educational opportunities in a variety of forms, including exhibits at the Science Center, single-day programs, summer camps, and community outreach. The Science Center is committed to bringing interactive exhibits and engaging programs for children, families, and adults. The well-established exhibit, "The World Around Us," focuses on all aspects of the natural environment as well as human interactions within it. Past offerings have included the exhibit "Reuse-a-palooza" which taught visitors about 'upcycling' and how waste can be repurposed instead of thrown away. The outreach program "DirtFest," allowed visitors to experiment and explore different types of dirt as well as farming and landscaping. <https://kysciencecenter.org/>

Louisville Metro Green Team organized by the Office of Advanced Planning and Sustainability leads Louisville Metro Government internal efforts to improve efficiency and sustainability within Metro's operations. This includes efforts to reduce and reuse waste and increase recycling.

8. If recycling is deemed not feasible, provide specific details supporting that decision: N/A

9. Describe how used motor oil, batteries, and antifreeze are handled in your SWMA:

Government Drop Off: The SWMA has a household hazardous waste (HHW) drop off center which accepts used motor oil, batteries, and antifreeze at no cost. The center is operated Tuesday-Saturday 9:30-4:00. The site does not accept out of county waste nor waste from businesses or governments. All items are recycled. The site is funded through license fees collected by the WMD.

WMD operates three (3) full-service recycling centers in the community that accept used motor oil, used oil filters, and used anti-freeze Tuesday-Saturday from 10-5. Two of the sites (Hubbards Lane and Dixie Highway) accept used lawn equipment in partnership with the Air Pollution Control District (APCD) for a program called Lawn Care for Clean Air that encourages Louisville Metro residents to improve air quality by offering rebates when residents convert to lower-emitting equipment. <https://louisvilleky.gov/government/air-pollution-control-district/lawn-care-cleaner-air>

Commercial Drop off or Services: Some businesses accept oil, batteries, and antifreeze as part of their normal operations such as home improvement stores, oil change shops, and auto parts stores.

10. Describe how household hazardous waste is handled in your SWMA:

The WMD operates a household hazardous waste (HHW) drop off site known as HazBin. The site is located at 7501 Grade Lane and is open Tuesday-Saturday from 9:30-4:00. Citizens of the SWMA can drop off unwanted HHW at the site at no cost. Many of the items are recycled or fuel blended. Anything not capable of being recycled or fuel blended is disposed in a landfill designed for the specific hazards of the chemical. Metro has a website designated to HHW which can be found here: <https://louisvilleky.gov/government/public-works/services/hazardous-materials-disposal-haz-bin>.

Accepted Items: Asbestos floor tiles (less than 25 lbs.), Automotive fluids, Batteries (auto, household and rechargeable), Cleaners (bathroom, rug, upholstery, all-purpose spot removers), Driveway sealers, Fertilizers, Fire extinguishers, Fluorescent light bulbs & LED light bulbs, Freon, Furniture polishes and waxes, Gasoline (including boat gas), Hearing aid/watch batteries, Kerosene, Lawn/garden hazardous chemicals (container must be left at HazBin), Mercury thermometers and thermostats, Metal polishes and rust removers, Mildew removers, Mineral spirits/turpentine, Mothballs, Nail polish and removers, Oil based paint or lead paint, Oven and drain cleaners, Pesticides, herbicides, fungicides, insecticides (container must be left at HazBin), Propane tanks (1 lb. and 20 lb. grill tanks), Smoke detectors, Solvents and degreasers, Spray paint, Swimming pool chemicals, Varnishes and stains, Wood preservatives.

The site does NOT ACCEPT: Items from businesses, Containers larger than 5 gallons or 40 pounds, more than 25 lbs. of Asbestos, Helium tanks, Ammunition, Expired medication, Latex paint

Prohibited From Collection System: Louisville Metro Ordinance 51.405 (A)(2) prohibits set out of asbestos, hazardous waste, medical waste to include bodily fluids, hazardous waste, and liquid paint in the Urban Services District when it is collected by the Department of Public Works. Home rule cities may have similar ordinances prohibiting disposal of household hazardous materials and private waste haulers may have their own collection rules.

11. Are electronics/computers recycled in your SWMA? Yes No

11a. If yes, describe your electronics/computer (e-scrap) recycling program:

Louisville Metro Government operates an electronic recycling drop off site called CyberCycle and Done With IT located at the Louisville Metro Waste Reduction Center at 636 Meriwether Avenue. It also conducts up to ten (10) Pop-Up Drop-Off events across the community each year in which citizens can drop off electronics items among many other things.

CyberCycle: accepts cell phones, compact discs, CD players (CD cases NOT accepted), computers, copiers, digital cameras, electronic game systems, floppy disks, microwaves, monitors, printers, scanners, disk drives, television sets, VCRs and VHS tapes (cases NOT accepted). Items dropped off at CyberCycle are destroyed and recycled. Residents can recycle up to 3 items or systems (computer, monitor, keyboard, printer and external drive) for free. They can recycle more than 3 items or systems (by appointment only) for \$0.60/lb. or \$0.30/lb. for non-profit organizations. Citizens should call 502-574-2796 to make an appointment. Appointments available Tuesday-Friday, 8 a.m. - 3 p.m. CASH ONLY

Done With IT: Louisville Metro Government has partnered with TERRA's Done with IT, Digitunity, and the Technology Conservation Group to provide a drop off and mail-in recycling program. The program is geared toward helping to close the digital divide by organizing the refurbishment and return of the devices to do good in the community. It is important to note there is COMPLETE DATA ERADICATION ON RETURNED DEVICES. All devices are shipped directly to a secure, Certified R2 facility that meets strict criteria for data destruction. Hard drives and other storage media will either be wiped

and/or physically destroyed. The program accepts donated usable cell phones, tablets, and laptops that can be refurbished and reused! There is a small fee associated with the mail in program. Residents can access the mail in website here: <https://www.donewithit.org/louisville>. Organization with many working computers that can be donated, are asked to contact the Louisville Metro Office of Performance Improvement & Innovation through the contact form at the bottom of <https://digitalinclusion.louisvilleky.gov/>

Ordinance: Electronics are prohibited by ordinance 51.405 (A) (2) from being set out for collection in the Urban Services District where waste is collected by the Louisville Metro Department of Public Works.

11b.If no, discuss any plans your governing body must start an electronics/computer (e-scrap) recycling program: N/A

12. Is office paper recycled in your SWMA? Yes No

12a. If yes, what businesses or agencies recycle office paper?

A government sponsored office paper recycling program does not exist in Louisville Metro except for state buildings. However, office paper recycling is common with many businesses in the private sector, or it is recycled in single stream collection programs. Since the year 2019 recyclers have reported accepting an average of 15,800 tons. For the purposes of this plan single stream means the collection of multiple types of recycling materials in a single container or collection vehicle. Recycling materials include office paper, magazines, mail, cups, flattened cardboard, empty food and beverage cartons, plastic empty kitchen/laundry/bath bottles and containers, glass bottles and jars, metal cans, pans, and wrap.

12b.If no, explain why office paper is not recycled in your SWMA: N/A

13. What efforts has your governing body made to assist the local school boards in recycling white paper and cardboard to meet the statutory requirements in KRS 160.294? If there have been none what will the county do to assist in this endeavor? Include dates in the implementation schedule:

Jefferson County Public Schools has adopted policy 05.7 which states: If the District can locate a recycling vendor to serve the District without a negative fiscal impact, all Board-owned and operated facilities shall recycle white paper, cardboard and other recyclables as practicable. The Superintendent/designee shall establish a recycling plan for all school facilities and periodically review compliance with this requirement.

The Partnership for a Green City encourages community collaboration to overcome challenges to Louisville's environmental practices. This partnership includes Louisville Metro Government, University of Louisville, Jefferson County Public Schools (JCPS), and Jefferson Community and Technical College. The Partnership has a subgroup that is called the Total Materials Management Group who works together with purchasing power of the Partnership to get more favorable terms on solid waste management contracts. JCPS has utilized these contracts to assist in its recycling program.

B. Recycling Program Strengths

Describe the strengths of your existing recycling program:

The SWMA has a robust general education system that targets collection of recycling materials generated from residents and businesses. This includes many electronic formats such as Facebook, Twitter, and Nextdoor as well as outreach programs.

The SWMA has many types of recycling or beneficial use facilities that accept a wide array of materials.

- Three (3) materials recovery facilities that accept residential and commercial single stream materials (office paper, magazines, mail, cups, flattened cardboard, empty food and beverage cartons, plastic empty kitchen/laundry/bath bottles and containers, glass bottles and jars, metal cans, pans, and wrap) as well as source separated materials from businesses and staffed recycling centers.
- Nine (9) metals salvage yards.
- One (1) shingle recycler.
- One (1) concrete recycler.
- One (1) composting facility. However, there are several other locations that accept organics and ship out of county for composting.
- Two (2) locations accepting or collecting electronics.

- Two (2) that accept inert materials for fill.

The SWMA has a drop off site for household hazardous materials that operates five (5) days per week, as opposed to the previous two (2) days per week, making it more convenient for residents.

