

Louisville/Jefferson County Metro Government Solid Waste Management Plan 2013-2017

Executive Summary

The Louisville/Jefferson County Metro Government Waste Management District has prepared this Five year Solid Waste management Plan as required by Kentucky Revised Statutes 224.43.

The Louisville/Jefferson County Metro Government Waste Management District was created pursuant to KRS 109.041, 109.115, and 67.083 and is charged under Louisville Metro Code of Ordinances Chapter 51.106 the responsibility for submitting, amending and/or updating on behalf of Metro Government the 1987 Cabinet approved solid waste management plan and any and all subsequent plans. The District responsibility includes all areas within the geographical boundaries of the county.

The plan has been adopted by resolution by the 109 Board as part of its responsibility and the City of Jeffersontown as a class II city.

The plan is viewed as a new beginning to the county's approach to solid waste management where traditionally solid waste is landfilled to one of resource recovery where the majority is recycled, composted, or used as fuel as a substitute for virgin materials.

The highlight of the plan is an initiative funded by Bloomberg Philanthropies to bring innovation and breakthrough ideas to government. The grant has allowed Metro Government to hire a full time "Innovation Delivery Team" that will work on problem solving and forward thinking. This team has already reached out and brought together key cities from across the country that have high recycling rates and local stake holders to develop a "Recycling Charter". This Charter has set ambitious short and long term goals to increase the recycling rate 50% in three years and to 90% in thirty years. The goal of Bloomberg Philanthropies is the programs adopted through the grant will become a model for other cities across the country.

The Louisville/Jefferson County Metro Government Waste Management District as a stake holder will assist Louisville Metro Government in this innovative initiative.

LOUISVILLE/JEFFERSON COUNTY SOLID WASTE MANAGEMENT PLAN 2013-2017

Prepared by: The Jefferson County Waste Management District

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CHAPTER 1

BACKGROUND INFORMATION

A. Area Designation

Name of County: Louisville/Jefferson County Metro

Check One: Single County Regional Solid Waste Management Area

List Counties of Regional Area: Jefferson

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

Anchorage	2511
Audubon Park	1473
Bancroft	494
Barbourmeade	1178
Beechwood Village	1324
Bellemeade	865
Bellewood	321
Blue Ridge Manor	767
Briarwood	454
Broeck Pointe	272
Brownsboro Farm	648
Brownsboro Village	319
Cambridge	175
Coldstream	1100
Creeside	743
Crossgate	225
Douglas Hills	5509
Druid Hills	308

Fincastle	817
Forest Hills	444
Glenview	531
Glenview Hills	316
Glenview Manor	192
Goose Creek	294
Graymoor-Devondale	2802
Green Spring	715
Hickory Hill	114
Hills and Dales	142
Hollow Creek	783
Hollyvilla	537
Houston Acres	507
Hurstbourne	4216
Hurstbourne Acres	1811
Indian Hills	2682
Jeffersontown	26757
Kingsley	381
Langdon Place	576
Lincolnshire	148
Louisville	243319
Lyndon	11000
Lynnview	914
Manor Creek	140
Maryhill Estates	179
Meadow Vale	696

Meadowbrook Farm	167
Meadowview Estates	363
Middletown	7161
Minor Lane Heights	
Mockingbird Valley	167
Moorland	431
Murray Hill	582
Norbourne Estates	441
Northfield	1020
Norwood	370
Old Brownsboro Place	353
Parkway Village	650
Plantation	741
Poplar Hills	362
Prospect	4636
Richlawn	405
Riverwood	446
Rolling Fields	959
Rolling Hills	646
St. Matthews	17470
St. Regis Park	1454
Seneca Gardens	738
Shively	15264
South Park View	7
Spring Mill	287
Spring Valley	654

Strathmoor Manor	335
Strathmoor Village	648
Sycamore	160
Ten Broeck	103
Thornhill	178
Watterson Park	976
Wellington	565
West Buechel	1230
Westwood	634
Wildwood	261
Windy Hills	2385
Woodland Hills	696
Woodlawn Park	942
Worthington Hills	1446

Designation of Governing Body

Check One: Fiscal Court 109 Board Regional Area

List the names of the chairperson and members of the governing body. Include official address and telephone number.