The SWMA has a resident self-haul location that accepts many commodities to include metals, electronics, white goods, yard and tree waste, shingles, and waste tires for recycling that operates Tuesday-Saturday.

The numerous drop off sites and relatively short hauling distances in the community that makes it easy for residents to recycle or compost their waste correctly.

C. Recycling Program Weaknesses

Describe the weaknesses of your existing recycling program:

Construction & Demolition Waste

Recycling options for mixed construction & demolition waste is not available.

There are limited outlets for gypsum (drywall) if it was collected.

Shingle to asphalt recycling has fallen out of favor with the Kentucky Department of Transportation causing the market to retract too almost non-existent.

Construction & Demolition reduction and reuse education does not exist.

Residential Recycling

On-site recycling is not available to many residents/tenants of multifamily buildings or complexes having nine (9) or more units within the Urban Services District or multifamily building or complexes of any size properties outside of the Urban Services District.

The recycling participation rate is low in unincorporated areas of the SWMA. According to the 10 Year Solid Waste Management Study ¹ the estimated recycling participation rate is 23% for the unincorporated area. The rate is lower than contracted cities and the Urban Services District (USD) as provided by the Department of Public Works (DPW)². Unincorporated residents who responded to the public survey mentioned their dissatisfaction with lower service levels at a higher cost in open-ended responses. As a result of lower service levels and higher costs for recycling and composting collection, diversion rates are consequently lower in the unincorporated area compared to the Urban Services District and incorporated cities. Survey responses for the reasons unincorporated city do not recycle were: services need to be more affordable, the feeling recycling should not cost consumers, the thought that the waste collector is making money on the collected recycling, the service should be part of the garbage bill, everyone across the city should be on the same services, we should get it free like those in the city or other cities where the person has lived, it is not available from my waste collector. These sentiments were also expressed but more generally in the Merger 2.0 Study.

Self-Haul

No permanent self-haul locations or online presence dedicated to reuse of materials.

There is only one household hazardous materials drop off site for the SWMA. While the site is centrally located, many residents feel the location is not convenient. This results in residents storing hazardous waste on their property or the materials being placed in the garbage stream illegally.

Education and Outreach

Technical Assistance programs to business in the industrial/commercial/institutional (ICI) to include certain multifamily buildings or complexes may not be formalized or have much reach into the community outside of direct request from the business. These programs could include topics such as how to right size waste services, how to reduce waste, how to recycle more, how to reduce contamination, how to reduce bulky waste and illegal dumping, and ultimately how to reduce cost and/or increase services. These technical assistance programs should be developed in consultation or partnership with professionals or associations within the individual sectors.

¹ 10 Year Study Existing Conditions: Unincorporated Areas (page 8)

² 10 Year Study Existing Conditions: Urban Services District (USD) and Incorporated Cities (pages 6-7)

Inconsistent or overly complex communication and messaging associated with recycling, trash, organics, and reuse programs in the SWMA causes confusion and increased contamination of recycling streams.

Many waste collectors use national information systems (websites/call centers) to let customers know what services available or what items are acceptable for recycling. This messaging may not be correct for the SWMA.

The Resin Identification Code for plastic containers (recycling symbol plus the #1-7) that was developed for recycling centers and processing facilities to identify the resin type has become a generally acceptable method for consumers to determine acceptability of an item in the SWMA recycling stream. However, while an item may be the right resin it may not always be acceptable in our local system.

General Public Perception

It is evident through phone calls, social media comments, emails, and face-to-face interactions that many members of our public have general misconceptions regarding recycling. Examples include:

- Recycling goes to the landfill.
- Some parts of the city receive recycling and other waste services for free.
- Residents should not have to pay for recycling if someone else is making money from the materials.

Incentives For Diversion

Residents and businesses who, in general, can be strongly motivated by financial mechanisms are not incentivized to divert waste because 1) no pay-as-you-throw programs exist in the SWMA, and 2) recycling and organics collection services cost are not embedded into the cost of garbage collection, and 3) because landfill tipping fees are low.

Enforcement

Although Louisville Metro Code of Ordinances prohibits placing yard waste with landfill bound waste, the waste composition study found a significant percentage is found in curbside residential garbage (9%). It should be noted this percentage included collection from many areas with yard waste collection services. It would not be surprising to find this percentage much higher in the subscription-based areas where households must pay extra for yard waste services.

D. Recycling/Reduction Implementation Schedule

List a detailed account of specific actions or projects the governing body will complete to maintain or improve its recycling/reduction system, the frequency at which such actions will take place, a date for commencement of the activities and a date at which the activities will cease. **Include educational efforts.**

Specific Actions	Frequency	Month/Year to Begin	Month/Year to End
1.) Create outreach and technical assistance programs for each waste sector that includes best practice guides or tool kits focusing on, but not limited to, reducing waste, recycling more, reducing contamination in waste streams, right sizing services, how to conduct waste audits and capture rates that allow for effective waste management decision making, how to contract solid waste services, importance of reducing and recycling, and where recycling goes once it is collected.	Once	Jan 2023	Dec 2025
2.) Create a roadmap to standardizing solid waste management messaging across the SWMA. This would be done in partnership with collection, disposal, and materials recovery facility service providers but also in consultation with The Recycling Partnership and a marketing firm.	Once	Jan 2024	Dec 2024
3.) Hire a consultant to assist in improving local and regional end-use markets for recovered gypsum (drywall), concrete, shingles, with the end goal of establishing better economic conditions for mixed construction and demolition waste recycling. Consultant could also develop recommendations the WMD could take to prepare the SWMA for the influx of spent electric vehicle batteries with the goal to become a leader in handling EV batteries.	Once	Mar 2023	Mar 2024

4.) Explore expansion of existing full-service sites to accept additional materials such as household hazardous materials, latex paint, electronics, and hard plastics.	Once	Mar 2024	Mar 2026
5.) Create a marketing program to complement existing education and collection programs in the SWMA but also to improve public perceptions about reducing and recycling. The marketing program should include elements of the outreach and technical assistance programs listed in actions one (1) and two (2).	Once	Jan 2023	Dec 2025
6.) Perform capture-rate studies to obtain baseline metrics for measuring the impacts of outreach campaigns and other efforts to boost recovery of materials that can be reused or recycled. Information obtained in capture - rate studies help to chart and track patterns and identify the areas of greatest opportunity for behavior change.	Continuous	Sep 2023	Sep 2027

5. OPEN DUMPS AND LITTER

A. Open Dumps and Litter

1. Describe the contents of your ordinance with respect to open dumping. Provide a copy of the section of the ordinance(s) pertaining to open dumping and place at the end of the report with a cover sheet labeled "**Chapter 5 Attachments.**"

The SWMA has adopted LMCO 51.502 which states "Solid waste and yard waste collected, disposed of or deposited within the county shall be disposed of or deposited only at a landfill, solid waste management facility, recycling facility, compost facility or waste disposal facility, permitted by the Cabinet and meeting all applicable laws and regulations".

The SWMA has adopted LMCO 51.510 (A) which states: No person shall deposit, drop, dump, place, or throw any waste or hazardous waste onto public or private property that is not licensed for the purpose of disposal of waste by the Louisville/Jefferson County Metro Government Waste Management District and in compliance with all applicable laws and regulations. Illegal dumping does not include the discarding of small quantities of waste related to consumer goods that are reasonably understood to be ordinarily carried on or about the body of a living person, including, but not limited to, beverage containers and closures, packaging, wrappers, wastepaper, newspaper, magazines, or other similar waste that escapes or is allowed to escape from a container, receptacle, or package.

2 What is your process for identifying and recording open dumps?

All citizens may report accumulations of waste on public or private property through Metro311. Complaints are routed to either the Department of Public Works (for waste set out for collection at the curb or reported illegal dumping on private property) or the Department of Codes and Regulations (private property). Metro Solid Waste officers also have assigned inspection districts which are surveyed for illegal dumping and other violations or ordinance.

3. How does the SWMA prioritize the cleanup of open dumps?

Small dumps that meet the definition of an illegal open dump are handled through the code enforcement process daily and result in the debris being removed within a few weeks if on public property and sometimes longer if on private property. Metro typically does not complete open dump grant applications for these smaller open dumps. Larger open dumps that require open dump grants have been identified and cleaned. There is currently one known open dump, and it is the priority.

4. Describe the procedures to prevent the recurrence of open dumping at sites that have been cleaned (include surveillance efforts, pull-off barricades, etc.):

Of the open dumps that have required open dump grants to clean Metro Department of Public Works will place barriers in the form of concrete block or gates. The sites will be checked frequently by enforcement officers and if needed surveillance cameras placed to identify illegal dumpers or to repair any openings to the barriers.

5. Describe any assistance your SWMA offers to private property owners to clean open dumps:

Louisville Metro will ensure any owners are aware of any opportunities such as free drop off events, used tire collection events, or for free disposal at local disposal facilities.

6. Describe your plan to control and clean up litter:

Louisville Metro Government has established a litter collection plan called “Clean Collaborative” which dramatically increased cleaning efforts in the SWMA. The purpose of the collaborative was to bring together stakeholders from across Louisville Metro to coordinate and maximize cleaning efforts.