Chairperson: Ms. Joyce St. Clair

Members:	Name	Name
	<u>Mr. Lee Lewis</u>	<u>Mr. Emery Stanchin</u>
	<u>Mr. Vanu Vanaparthu</u>	<u>Mr. Darrell Rhodes</u>

Address: 600 Meriwether Avenue
Louisville, KY 40217

Telephone: (502)574-3571

Fax: (502)574-4155

E-mail Address: pete.flood@louisvilleky.gov

C. Solid Waste Coordinator Information

Name: Keith S. Hackett
 Address: 600 Meriwether Avenue
Louisville, KY 40217
 Phone: (502) 574-2775
 Fax: (502) 574-4155
 E-mail Address: Keith.hackett@louisvilleky.gov

Work Status: Volunteer Full-Time Part-time (Hrs./Week) _____

Advisory Committee

List the names and representative bodies of the advisory committee members. If the current committee is inactive, the county is to appoint a new advisory committee.

<u>Pat Stallard, Chair</u>	<u>Citizens At Large</u>
<u>Mike Keeney</u>	<u>Citizens, Eastern (C) District</u>
<u>Darrell Shelton</u>	<u>Citizens, Central (B) District</u>
<u>Robert Schindler</u>	<u>Citizens, Southwestern (A) District</u>
<u>Bruce Burrow</u>	<u>Solid Waste Hauling Industry</u>
<u>Bob Lee</u>	<u>Solid Waste Hauling Industry</u>
<u>Bruce Blue</u>	<u>Recycling/Composting Facility</u>
<u>Marie Burnett</u>	<u>Solid Waste Disposal Facility</u>
<u>David Brown Kinloch</u>	<u>Environmental Community</u>
<u>Greg Zahradnik</u>	<u>Environmental Community</u>
<u>Sarah Lynn Cunningham</u>	<u>Environmental Community</u>

Plan Preparation Information (if other than the solid waste coordinator)

Name: Pete Flood
 Address: 600 Meriwether Avenue, Louisville, KY 40217
 Phone Number: (502) 574-3290

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

Resolution
 Check One: Date Signed: _____ Public Notice Date _____
 Ordinance
 Date Signed: _____ Public Notice Date _____

Appendix 1.1: Attached a signed and dated copy of the resolution/ordinance adopting the 5-year update.

Appendix 1.2: Attached a dated original of the public notice, or a copy and an affidavit from the newspaper for the 5-year update.

Appendix 1.3: Update of Area Designation

Appendix 1.4: County & Cities Resolutions for area designation

CHAPTER TWO

COLLECTION

A. Collection System

1. **Ordinance Type:** **Date Passed:**

Mandatory	<input checked="" type="checkbox"/>	4-19-05	
Universal	<input type="checkbox"/>		

2. Provide a brief synopsis of the collection systems supported by your county solid waste ordinance. Attach a signed and dated copy of the current solid waste management ordinance including all related amendments as Appendix 2.1.

Louisville Metro Code of Ordinances Chapter 51 states that the Waste Management District Board shall provide a mandatory collection program for all municipal solid waste in the county, provided, however, the Board may assure access to the collection system through a registration program of collectors or by contracting with a person, county, or city or a combination thereof, for the entire county or portions thereof, as deemed to be in the best interest of the county. The ordinance also requires collectors operating within the county to register, obtain and maintain a Collectors License pursuant to regulations adopted by the Board

3. Check all that apply in your county (including cities).

System Types:

<u>Door-to-Door:</u>	<u>County</u>	<u>Cities</u>	
Franchise	<input type="checkbox"/>	<input type="checkbox"/>	
Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Municipally Owned/Operated	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Private Hauler	<input type="checkbox"/>	<input type="checkbox"/>	
<u>Other:</u>			
Staffed Transfer Station	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Staffed Convenience Center	<input type="checkbox"/>	<input type="checkbox"/>	
Collection Boxes	X	X	

4. Describe your county's annual waste hauler registration process, including the annual requirement to file reports.

Louisville/Jefferson County Metro (Metro) currently use the same collector licensing process that has been in place since 1994. Collectors must submit a detailed application to receive a license to operate in Jefferson County, and must renew the license annually. Further, haulers must also obtain stickers for each vehicle annually and must file annual reports with the District. Louisville Metro Code of Ordinances (LMCO) "Chapter 51.300 Waste Haulers" contains specific requirements for obtaining a license (51.300) (C), paying license fees (51.300) (D), and required reporting (51.300) (E), as well as vehicle requirements (51.300) (F) and prohibited activities (51.300) (G). (See Appendix 2.2, Louisville Metro Code of Ordinances). The District will register collectors annually required by KRS 224.43-315

B. Collection System Strengths

Describe the strengths of your existing collection system.

Given the number of waste haulers and transfer stations, waste collection is readily available to all residents and businesses in Louisville Metro. This availability creates a competitive atmosphere among the haulers when bidding for residential contracts.

According to a study called Merger 2.0 (appendix 2.2), that assessed citizen's satisfaction with waste disposal services (both garbage and recycling), an overwhelming majority indicated they were highly satisfied.

A variable rate pricing structure allows residents a menu of services from which to choose.

Trash collection is mandatory requiring all entities (residential, commercial, and industrial) to obtain collection services.

C. Collection System Weaknesses

Describe the weaknesses of your existing collection system.

Perception of inequality of services. Services for collection in Louisville Metro vary widely depending on which taxing district, large/small incorporated city, or unincorporated areas in which a person lives. This collection system leads some in the community to a false perception that some have to pay for garbage collection while others in municipal areas do not.

Duplication of services creates inefficiencies and places stress on public infrastructure. Large sections of Louisville Metro have multiple collectors servicing the same street each week. This creates street maintenance issues as well as safety issues with more large waste collection trucks travelling residential areas than is needed. The extra waste collections trucks also potentially increase (GHG) greenhouse gas emissions.

The collection of recyclable materials and yard waste is required to be "offered" as part of a basic service package by curbside municipal solid waste collectors. As these items are part of a menu that citizen's can select there are many who do not subscribe due to cost. Due to this additional cost, there is little incentive for citizens to reduce the amount of trash going to the landfill.

Tracking methods to determine if a resident or business is not participating in the mandatory collection system do not exist. The lack of accountability increases the amount of "illegal dumping" and thus causes the government to remediate dump sites at an additional cost.

Loss of data used for tracking diversion from unlicensed collectors or items not specifically requiring a license to collect.

The curbside collection of solid waste from households always contains minimal amounts of hazardous waste or unused medication. The District operates a household hazardous waste collection program for most common chemicals including solvents, solvent based paints, batteries, pesticides, fluorescent light bulbs, flammable/combustible solids, and oxidizers. However, unused medication continues to be cause for concern. Curbside solid waste collection is not considered a best management practice by the Food and Drug Administration nor is "flushing" the unused medication. At this time collection events for unused medications are held periodically. These programs have wide spread public support and appeal but at this time Louisville Metro must currently transport these medications to Indianapolis for incineration.

Yard waste collected during residential curbside routes is often heavily contaminated with plastic and other debris. This contamination results in much of the yard waste being unsuitable for composting.

D. Collection Action Plan

Detail specific actions or projects the county will complete to maintain or improve its Collection System. The action plan should reflect the county’s efforts to improve the weaknesses and maintain or improve the strengths previously identified. The action plan should also incorporate responses to each numbered item in the chapter.

Action Plan

The District is in the process of reviewing and changing the licensing of collectors and collection regulations.

The District would look favorably on more convenient and less expensive disposal options for unused medication. This would include portable incineration units, provided the incinerator has approval by the air pollution control district.

Collection Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/ Year to Begin	Month/Year to Be Accomplished
1. Develop an education program giving citizens facts on how the collection system works in Louisville Metro	Continuous	1/1/2013	12/31/2017
2. Investigate the potential for "Franchising" unincorporated sections of Louisville Metro to prevent duplication.	Once	1/1/2013	12/31/2017
3. Investigate the potential for "Pay as you Throw" to create incentives to recycle or compost	Once	1/1/2013	12/31/2017
4. Investigate a county wide tracking of addresses having contracted solid waste collection	Once	1/1/2013	12/31/2017
5. Update LMCO Chapter 51 to make clear licensing/tracking requirements as well as defining the scope of items tracked by the District	Once	1/1/2013	12/31/2017
6. Institute a ban on the use of plastic bags in the collection of compostable waste	Once	1/1/2013	12/31/2017

Appendix 2.1: Attach a signed and dated copy of the current solid waste management ordinance, including all related amendments.