Clean Collaborative Stakeholders and Roles

Louisville Metro Public Works & Assets (DPW) utilizes paid crews (M-F 8am to 4pm) to consistently clean major arterial routes throughout Jefferson County on a rotating basis, conducts litter hotspot cleanings daily, homeless camp cleanings or clearings, sweeping streets in the urban services district and contracts such as suburban street sweeping and hand cleanings of interstates to supplement state cleanings.

Louisville Waste Management District, which annually receives Kentucky Pride Fund grant funding each year supports Metro Government and Brightside through Memorandum of Agreements (MOA’s).

Brightside organizes and supplies volunteers for community and neighborhood cleanups, beautifies areas so they are less likely to be littered, conducts in-school education on cleanliness, and public anti-litter messaging.

Louisville Downtown Partnership (LDP) utilizes “Ambassadors” to keep litter from sidewalks. As part of the Clean Collaborative there was an agreement the boundaries of the LDP was extended to ensure everyday cleaning.

Goodwill Industries conducts a program called Another Way with a goal to provide a workforce strategy that includes opportunities or individuals to gain job skills training and work-based learning opportunities rather than directly engaging other people for money on sidewalks and other rights of way. Another Way Team will canvass highly trafficked areas known for panhandling and offer up to 13 individuals daily the opportunity to work or 5 hours and earn \$50 compensation for their time. These individual then go into the community to clean litter from streets. Individuals will return daily to Goodwill’s Career Resource Center there they will have the opportunity to address barriers and connect to both internal and external resources.

Cleanliness Assessments

The first step of the process was to begin assessments of the level of cleanliness along major arterial roadways. Assessments began in February 2021 and will continue throughout the initiative. Streets and roads are scored based a 1-4 scale with 1 being almost totally free of litter and 4 being heavy litter. Citizens can use the online Cleanliness Assessment Map to view scores

<https://lojic.maps.arcgis.com/apps/View/index.html?appid=548ce95ed5424328a093d54428a9c0e7>.

Cleanliness Programs

The initial funding of \$1.5 million was used to hire 13 employees, two (2) rear load mini packers, two (2) stake bed trucks, (3) three small sweepers, and two (2) pickup trucks to clean routes continuously throughout the entire year. An additional six (6) staff members were added in CY 22 by the Waste Management District using litter abatement funds bringing the total daily cleaning staff to 18.

Cleaning Focus:

1. Central Business District:

- a. Litter baskets are serviced daily along with businesses carts (dry waste).
- b. Streets and sidewalks are swept, and litter pickup is conducted daily.
- c. This work is shared in responsibility by the Department of Public works and through a Memorandum of Understanding (MOU) between Louisville Metro Government through Public Works and Assets and Downtown Development Corporation (“DDC”), dba the Louisville Downtown Partnership (“LDP”).

2. Alley Action Operations: Louisville Metro Public Works staff clear overgrown limbs and pick up all loose litter in alleys and street frontages in the Urban Services District on a rotational basis.

3. Major Arterial Roads: Litter is removed from the curb to include the adjacent sidewalk and up to five (5) to ten

(10) feet past it on major arterial roadways on a rotational schedule. Litter is defined as cups, bottles, cans, paper, and items not attached. Excluded are cigarette butts and trash smaller than a half inch.

4. **Management Referrals:** Litter areas that have been called or sent to the supervisor from PWA leadership, Mayors Office, Metro311 system and/or Metro Council that require immediate cleaning.
5. **Hot Spots:** There are sixteen (16) areas that have been identified over time as generating continuous high amounts of litter that require constant cleaning. Most of these are viaducts that are low areas that litter tends to accumulate.

Interstate litter abatement and mowing cycles in Jefferson County-The interstate highways that traverse the SWMA are the responsibility of the Kentucky Department of Transportation to mow, sweep, and clean. Louisville Metro will utilize the state contracts to supplement cleanings as funding allows.

Right-of-way grass cutting litter abatement: The Right-of-Way (ROW) mowing, and litter collection program is under the Louisville Metro Department of Public Works and Assets Roads & Operations Division. This excludes expressways that run through the SWMA. Identified roadways are serviced using three methods: Contractors: (1) State ROW Mowing (mowing along State highways – such as Hurstbourne Parkway and Fern Valley Road, but not including the Interstates); (2) State “Odd Lots” Mowing (generally “sliver” properties owned by the State which need to be maintained); and (3) Metro ROW Mowing, which are along Metro-owned and maintained roadways – such as Chamberlain Lane and Blankenbaker Lane. There are approximately 304 acres of Metro Right-of-Way, 933 acres of State Right-of-Way and 40 acres of State parcels that receive heavy-duty tractor mower cutting. Before starting the mowing cycle operation, all litter, trash, and debris is removed.

Brightside Cleanups: Periodic cleanups are conducted by community groups which require pickup of litter bags or debris. As part of Brightside’s 2022 Strategic Plan, the Clean Collaborative will partner with Brightside to increase the success of both organizations. The goal is organizing volunteer cleanups based on the Clean Collaborative routes. This will double the impact of both organizations. The Waste Management District provides litter abatement funding for supplies for neighborhood cleanups and for litter education through a Memorandum of Understanding.

Brightside Litter Routes: Litter assessments conducted by Brightside in each of the 26 Metro Council District showed certain areas collect litter at a higher rate. These areas are roadways with high number of bus routes, high amounts of pedestrian traffic, commercial corridors, and some open spaces with high traffic. The roadways in Louisville Metro were analyzed to identify these areas and routes were created to address the litter. These have been placed on maps and as community groups are looking to do service they may be directed to these areas.

Viaduct Cleaning: Cleaning is done year-around and based on the level of cleanliness. The CCO will focus on viaduct cleaning on the major arterial routes. These viaducts are in addition to the hot spot cleanings.

Sites for abandoned construction equipment – Clean Collaborative crews also pickup abandoned construction equipment (i.e. safety cones, safety tape, plastic barricades, jersey shape barricades, etc.) that remains in construction areas after work has been completed. The Cleanliness Coordinator and Permit Division Director of Public Works and Assets work with vendors to ensure equipment and utility markings are removed once the job/project is completed.

Scheduled street sweeping in the Urban Service District and Suburban Areas- Curbed roadways are cleaned three times per year on a rotating schedule. It is anticipated that litter accounts for 25% of the waste collected by the sweepers. This sweeping is also important in keeping litter and other debris out of sanitary and storm sewers that may cause drainage backups and problems at treatment plants.

Vehicle accident cleanup as generated by Metro311, emails, and while picking up litter on the routes. The Cleanliness Collaboration Coordinator will communicate with area wrecking companies to pick up vehicular material from accident locations pursuant to Louisville Metro Code Ordinances.

Clean Collaboration Abatement Routes- Major arterial roadways (561 lane miles) are hand cleaned of litter on a rotational basis through out the year. Twelve (12) members are staffed by Metro Government and six (6) through litter grant funds provided by the Waste Management District.

Major Events Cleaning: For major events that generate large amounts of litter on roadways such as the Kentucky Derby Festival (Thunder Over Louisville, Pegasus Parade, Great Steamboat Race, and races at Churchill Downs), Metro Government will utilize crews from Public Works & Assets by scheduling time away normal operations to conduct cleanings (lower overtime cost) to working overtime. For many festivals and fairs such as the Saint James Art Fair or the St Paddy’s Day Parade event organizers must provide solid waste management plans for approval that includes handling

waste/recycling and litter cleanings.

Public Litter Removal Tracking: All litter removal activities can be found on an Interactive Data Dashboard that tracks hand collection crews, street sweeping activities, and community cleanups through Brightside. Metrics include individual roadways cleaned (date, time, number of bags and other items collected) as well as totals for a certain period of time. <https://lojic.maps.arcgis.com/apps/dashboards/dd2e2fc1b5f449a0afd4983c53ff64a1>.

Brightside Education: Brightside strives to educate the future of our community--our children--on the benefits of taking care of our environment. If we teach our students about picking up litter, planting trees and being a good steward of our environment, then as our children grow, we will have so many more adults who will be looking out for our environment.

Brightside offers three opportunities for Louisville students to learn more about how they can better our city through taking care of our environment:

- [Brightside Kids](#) (appropriate for children in Kindergarten - 3rd grade.)
- [Brightside & Partnership for a Green City Youth Summit](#) (appropriate for children in 5th - 12th grades.)
- [Lorax Project](#) (appropriate for children in Pre-K - Kindergarten.)
- [Summer Camp Presentations](#) (appropriate for children in Pre-K - 3rd grade.)

Report a Litterer: Louisville Metro and Brightside operate a program that allows citizens who witness littering from vehicles to report that goes to Louisville Metro Department of Public Works Enforcement. After a litterer is reported, the license plate number is verified (including a description of the vehicle) through the County Clerk's Office. The owner of the vehicle will receive a letter saying that someone reported seeing litter being thrown from their vehicle, and reminding the owner that littering is punishable by a fine of up to \$500 and/or up to a year in jail. An automobile litter bag also will accompany each letter.