CHAPTER THREE DISPOSAL

1. Provide projections of population and waste generated and collected for the county, including all cities for five (5), ten (10) and twenty (20) years in the future.

COUNTY	WASTE GENERATION IN 2010 (TONS)	POPULATION 2010	TONS GENERATED PER/PERSON/YEAR	WASTE GENERATION PROJECTION 2013-2017	WASTE GENERATION PROJECTION 2018-2022	WASTE GENERATION PROJECTION 2023-2033
JEFFERSON	968,038	741,096	1.3	5,015,903	5,184,517	10,946,856
	POPULATION EST 2015	768,000				
	POPULATION EST 2020	793,817				
	POPULATION EST 2030	838,053				

2. List all contained landfills, including out-of-state landfills that will be used by your county 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 listed in this plan as Appendix 3.1

Landfill Name: Outer Loop Recycling and Disposal Facility (OLRDF)
 Permit #: 5600028
 Address: 2673 Outer Loop
 Louisville, Kentucky

Landfill Name: Hardin County Landfill
 Permit #: 047-0040
 Address: 1620 Audubon Trace
 Elizabethtown, KY 42701

Landfill Name: Valley View Landfill
 Permit #: 11200002
 Address: 9120 Sulfur Road
 Sulfur, KY 40070

Landfill Name: Clark-Floyd Landfill, LLC
 Permit #: IDEM 10-01
 Address: 14303 SR 60
 Borden, IN 47106

Landfill Name: Benson Valley Area Landfill
 Permit #: 37009
 Address: 2157 Hwy. 151
 Frankfort, KY 40601

3. Provide a complete inventory of all disposal facilities pursuant to KRS 224.40-310 (1) currently operating in your county. Facilities to include are: contained landfills, construction/demolition debris landfills greater than one acre, incinerators or other waste-to-energy technologies that accept municipal solid waste and medical waste incinerators that accept medical waste from other sources. (Note: Do not include on-site incinerators that accept waste only from their own facility [known as a captive site] or construction/demolition debris landfills that are less than one acre).

a. Facility Name: Outer Loop Recycling and Disposal Facility
Location: 2673 Outer Loop
Ownership: Waste Management of KY., Inc.
Cost to users: MSW: \$42.65 per ton, plus fee (s)
Life Expectancy: 49 years
Level of compliance with state and federal laws: In Compliance

b. Facility Name: CEMEX Kosmos Cement Company
Location: 15301 Dixie Highway
Ownership: CEMEX Kosmos Cement Company
Cost to users: Does not accept waste from general public
Life Expectancy: Process specific
Level of compliance with state and federal laws: In Compliance

Counties hosting a landfill must complete question 4. All other counties can proceed to question 5.

4. A. For the contained solid waste disposal facility you host, identify the following:

OUTER LOOP RECYCLING & DISPOSAL FACILITY

TOTAL CAPACITY AUTHORIZED (*2008-2017 ROLLING CAP)	Tons	<u>16,000,000</u>	Year	<u>10</u>
Additional capacity requested during this 5-year update	Tons	<u>0</u>		
Amount disposed in the landfill to date: (minus)	Tons	<u>3,572,578</u>		
Remaining capacity at landfill:	Tons	<u>12,427,422</u>	Years	<u>5.5</u>

*Based on Community Host Agreement's "Third Amendment" establishing time frames concurrent with the State's CAP Requirements. See appendix 3.1

CEMEX WASTE TO ENERGY FACILITY

Capacity authorized in the 2008-2012 plan	Tons	<u>365,000</u>	Years	<u>10</u>
Additional capacity authorized in 19	Tons	_____	Years	_____
Additional capacity authorized in 19	Tons	_____	Years	_____
Additional capacity authorized in 20	Tons	_____	Years	_____
Additional capacity authorized in 20	Tons	_____	Years	_____
TOTAL CAPACITY AUTHORIZED	Tons	<u>365,000</u>	Years	<u>10</u>
Additional capacity requested during this 5-year update	Tons	<u>0</u>	Years	_____
Amount disposed in the Waste to Energy Facility to date: (minus)	Tons	<u>15,000</u>		
Remaining capacity at landfill:	Tons	<u>350,000</u>	Years	<u>10</u>

B. For the greater than one-acre construction/demolition (CD/D) landfill you host, identify the following

TOTAL CAPACITY AUTHORIZED Tons N/A

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.