Louisville Metro has adopted Ordinance 51.510(B)(4) which states: *Public solid waste receptacles placed on sidewalks and streets by or with the approval of Louisville Metro Government shall be used only for such solid waste materials as a pedestrian may have for disposal. Such receptacles shall in no case be used for the disposal of solid wastes accumulated in residences or places of business.*

7. Describe the coordination efforts that exist within your SWMA with local, county and state law enforcement. If your county has a litter ordinance, provide a copy of the ordinance(s) or the portion of the solid waste ordinance(s) pertaining to litter and place at the end of the report with a cover sheet labeled "Chapter 5 Attachments."

Coordination is limited to assistance for issuing illegal dumping impounds, information request to the Realtime Crime Center (RTCC) and towing of impounded vehicles.

B. Open Dump Prevention Strengths

Describe the strengths of your program to clean and prevent open dumps:

Metro311 system makes it easy to report illegal dumping and poor solid waste management to city officials.

Louisville Metro can handle most illegal dumping issues without completing illegal open dump grant request.

Louisville Metro has dedicated solid waste enforcement team that investigates illegal dumping, utilizes surveillance cameras to catch violators, can issue citations and impound vehicles used in illegal dumping, and has a dedicated code enforcement board to hear appeals of citations.

Louisville Metro has a dedicated website for illegal dumping where citizens can get tips for prevention, view images of vehicles we are searching for as well as ones we have impounded, report witnessed illegal dumping (anonymously if needed), and upload images of people for investigation.

Louisville Metro has a social media presence that announces when Metro impounds vehicles and when the enforcement team is searching for a vehicle. This involves the public who can send messages to the enforcement unit on information.

C. Open Dump Prevention Weaknesses

Describe the weaknesses of your program to clean and prevent open dumps:

The collection system in the SWMA does not automatically include bulky waste items or the collection of bulky items is conducted periodically.

D. Open Dump Prevention Implementation Schedule

List specific actions or projects your SWMA will complete to maintain or improve its open dump abatement program. **Include educational efforts.**

Specific Actions	Frequency	Month/ Year to Begin	Month/ Year to End
1.) Replace the announcement based bulky waste collection system with an appointment-based system of four (4) large item too large to fit in a 95-gallon cart (per week) for services provided by the Department of Public Works in the Urban Services District. The goal of this program should allow citizens an option for disposal of items as they are generated instead of needing to wait months for their next set out period in the current system.	Once	Jan 2023	Jul 2023
2.) Consider amending 51.300 (C)(3) to include a minimum of once per month collection of bulky waste items too large to fit in garbage containers into the basic service package that is required to be offered by waste collectors as a condition of their license.	Once	Jan 2024	Jan 2025
3.) Create illegal dumping education and outreach messaging as part of a larger campaign focusing on putting waste in its place. Messaging will focus on ensuring residents and businesses understand the importance of solid waste management for the community, their responsibility to ensure their waste is properly disposed of in a permitted disposal facility and publicize disposal options offered by Metro Government and the private sector.	Once	Jan 2023	Jan 2025
4.)			
5.)			
6.)			

E. Litter Prevention Strengths

Describe the strengths of your program to control and clean up litter:

Litter Collection System: Louisville Metro Government created the Clean Collaborative Initiative that includes both assessment and collection of litter year-round.

Clean Collaborative Coordinator: Louisville Metro has created a full-time position to bring together stakeholders from across Louisville Metro to coordinate and maximize cleaning efforts.

Ordinance updated to include that household/business trash is not allowed in public litter baskets to prevent overflows before the next collection occurs.

Louisville Metro Government and many of the private waste collectors have either switched or are in the process of being transitioned from 18-gallon recycling bins to 65 or 95-gallon recycling carts with lids. This prevents litter from open top bins when the wind blows.

Volunteer Cleanup Opportunities: Brightside organizes community-wide and neighborhood cleanup events. Citizens and businesses wanting to do community service can contact Brightside to obtain locations, litter collection supplies, and high

viability T-Shirts for safety.

Education and Outreach/Communication/Prevention

Weekly Litter collection report/information, such as what streets were cleaned and how much litter was removed, are sent to interested parties to include Metro Council which is then shared in newsletters to constituents.

Clean Collaborative Dashboard/Website: Louisville Metro maintains a website that includes information on the Clean Collaborative Initiative, tips on litter prevention, links to how someone can help, and links to a Public Dashboard that allows citizens to interactively track cleaning activities down to the street level, locate litter baskets, see latest assessment data, and SWMA litter collection totals for miles cleaned and pounds collected.

Brightside Outreach and Education: Brightside conducts in school programming that includes anti-littering and sustainability messaging and some public messaging in the public transportation sector.

F. Litter Prevention Weaknesses

Describe the weaknesses of your program to control and clean up litter:

Litter Composition: the SWMA has not conducted a county-wide study that focuses on composition (single use plastic bags, cups and bottles, or food containers), what action took place that resulted in it being littered (dropped by pedestrian or blown out of vehicle), and the original generator of the item (i.e., certain stores or types of stores). Having this knowledge could aid in education for prevention efforts.

No surveys or other community metrics have been established but it is generally believed the SWMA has not improved the community perspective of being a clean community: A strong contributor to littering is the prevalence of existing litter. Litter is not removed from public or private property or along roadways fast enough to change community perspectives that we have a clean community and therefore we should not litter. To do this would require a full community effort to include residents, businesses, and government.

Litter Containers: Litter containers are not consistently placed in the right places. Litter baskets are most effective at transition points such as bus stops or where people move to/from businesses that generate litter by nature of their operation. This would include sidewalks along pedestrian moving away from the business to residential areas, fast food drive thru and vehicle parking lots at convenience/gas stations, shopping centers, and grocery stores. Some litter baskets are placed in residential areas that attract household or business waste that quickly overwhelm the containers causing overflows or along roadways that have very little pedestrian traffic. Metro is currently conducting community-wide surveys to geolocate all litter baskets and to document the type and condition. This information will be used to guide future placement.

Education and Outreach/Communication/Prevention: Public anti-littering education and outreach campaign messaging is not likely reaching target audiences or connecting with them to address specific littering behaviors. This would include persons of specific ages that are known to litter at higher rates, persons/businesses/waste collectors who do not cover their truck and cargo loads, people who consistently have overflowing garbage or recycling containers, or general littering behaviors in public spaces.

Enforcement Against Active Littering:

- Existing Kentucky Revised Statutes (KRS) relating to criminal littering are rarely enforced because of priority level compared to other crimes or the law enforcement agencies do not have the staffing levels to effectively police the issue.
- Existing Louisville Metro Code of Ordinances (LMCO 51 and 155) are more specific to property maintenance and not directly related to the violator.

Abandoned Shopping Carts: Abandoned shopping carts accumulate on public property and in the public right of way create conditions that reduce property values, promotes blight and deterioration, and results in a public nuisance.

Waste Collection System:

- Announcement-based collection of unlimited bulky items that include smaller items in bags or boxes that can be scavenged and scattered create large amounts of litter.
- No organized collection system for litter containers outside of the Urban Services District where any litter containers need to have collection agreements in place with a private waste hauler or business.

- Overflowing garbage, recycling, or litter baskets attract animals which scavenge and spread litter.
- Garbage and recycling containers that are left unsecured setting at the collection point attract scavengers. These scavengers, who are looking for things of value, often leave litter on the ground in the area or alley.

Vehicle Wreckage: Debris from motor vehicle accidents are not always removed after accidents by the tow truck operator or left by private citizens clearing a wreck without involving law enforcement. Debris left on the roadway or side of roadway can be a hazard to other vehicles or pedestrians and are unsightly.

D. Litter Prevention Implementation Schedule

List specific actions or projects your SWMA will complete to maintain or improve its litter abatement program. **Include educational efforts.**

Specific Actions	Frequency	Month/ Year to Begin	Month/ Year to End
1.) Create anti-litter education and outreach messaging as part of a larger campaign focusing on putting waste in its place. This campaign will focus on behavior change and will not only work to reduce litter but would both measure and improve public perception about the cleanliness of the community.	Once	Jan 2023	Jan 2025
2.) Conduct a county-wide litter basket inventory to include identifying the gps location, type, and condition of existing litter baskets. Perform an analysis to determine the effectiveness of the existing placement and where additional litter baskets should be deployed. Deploy and reposition as needed. Through a partnership with Louisville Metro Department of Public Works, TARC, and the Waste Management District (WMD) create an organized collection system using Metro crews.	Once	Jan 2023	Dec 2025
3.) Explore a subscription to Litterati as a part of the education and outreach plan. This site uses the power of crowdsourced data to inspire citizens, local businesses, and non-profits to take collective action. This data will help government agencies and the community to diagnose the state of litter in the community and to take tangible action to prevent it from happening in the first place. https://www.litterati.org/	Once	Jan 2023	Jan 2025
4.) Replace the announcement based bulky waste collection system with an appointment-based system of four (4) large item too large to fit in a 95-gallon cart (per week) for services provided by the Department of Public Works in the Urban Services District. The goal of this program should reduce litter from smaller items being scavenged and blown through the neighborhood during the collection process.	Once	Jan 2023	Jul 2023
5.)			
6.)			

6. FACILITY SITING

As per KRS 224.01-010, the definition for a "solid waste management facility" is any facility for the collection, storage, transportation, transfer, processing, treatment, and disposal of solid waste..." Solid waste facilities include, but are not limited to contained landfills, CD/D landfills, transfer stations, recycling centers and composting facilities.

A. Facility Siting

1. Describe your SWMA's current siting ordinance(s). Include any local planning and zoning requirements. *Attach a signed and dated of the current siting ordinance(s) and place at the end of the report with a cover sheet labeled "Chapter 6 Attachments."*

Applicants must complete the approval process for one or both the Louisville Metro Planning & Design Division of Louisville Forward and the Louisville/Jefferson County Metro Government Waste Management District.

Planning & Design-The Land Development Code is a regulatory document that has been created to implement the goals, objectives, and policies set forth in Louisville Metro's comprehensive plan - Plan 2040. The LDC provides requirements related to zoning, form districts, land use, building & site design, transportation, landscaping, and signage. <https://louisvilleky.gov/government/planning-design/land-development-code>.

Some cities in Jefferson County have their own zoning authority, meaning they can choose which regulations to adopt into their local LDC. Louisville Metro/Jefferson County has 12 such cities.

Note: The required attachment of the LDC document will not contain the entire ordinance but instead will include only those sections relating to solid waste management facilities. See attachment: Land Development Code Provisions Relating to Off-site Solid Waste Management Facility Siting

Waste Management District (WMD)-Ordinance Chapter 51 requires any off-site solid waste management facility to be licensed by the district. This includes landfills, solid waste management facilities other than landfills, waste disposal facilities other than landfills, recycling, and compost facilities. Each application is reviewed and approved, disapproved, or additional information is requested within 45 days.

This process may include a Consistency Determination by the WMD 109 Board to determine if a facility fits with the current Five-Year Solid Waste Management Plan (SWMP). The process follows established bylaws for conducting public meetings and consistency determinations. See attached "By Laws of the Louisville/Jefferson County Metro Government Waste Management District"

2. Describe in detail the site approval process for your SWMA. Attach a copy of the siting procedures and place at the end of the report with a cover sheet labeled "**Chapter 6 Attachments.**"

Land Development Code approval process has five (5) steps:

Step One: Pre-application and meeting with adjoining property owners and neighborhood groups.

- Applicants must submit a **pre-application** to begin the process along with a fee
- A case manager is assigned and sets up a pre-application meeting
- Pre-applications are reviewed by pertinent agencies.
- Pre-application meeting is conducted if the applicant requests one. The pertinent agency comments are reviewed.
- Applicants are required to hold a neighborhood meeting to present plans to neighbors and to respond to their feedback. The neighborhood meeting can be held at any time during the Pre-Application phase but must be held prior to filing a formal application.

Step Two: Formal application and site inspection

- Once the pre-application review has occurred, the meeting with adjoining property owners and neighborhood groups has taken place, and the Louisville Metro review agencies have preliminarily approved the proposal, the owner/developer may formally file for rezoning. A case number will be assigned to the case. The case file is available at Planning and Design Services, 444 S. 5th Street, Suite 300, during normal business hours (Monday through Friday, 8:00 a.m. until 5:00 p.m.). Once the rezoning application is filed, Metro Council members and Planning Commissioners are not allowed to discuss the matter with any interested party (including the developer, attorney, or citizens). Members of the community can send letters, petitions, and other information to the Planning and Design Services office where it will become part of the official record and copies will be provided to all Planning Commission members.
- Site Inspection: Planning and Design Services staff, along with some members of the Planning Commission, conduct a site inspection to assess the impact of the proposed development on the surrounding area. They evaluate the proposal in terms of its effect on roads and traffic patterns, its compatibility with the neighborhood, and its impact on natural and historical features in the area. The plan is also reviewed to determine if it follows the guidelines of the Comprehensive Plan.

Step Three: Land Development & Transportation (LD&T) Meeting

- The LD&T of the Planning Commission reviews zoning changes and subdivisions, schedules public hearing

dates, and makes recommendations to the Planning Commission. The venue is informal, and all interested parties simply go up to the committee table when the case number is called. The developer and Commission staff discusses the proposal and citizens are given an opportunity to speak. LD&T has wide latitude and can simply schedule the public hearing, ask the developer to revise and resubmit the plan, require further studies, or recommend restrictions.

- Any restrictions or modifications should be in the form of binding elements, which as the name implies, “bind” the developer to follow through on specific design details and restrictions if their rezoning is approved.
- LD&T generally meets on the second and fourth Thursday of each month in the Old Jail Building, located at 514 W. Liberty Street, at 1:00 p.m.

Step Four: Planning Commission

- Once steps 1, 2, and 3 are complete a public hearing is scheduled and conducted by the Planning Commission. Notification of the public hearing is made in several ways:
 - Hearing notices are sent to adjoining property owners 14 days prior to the public hearing;
 - Signs are posted on the property 14 days prior to the hearing; and
 - Legal ads are placed in newspapers not less than 7 days nor more than 21 days prior to the hearing.
 - In addition, neighborhood groups that have registered with Planning and Design Services are notified 7 days prior to the public hearing.
- Public hearings are normally held on the first and third Thursday of each month at the Old Jail Building, 514 W. Liberty Street, at 1:00 p.m. In addition to these regular meetings, extra bi-monthly meetings of the Commission are held after normal working hours. Development proposals generating a high level of interest in the community will automatically be scheduled for one of these meetings, which occur on the third Thursday of every other month at the Old Jail Building, 514 W. Liberty Street, at 6 p.m.
- The Public Hearing Process: Routinely, the staff person assigned to the case has 5 minutes to outline the plan, the developer and supporters have 10 minutes to argue for it, and opponents have 10 minutes to argue against it.
- The public hearing is a formal format where staff will present the plan, the developer and/or attorney will present the reasons the change in zoning should be granted, and the public is given the opportunity to state agreement or disagreement, suggest alternatives and give reasons for their position. The developer is then allowed a rebuttal to your remarks.
- After all testimony is heard, the Planning Commission will go into business session and vote to recommend approval or denial to the appropriate legislative body, continue the hearing to a later date, or defer action. When a hearing is continued to a later date, the Planning Commission will accept additional testimony. When action has been deferred, the case is placed on a subsequent docket under “business session” for deliberation, and no additional testimony is allowed.

Step 5. Legislative Action

- Following the Planning Commission’s recommendation, the elected legislative body makes the decision to approve or deny the proposal. Legislative bodies with zoning authority in Jefferson County include the Metro Council, and the following 2nd, 3rd, or 4th class cities: Anchorage, Douglass Hills, Graymoor-Devondale, Hurstbourne, Indian Hills, Jeffersontown, Lyndon, Prospect, Shively, St. Regis Park, and St. Matthews.

Waste District Approval Process: All proposed off-site waste management facilities operators must apply to the Waste District at 600 Meriwether Avenue. The applicant must complete and submit the license application form, supply documents showing the business is in good standing with the Kentucky Secretary of State, and proof the business has comprehensive general liability insurance. The applicant must submit an Applicant Statement Form that provide a description of the owner and/or operators prior experience in the ownership and operation of a solid waste management facility, wherever situated. The description must disclose:

- a) Any administrative, criminal, civil action pending alleging a violation of federal, state, or local law or regulation concerning solid waste management
- b) For a five year period immediately preceding the date of filing, whether the owner/operator has been convicted of a crime, entered a plea of guilty, a plea of nolo contendere or such other plea of no contest to a felony or misdemeanor charge, been held liable in a civil or administrative action, or agreed to payment of any civil penalties or monies as part of the final disposition of any civil, administrative or criminal proceeding involving the

violation of any federal, state or local law or regulation applicable to the management of a solid waste management facility.

Other required documents may include copies of any state permits issued by the Commonwealth of Kentucky Energy and Environment Cabinet, and a letter from Louisville Metro Planning & Design certifying the zoning of the property is correct, a site plan showing all parcels, site boundaries, easements, and 100-year flood plain. The applicant must also submit the following:

- 1) Locations of access gates and procedures to restrict unauthorized persons from entering the premises. Facilities must have an attendant on site during all operating hours.
- 2) Description and locations of records showing the number of materials received, processed, and distributed and/or disposed.
- 3) Materials accepted by the facility for which the applicant is operating per definitions described on Chapter 51.001
- 4) Procedures for handling and removal incidental amounts of unpermitted waste received at the facility
- 5) Locations where incoming materials, materials processing, and finished material will be stored to meet the requirements as indicated in Chapter 51 for the facility in which the applicant is making application.
- 6) Location of fire lanes capable of handling firefighting vehicles more than 35,000 pounds in all weather conditions.
- 7) Location of on-site water supply that is approved by the local fire district having jurisdiction.
- 8) Transfer facilities handling municipal Solid Waste as defined in 51.001 shall include in the site plan the location and design of an enclosure having three side and a roof where the loading, unloading, and storage must take place. The plan must include a statement on how the enclosure will be equipped with a dust control system and system to control odors emanating from the structure.
- 9) Drainage plan that has been approved by the Metropolitan Sewer District and the Kentucky Division of Water.