Louisville Metro Police Department is considering purchasing a portable 400 kg Capacity incinerator unit for unused medication and confiscated drugs disposal. The unit would be operated by LMPD Narcotics agents and would require approval by the Louisville Metro Air Pollution Control District.

6. Describe the county's emergency disaster plan to address solid waste concerns in the event of natural disasters (flooding, snow/ice storms, tornadoes, and earthquakes).

Louisville Metro Public Works & Assets currently has a Disaster Response Plan (DRP) that includes specific procedures as well as chain of command information and is based on past disaster experiences (Appendix 3.2). It is supplementary to an over-all L/JCM Disaster and Emergency Response Plan.

7. Describe plans to research alternative approaches to solid waste management.

Waste to Energy Facilities for Waste Tires, RDF, TDF and other additional fuels, as approved by the District
Construction & Demolition Recycling/Reuse Facilities
Pay As you Throw
Recycling Charter

B. Disposal Practices Strengths

Describe the strengths of your existing disposal practices.
Metro currently hosts a state-of-the-art permitted landfill with significant capacity, and has easy access to several other permitted landfills.

C. Disposal Practices Weaknesses

Describe the weaknesses of your existing disposal practices.

Easy access and significant capacity do not create a sense of need to reduce waste disposal on the part of local residents and businesses.

E. Disposal Action Plan

Detail specific actions or projects the county will complete to maintain or improve its disposal practices. The action plan should reflect the county's efforts to improve the weaknesses and maintain or improve the strengths previously identified. The action plan should also incorporate responses to each numbered item in the chapter.

Action Plan

The District will rely on the Outer Loop Landfill (OLRDF) as well as landfills in adjacent counties for its waste disposal capacity during the 2013-2017 plan period. The District recognizes the benefits to Metro of having a disposal facility located within the geographical boundaries of the county.

The Host Agreement guarantees capacity assurance for Jefferson County waste in the amount of 13,500,000 tons for each ten (10) year period beginning April 4, 1994, and extending through April 3, 2014, and renewable for another 20-year period at the District's option.

Collectors serving Jefferson County that utilize out-of-area disposal facilities will be allowed to continue to export solid waste.

Per the Host Agreement, the facility receives waste from the Kentucky counties of Adair, Allen, Anderson, Barron, Boone, Bourbon, Breckinridge, Boyle, Bullitt, Butler, Caldwell, Campbell, Casey, Christian, Clark, Clinton, Crittenden, Cumberland, Daviess, Edmonson, Fayette, Franklin, Gallatin, Garrard, Grant, Grayson, Green, Hancock, Hardin, Hart, Henderson, Hopkins, Jessamine, Jefferson, Kenton, LaRue, Lincoln, Livingston, Logan, Lyon, Marion, McCreary, McLean, Meade, Mercer, Metcalfe, Monroe, Muhlenberg, Nelson, Ohio, Oldham, Owen, Pulaski, Russell, Scott, Shelby,

Simpson, Spencer, Taylor, Todd, Trigg, Trimble, Union, Warren, Washington, Wayne, Webster, Woodford and the Indiana counties of Clark, Dearborn, Dubois, Floyd, Gibson, Harrison, Jackson and Jefferson. In addition, the facility is authorized by the District to accept, from Kentucky, Indiana, Tennessee and West Virginia counties, certain municipal solid wastes that were formerly classified as 'special waste' at the time of the signing of the Host Agreement, and were thereby not under the auspices of the District. Subsequent classification of those specific types of waste as MSW by the Kentucky Division of Waste Management brought them under the authority of the District. (See Host Agreement as Appendix 3.1)

The Host Agreement limits the OLRDF facility to accepting wastes from the "Service Area" defined in the agreement (those counties specifically mentioned). The agreement also contains a mechanism whereby the facility may petition the Waste Management District Board to add counties to the Service Area. The Board retains the right to grant or deny any additions to the Service Area. Since the Host Agreement is a legal contract any amendments to the Agreement require a public hearing and Board action.