Applications are reviewed according to LMCO Chapter 51.202 (C) which requires the WMD to respond to the applicant within 45 days of receipt with an approval, disapproval, or request for more information.

Additional Process: Any person or entity proposing to construct or expand a municipal solid waste disposal facility as defined in Kentucky Revised Statutes (KRS) 224.40-310 (contained landfills, residual landfill, greater than one acre construction & demolition debris landfill, solid waste incinerator, waste to energy facilities, hazardous waste landfills and hazardous waste incinerators) must meet state siting requirements. As such, permit applications for constructing or expanding these facilities, must contain a determination from the WMD that the proposal is consistent with the Solid Waste Management Plan (SWMP). This process of local determination will be carried out as needed for these facilities. If the proposal is inconsistent with the SWMP, then the WMD may propose amending the SWMP to make it consistent.

3 List any planned modifications to your existing siting ordinance(s), siting procedures, planning and zoning requirements and/or land use regulations. If your SWMA does not have a siting ordinance, planning and zoning and/or land use regulations, what steps are planned for developing and enacting an ordinance or other local policy to regulate the use of land for solid waste facilities within your area?

No planned modification as of the writing of this plan.

4. Selection of a site for a solid waste facility can be very controversial and the public must be given an opportunity to understand and participate in the process. What steps are taken by the SWMA to ensure the public is informed and involved in the decision-making process for siting solid waste facilities within your area?

All processes include specific requirement for the public to be notified of new facilities, a chance to understand what is being proposed, and a chance to make written or public comment in support or in opposition to the facility. All meetings are conducted in accordance with the Kentucky Open Records & Open Meetings Acts.

5. The siting process at the local level and the permitting process at the state level are mutually supportive and share the same objective for solid waste facilities to meet environmental, engineering, and operational standards, as well as be acceptable to the public. Describe how your SWMA coordinates local siting procedures with state permitting procedures for solid waste facilities.

The WMD conducts consistency determinations when requested by the Kentucky Energy Environment Cabinet.

B. Facility Siting Strengths

Describe the strengths of your existing siting ordinance:

The ordinances effectively outline the proper procedures of each approval process for siting an off-site solid waste management facility within the SWMA.

The processes ensure siting of the facility meets zoning regulations as set forth by ordinance.

The process ensures the public is informed about the proposed facility and the site approval process requires notification of nearby residents of the proposed site.

The siting process allows for extensive public involvement through public comments and hearings.

C. Facility Siting Weaknesses

Describe the weaknesses of your existing siting ordinance:

The process involves two (2) agencies and can be complicated for applicants and the public.

The order in which these application processes must be completed by the two agencies is not clear.

D. Facility Siting Implementation Schedule

List specific actions or projects the SWMA will complete to maintain or improve its facility siting system, the frequency at which such actions will take place, a date for commencement of the activities and a date at which the activities will cease. **Include educational efforts.**

Specific Actions	Frequency	Month/ Year to Begin	Month/ Year to End
1.) Create step by step guide to siting solid waste management facilities in the SWMA	Once	Jan 2025	Jan 2027
2.)			
3.)			
4.)			
5.)			

6.)

7. ENFORCEMENT

A. Enforcement Program

1. Describe your enforcement procedures and penalties for non-participation in your approved solid waste collection system. Attach a copy of the section of the ordinance(s) or procedures pertaining to non-participation and place at the end of the report with a cover sheet labeled **"Chapter 7 Attachments."**

Ordinance

Louisville Metro has adopted ordinance 51.500 Mandatory Solid Waste Management Collection. This ordinance requires the owner of every residence and the owner and occupant of every commercial or industrial establishment to provide for not less frequent than weekly disposal of solid waste, except recyclables and yard waste when the owner or occupant has either employed or has been provided services of once every other week collection as provided in § 51.300(C)(3) by either:

1. Employing the services of a solid waste collection and disposal service.
2. Having use of the service of a municipally provided waste hauler; or
3. Having solid waste collection and disposal services through the Urban Services District.

The owner of said residence or the owner and occupant of said commercial or industrial establishment that does not have use of a municipally provided solid waste collection and disposal service must be able to produce evidence of compliance with subsection (A)(1) above in the form of a paid receipt from the solid waste collection and disposal service employed by the owner and occupant.

Any person who violates §§ 51.500 shall be liable for a civil penalty of not less than \$50 per day or per occurrence, and not more than \$2,500 per day or per occurrence. Each day upon which a violation occurs shall constitute a separate violation. For a first offense within a two-year period, a specific civil fine of \$50 per day will be imposed for each offense if the person who has committed the offense does not contest the citation. For each subsequent offense committed within a two-year period from the date of payment or conviction on the first offense, a specific civil fine of \$100 per day will be imposed for each offense if the person who has committed the offense does not contest the citation.

Identifying and Enforcement Actions for Non-Participants

Louisville Metro Department of Public Works Enforcement receives complaints from citizens or other agencies when a residents or business waste are not getting collected. A solid waste management officer creates a case in our Accela tracking system and response to the property to determine compliance with ordinance. Many times, the officer will try to contact the citizen by knocking on the door and asking but most times they see a waste company container on-site and will contact the waste company to see if the customer is up to date on payments or the officer sees no waste container on the premises. In either case of no service the officer will issue a Notice of Violation. A copy is placed on the door of the property but also mailed to the property valuation administration registered owner of the property. A re-inspection date is scheduled and a recheck is conducted. If no service is in place on reinspection a civil citation is issued with a penalty as described above. All citations can be appealed to the Louisville Metro Code Enforcement Board under ordinance 32.287. Any citation not appealed within 10 days of issuance will become final and all fines will become due. If the fines are not paid within 30 days a lien is placed against the property.

2. Describe all surveillance/enforcement activities used by your SWMA to prevent litter and illegal dumping; for example, neighborhood watches, hidden cameras, etc. Attach copies of citation forms and letters to violators and place at the end of the report with a cover sheet labeled **"Chapter 7 Attachments."**

Illegal Dumping

Surveillance Operations: Louisville Metro utilizes eighty-four (84) Reconyx Surveillance cameras to catch illegal dumping. These cameras are installed in illegal dumping hotspots or in places that have had illegal open dump cleanups to prevent new dumping. The solid waste enforcement team has a 35' pull behind lift and one full time officer assigned to manage the placement priority, installing/maintenance, reviewing images and video, researching, and finding violators, and preparing citations to include impoundment orders.

Louisville Metro asks that citizens who have home surveillance systems or who capture illegal dumping on their phone utilize our illegal dumping website where citizens can report and upload their images of people engaged in the act of illegal dumping. Citizens can remain anonymous if those choose. Citizens can also see images of vehicles we are

searching for on the website as well as people we have impounded. <https://louisvilleky.gov/government/public-works/illegal-dumping>.

Periodically when finding having images but without identifying information the Department will post images of the vehicle on social media to include Facebook, Nextdoor, and Twitter) asking the public help in finding the violator. This method has been very successful in locating persons of interest. We will also update this post to announce the vehicle was impounded.

Other Enforcement Methods: In addition to surveillance operations solid waste officers will conduct inspections on properties where illegal dumping is reported by citizens with the goal of finding evidence in debris piles that could be used to identify the violator. Officers will also conduct windshield surveys of areas prone to illegal dumping stopping to investigate when found.

Litter

Ordinance 131.20 pursuant to KRS 512.070(4), which was adopted in 2019, classifies litter as a civil offence. The ordinance has penalties of not less than \$125 nor more than \$250 for each offence. This ordinance is used for witnessed littering because code officers do not have the authority to stop and detain violators. However, some instances of littering can be cited by the code officer if enough identifying information is found contained in the litter that rises to the level of proof that would be upheld at a code board hearing.

Existing Louisville Metro Code of Ordinances (LMCO 51 and 155) are more specific to property maintenance and not directly related to enforcement of litter against specific violators.

Report a Litterer: Louisville Metro and Brightside operate a program that allows citizens who witness littering from vehicles to report that goes to Louisville Metro Department of Public Works Enforcement. After a litterer is reported, the license plate number is verified (including a description of the vehicle) through the County Clerk's Office. The owner of the vehicle will receive a letter saying that someone reported seeing litter being thrown from their vehicle, and reminding the owner that littering is punishable by a fine of up to \$500 and/or up to a year in jail. An automobile litter bag also will accompany each letter. <https://louisvilleky.gov/government/brightside/report-litterer>.

Attachments: All violation and citation forms, all agreed order forms, all educational letters, Citation Appeals Forms, Lien Forms

3a. Do you use an administrative court for solid waste issues? Yes No

3b. If "yes" to question 3a, above, provide the date the court became effective: In 2016 it was reorganized, and the ordinance adopted.

4. Describe the operative procedures of the administrative court for solid waste issues. Attach a copy of the relevant documents or codes that relate to the administrative court and place at the end of the report with a cover sheet labeled **"Chapter 7 Attachments."**

ENFORCEMENT PRECEEDINGS

Enforcement proceedings shall only be initiated by the issuance of a citation by a Code Enforcement Officer. The Code Enforcement Officer must issue the citation by one of the following methods:

- Personal service to the alleged violator.
- Leaving a copy of the citation with any person 18 years of age or older who is on the premises and informed of the contents of the delivery, if the alleged violator is not on the premises at the time the citation is issued; or
- Mailing a copy of the citation by regular first-class mail to the last known recorded mailing address of the alleged violator; or
- If, in the exercise of reasonable diligence, the issuance of a citation using the methods set out in paragraphs (A) to (C) of this subsection is not possible, then the citation is properly served by posting a copy of the citation in a conspicuous place on the premises.
-

The citation issued by the Code Enforcement Officer must contain the following information:

- The date and time of issuance.
- The name and address of the person to whom the citation is issued.
- The physical address of the premises where the violation occurred.
- The date and time the offense was committed.
- The facts constituting the offense.
- The section of the code or the number of the ordinance violated.

- The name of the Code Enforcement Officer.
- The civil fine that may be imposed for the violation, including, if applicable:
 - The civil fine that will be imposed if the person does not contest the citation; and
 - The maximum civil fine that may be imposed if the person elects to contest the citation.
- The procedure for the person to follow to pay the civil fine or to contest the citation; and
- A statement that if the person fails to pay the civil fine set forth in the citation or contest the citation within the time allowed: the person shall be deemed to have waived the right to a hearing before the Code Enforcement Board or hearing officer to contest the citation; the determination that the violation was committed shall be final; the citation was issued shall be deemed a final order determining that the violation was committed and imposing the civil fine as set forth in the citation; and the person shall be deemed to have waived the right to appeal the final order to Jefferson District Court.

After issuing a citation to an alleged violator, the Code Enforcement Officer shall notify the Code Enforcement Board by delivering the citation as set forth in the board's regulations.

The person to whom the citation is issued shall respond to the citation within seven days of the date of issuance by either paying the civil fine or requesting, in writing, a hearing to contest the citation. If the person fails to respond to the citation within seven days, the person shall be deemed to have waived the right to a hearing and the determination that a violation was committed shall be considered final. In this event, the citation was issued shall be deemed a final order determining that the violation was committed and imposing the civil fine as set forth in the citation, and the person shall be deemed to have waived the right to appeal the final order to Jefferson District Court.

(Lou. Metro Ord. No. 200-2016, approved 11-29-2016, effective 12-31-2016, Lou. Metro Am. Ord. No. 10-2018, approved 2-14-2018)

HEARING; NOTICE; FINAL ORDER.

When a hearing has been requested, the Code Enforcement Board or its administrative staff shall schedule a hearing. Not less than seven days before the date of the hearing, the Code Enforcement Board shall notify the requester of the date, time, and place of the hearing. The notice may be given by regular first-class mail; certified mail, return receipt requested; personal delivery; or by leaving the notice at the person's usual place of residence with any individual residing therein who is 18 years of age or older and who is informed of the contents of the notice and in accordance with § 32.289.

Any person requesting a hearing who fails to appear at the time and place set for the hearing shall be deemed to have waived the right to a hearing to contest the citation, and the determination that a violation was committed shall be final. In this event, the citation as issued shall be deemed a final order determining the violation was committed and imposing the civil fine set forth in the citation, and the alleged violator shall be deemed to have waived the right to appeal the final order to Jefferson District Court.

Notice of a final order shall be provided to the cited violator by regular first-class mail; certified mail, return receipt requested; personal delivery; or by leaving the notice at the person's usual place of residence with any individual residing therein who is 18 years of age or older and who is informed of the contents of the notice.

All testimony at the hearing shall be taken under oath and recorded and retained for ten years. Testimony shall be taken from the Code Enforcement Officer, the alleged violator, and any witnesses to the violation offered by the Code Enforcement Officer or alleged violator. Formal rules of evidence shall not apply, but fundamental due process shall be observed and shall govern the proceedings. Pre-conferenced cases shall be called by the hearing officer so any witnesses present may have an opportunity to testify prior to adoption of any recommendation from the Code Enforcement Officer.

The Code Enforcement Board or assigned hearing officer shall, based on the evidence, determine whether a violation was committed. If it is determined that no violation was committed, an order dismissing the citation shall be entered. If it is determined that a violation was committed, an order may be issued upholding the citation. The board or hearing officer may impose a fine up to the maximum authorized by ordinance or require the offender to remedy a continuing violation to avoid a fine, or both.

Every final order following a hearing shall be reduced to writing, which shall include the findings and conclusions reached and the date the order was issued. A copy shall be furnished to the person named in the citation within 24 hours of the entry.

- If the person named in the citation is not present when the final order is issued, the order shall be delivered by regular first-class mail; certified mail, return receipt requested; personal delivery; or by leaving the notice at the person's usual place of residence with any individual residing therein who is 18 years of age or older

and who is informed of the contents of the notice.

PRESENTATION OF CASES.

Each case before the Code Enforcement Board or assigned hearing officer shall be presented by an attorney selected by Louisville Metro, a Code Enforcement Officer for Metro, or by a member of Louisville Metro's administrative staff. The Jefferson County Attorney's Office may either be counsel to the Code Enforcement Board or hearing officer or may present cases before the board or hearing officer but shall in no case serve in both capacities.

APPEALS; FINAL ORDER.

An appeal from a final order of a Code Enforcement Board or assigned hearing officer following a hearing conducted pursuant to § 32.284(E) may be made to the Jefferson District Court within 30 days of the date the order is issued. The appeal shall be initiated by the filing of a complaint and a copy of the final order in the same manner as any civil action under the Kentucky Rules of Civil Procedure. The Jefferson District Court shall review the final order de novo.

- If no appeal from a final order following a hearing is filed within the time period set in subsection (A) above, the order shall be deemed final for all purposes.

ORDINANCE FINE SCHEDULE.

Violations of ordinances that are enforced by the Code Enforcement Board or an assigned hearing officer shall be subject to civil fines. If a citation for a violation of an ordinance is not contested by the person charged with the violation, the penalties set forth in the ordinance establishing the violation shall apply. If no penalty is set forth, the penalties in LMCO § 156.999 shall apply.

LIEN; FINES, CHARGES, AND FEES.

Louisville Metro shall possess a lien on property owned by the person found by a non-appealable final order as defined by § 32.275, or by a final judgment of the court, to have committed a violation of a Louisville Metro ordinance. The lien shall be for all civil fines assessed for the violation and for all charges and fees incurred by Louisville Metro in connection with the enforcement of the ordinance, including abatement costs and administrative cost of 15% of the above. An affidavit of the Code Enforcement Officer shall constitute prima facie evidence of the amount of the lien and regularity of the proceedings pursuant to KRS 65.8801 to 65.8839.

The lien shall be recorded in the office of the County Clerk. The lien shall be notice to all persons from the time of its recording and shall bear interest at 18% per annum until paid. The lien shall continue for ten years following the date of the non-appealable final order or final court judgment.

Subject to § 32.290, the lien shall take precedence over all other liens, except state, county, school board, and Louisville Metro taxes, and may be enforced by judicial proceedings, including a foreclosure action.

In addition to the remedy prescribed in subsection (A) of this section, the person found to have committed the violation shall be personally responsible for all civil fines assessed for the violation and for all charges, fees and abatement costs incurred by Louisville Metro in connection with the enforcement of the ordinance. Louisville Metro may bring a civil action against the person and shall have the same remedies as provided for the recovery of a debt.

LIENHOLDER NOTIFICATION SYSTEM.

Louisville Metro shall obtain and maintain priority over previously filed liens, as provided in § 32.288, in accordance with the following provisions:

Individuals and entities, including but not limited to lienholders, (hereafter referred to as "registrants") may register with Louisville Metro to receive electronic notification of final orders entered pursuant to this subchapter.

To receive the notification, the registrant shall submit the following information to the Code Enforcement Board:

- Name.
- Mailing address.
- Phone number; and
- Electronic mailing address.

A registrant may use the electronic form provided on the Louisville Metro website to submit the information required by subsection (B) of this section. It shall be the responsibility of the registrant to maintain and update the required contact information with Louisville Metro. Louisville Metro shall inform a registrant of any evidence received that the electronic mailing address is invalid or not functional so that the registrant may provide an updated electronic mailing address. Not less than once per month nor more than once per week, Louisville Metro shall send electronic mail notification of all final orders entered pursuant to this subchapter since the last date of notification to each party registered pursuant to this section. The notification shall provide an electronic link to the Code Enforcement Database located on the Louisville Metro website. The database shall include the following information regarding each final order:

- The name of the person charged with a violation.
- The physical address of the premises where the violation occurred.
- The last known mailing address for the owner of the premises where the violation occurred, if, in the exercise of reasonable diligence, it is ascertainable.
- A specific description of the citation leading to the final order, including the citation detail set forth in KRS 65.8825(4)(a) to (h);
- The findings of the final order, including the penalty or penalties imposed by the final order; and
- The status of the final order regarding its ability to be appealed pursuant to this subchapter.

If an appeal is filed on a final order pursuant to this subchapter, Louisville Metro shall send electronic mail notification to all registrants.

At the same time the electronic notification required under paragraph (D) of this subsection is sent, Louisville Metro shall update its Code Enforcement Database to reflect the issued final order and shall post the notification required by subsection (D) of this section containing an updated link to the Code Enforcement Database on the Louisville Metro website.

Louisville Metro shall maintain the records created under this section for ten years following their issuance.

LIENS.

A lienholder of record who has registered pursuant to § 32.289(B) may, within 45 days from the date of issuance of notification under § 32.289(D):

- Correct the violation if it has not already been abated; or
- Pay all civil fines assessed for the violation, and all charges and fees incurred by Louisville Metro in connection with enforcement of the ordinance, including abatement costs.

Nothing in this section shall prohibit Louisville Metro from taking immediate action, if necessary, under § 32.292. The lien provided by § 32.288 shall not take precedence over previously recorded liens if:

- Louisville Metro failed to comply with the requirements of § 32.289 for notification of the final order; or
- A prior lienholder complied with subsection (A) of this section.

A lien that does not take precedence over previously recorded liens under subsection (C) of this section shall, if the final order remains partially unsatisfied, take precedence over all other subsequent liens except liens for state, county, school board and Louisville Metro taxes.

Louisville Metro may record a lien before the 45-day period established in subsection (A) of this section expires. If the lien is fully satisfied prior to the expiration of the 45-day period, Louisville Metro shall release the lien in the County Clerk's office where the lien is recorded within 15 days of satisfaction.

Failure of Louisville Metro to comply with §§ 32.289 and 32.290, or failure of a lien to take precedence over previously filed liens as provided in subsection (C) of this section, shall not limit or restrict any other remedies Louisville Metro has against the property of the violator.

IMMEDIATE ACTION.

Nothing in this subchapter shall prohibit Louisville Metro from taking immediate action to remedy a violation of its ordinances when there is reason to believe that the violation presents imminent danger or a serious threat to the public health, safety, and welfare, or if in the absence of immediate action, the effects of the violation will be irreparable or irreversible.

(Lou. Metro Ord. No. 200-2016, approved 11-29-2016, effective 12-31-2016)

5. If your SWMA does not have an administrative court for solid waste issues, do you plan to initiate an administrative court during this plan period? Yes No **If yes, provide dates in the implementation schedule:**

6. Describe any proposed modifications to your open dumping and littering procedures/ordinances. Provide dates in the implementation schedule: No changes are proposed.

7. Describe enforcement actions or procedures taken by the SWMA if identifying information (i.e., names, addresses, etc.) is found in litter or an illegal dump:

Illegal Dumping

Louisville Metro Public Works Enforcement investigates all reported or found debris piles for identifying information. If evidence is found the officer will document the evidence by taking images of it in the debris and then the entire debris pile. An enforcement case is opened in Accela for tracking purposes. The officer will then utilize research tools using a subscription-based program called Accurint, PVA records, Facebook postings, the Louisville Metro Real Time Crime Center (RTCC), etc. to locate potential dumpers. The officer will attempt to contact parties of interest by phone or by going to the address where the debris was generated to discuss the dumping with them. If all attempts to contact the parties of interest fail a notice of violation or citation will be issued according to ordinance 32.282 and place on a conspicuous location on the property where the debris was generated.

Litter

Louisville Metro Public Works Enforcement does not investigate reported or found litter for identifying information unless it is repetitive in nature. If that is the case, we follow the illegal dumping procedures above.

B. Enforcement Procedures Strengths

Describe the strengths of your existing enforcement procedures regarding litter and illegal dump prevention and non-participation in your approved collection system:

The SWMA has a well-developed solid waste enforcement system that includes ordinances clearly defining prohibited activities, enforcement processes, penalties and fees, and code board appeals process.

The SWMA has a well-developed citizen reporting system called Metro311 that allows citizens to report illegal dumping and litter issues (<https://louisvilleky.gov/government/metro311>).

The SWMA has a well-developed online reporting website to allow citizens to report witnessed illegal dumping and to upload images and videos captured on cell phones or security cameras. The site also allows citizens to view images of vehicles that have been captured in images in the act of illegal dumping (<https://louisvilleky.gov/government/public-works/illegal-dumping>).

The SWMA has a well-developed government provided surveillance camera system that allows solid waste enforcement officers to capture illegal dumping activities within the community for enforcement action.

C. Enforcement Procedures Weaknesses

Describe the weaknesses of your existing enforcement procedures regarding litter and illegal dump prevention and non-participation in your approved collection system:

None identified.

D. Enforcement Implementation Schedule

List a detailed account of specific actions or projects the county will complete to maintain or improve its Enforcement System, the frequency at which such actions will take place, a date for commencement of the activities, and a date at which the activities will cease. **Include educational efforts.**

Specific Actions	Frequency	Month/Year to Begin	Month/Year to End
1.) Continue existing enforcement procedures with annual assessments to identify potential improvement.	Continuous	Jan 2023	Dec 2028
2.)			
3.)			

4.)			
5.)			
6.)			

8. FINANCIAL MECHANISMS

A. Financial Mechanisms

1. Check all items that apply for the funding of your Solid Waste Program.

- Line Item in County Budget
- Collection franchise fees
- 109 Taxing Board
- General Fund
- Host agreement fees
- Other (list all): License fees collected from off-site solid waste management facilities, waste collectors, auto salvage yards, receipts from recycling, grants, citation and enforcement fees.

2. How is the Solid Waste Coordinator's position funded?

- Line Item in County Budget
- Collection franchise fees
- 109 Taxing Board
- General Fund
- Host agreement fees
- Other (list all): License fees collected from off-site solid waste management facilities, waste collectors, auto salvage yards, receipts from recycling, grants, citation and enforcement fees.

3. List all fees/revenues collected by local government for solid waste management. Examples of fees/revenue are fees charged for disposal facilities under KRS 68.178; fees charged by local government for garbage collection; 109 taxes, franchise and/or permit fees charged by local government; fees charged at transfer stations or convenience centers if owned by local government; and revenue received from the sale of recyclables.

Type of Fees/Revenue:	Anticipated Amounts Collected				
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
License Fee (per KRS 68.178 for Off-Site Waste Management Facilities)	\$1,426,000	\$1,454,600	\$1,483,600	\$1,513,300	\$1,544,000
Municipal Garbage Collection (city and/or county)	\$	\$	\$	\$	\$
Franchise fee	\$	\$	\$	\$	\$
Permit fee	\$	\$	\$	\$	\$
Transfer station	\$	\$	\$	\$	\$
Convenience center	\$	\$	\$	\$	\$
109 or other tax	\$	\$	\$	\$	\$
Proceeds from sale of recyclables	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Landfill user fees	\$	\$	\$	\$	\$
Host agreement	\$	\$	\$	\$	\$

General revenue	\$	\$	\$	\$	\$
Eastern Kentucky PRIDE	\$	\$	\$	\$	\$
Grants, Conservation Service	\$	\$	\$	\$	\$
Grants, State illegal dump	\$	\$	\$	\$	\$
Grants, State litter abatement	\$380,000	\$380,000	\$380,000	\$380,000	\$380,000
Grants, State Crumb Rubber	\$	\$	\$	\$	\$
Grants, State HHW Collection Grant	\$	\$	\$	\$	\$
Grants, State Waste Tire	\$	\$	\$	\$	\$
Grants, State Recycling	\$	\$	\$	\$	\$
Other (specify): Rollover Funds from Previous Year. (These funds are not included in annual revenue totals because they were generated outside the planning period.)	\$2,560,112	\$	\$	\$	\$
Other (specify):	\$	\$	\$	\$	\$
Other (specify):	\$	\$	\$	\$	\$
Other (specify):	\$	\$	\$	\$	\$
TOTAL AMOUNT ANTICIPATED	\$1,831,000	\$1,859,600	\$1,888,600	\$1,918,300	\$1,949,000

4. Provide the following information on anticipated expenditures during the 5-year update period.

Type of Expenditures:	Anticipated Expenditures/Budget				
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
Capital Expenditures	\$0	\$500,000	\$500,000		
Personnel	\$1,165,000	\$1,167,330	\$1,190,067	\$1,214,490	\$1,238,780
Collection	\$	\$	\$	\$	\$
Disposal	\$	\$	\$	\$	\$
Enforcement	\$	\$	\$	\$	\$
Open Dump Cleanups	\$	\$	\$	\$	\$
Litter Cleanups	\$380,000	\$380,000	\$380,000	\$380,000	\$380,000
Education Activities	\$	\$	\$	\$	\$
Recycling Costs/Expenses	\$	\$	\$	\$	\$
Other (specify): Contractual Services	\$480,900	\$490,000	\$500,000	\$510,000	\$520,000
Other (specify): Supplies	\$12,100	\$12,500	\$13,000	\$13,500	\$14,000
Other (specify): Fleet	\$9,500	\$10,000	\$10,100	\$10,200	\$10,300
Other (specify): (4) Document Shredders	\$200,000	\$	\$	\$	\$
Other (specify):	\$	\$	\$	\$	\$
Other (specify):	\$	\$	\$	\$	\$
TOTAL COSTS ANTICIPATED	\$2,247,500	\$2,559,830	\$2,593,777	\$2,128,190	\$2,163,080