In addition, any expansion of the permit that OLRDF holds with the Ky. DWM requires a determination of consistency by the Solid Waste Management 109 Board, which also requires a public hearing and Board action.

The District will continue to monitor Waste Management's compliance with the Host Agreement, and will also monitor its permit modification process.

Disposal Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.		Frequency	Month/Year to Begin	Month/Year to Be Accomplished
1. Maintain current disposal system		Annual	1/1/2013	12/31/2017
2. Update the Host Agreement		Once	1/1/2013	12/31/2017

Appendix 3.1: Capacity assurance letters and copies of any contractual agreements.

CHAPTER FOUR
RECYCLING/REDUCTION

A. Recycling/Reduction Program

1. Is recycling offered in your county? Yes No

2. Describe your county's annual recycler registration process, including the annual requirement to file reports.

All collectors of solid waste are required to offer residential and commercial recycling and yard waste collection as a condition of maintaining their license, and are therefore covered by registration and reporting requirements imposed by LMCO 51.300.

Recycling facilities, whether the material is considered "Recovered" or not, must submit a detailed application to receive a license to operate in Jefferson County. As part of this license each facility must maintain the license by annual renewal and reporting of its recycling activities.

It is the District's position that even if a material is considered "Recovered" and exempt in KRS 224.43-315 we must still report this activity in our annual report. KRS 224.43-310(5) (d) provides that information reported by the county in the annual report shall include but not be limited to: "Recycling and composting activities in existence." Therefore even though a company may not be required to register under KRS 224.43-315 because a material is considered "recovered" the District feels it has an obligation to report, in the annual report, information about recycling operations in the county. As we feel we have this obligation, Louisville Metro adopted an ordinance requiring facilities that recycle as their main purpose operating in our county to be licensed.

LMCO chapter 51.200 (A) states "All person involved in the business of operating an off-site waste management facility within the county shall be licensed with the District pursuant to regulations duly adopted by the Board of Directors" and 51.200 (C) (1) stating Off-site waste management facilities shall be classified and licensed in one or more of the following categories:" (d) "Recycling facility".

3. Describe your assessment of the opportunity to reduce the need for land disposal by banning yard waste.

The District has banned yard waste in the landfill since 1994, when it implemented a Solid Waste Regulation (50.0) that not only bans yard waste from the landfill but also requires that all yard waste collected in the county must be deposited at a permitted facility for recycling, composting, land farming, or some other beneficial reuse.

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

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

- a. Due to the yard waste ban (LMCO 51.605), all cities in Jefferson County do so.
- b. _____
- c. _____

6. Describe any composting operations currently operating in your county. If no composting operation exists, detail any actions the county plans to take to initiate the composting of grass clippings, leaves and other yard waste.

The OLRDF currently contracts with a commercial composting operation where waste haulers deposit yard waste. In addition, the District, with the assistance of Metro Public Works, traditionally offers Christmas tree recycling, and operates a seasonal leaf drop-off program where the leaves are land-farmed. When there are significant storms, the Solid Waste Management Division accepts woody debris which is shredded into chips.

7. Describe the plan implemented by your county to reduce the need for land disposal through waste reduction and recycling, materials recovery, and energy recovery and the provision of opportunities for recycling that may include, but are not limited to, drop-off centers or door-to-door collection.

The goal contained in the Solid Waste Management Plan has always been to divert through reduction and recycling activities 25% of the municipal solid waste stream, measured annually, and exclusive of yard waste. Louisville Metro tracked its diversion rate in 1996 and uses 16.82% as the baseline for the community to measure its success. By December 2006, a reduction of 22% had been achieved against the 25% recycling goal. In 2011 Louisville Metro exceeded the goal with a rate of 25.1%.

This approach will continue to be used as a barometer of the community's success in recycling and the new goal for this measurement is now 35%.

Louisville Metro Diversion Rate Computation Method: The annual recycling diversion rate has been calculated by measuring specified waste streams within a given calendar year and applying a formula defined below. The diversion rate measures the municipal waste stream and bioremediated contaminated soils. Yard waste is not included in the diversion rate.

The diversion rate is calculated according to a model used by a variety of jurisdictions across the country to calculate recycling rates. The model is:

$$\text{Recycling Rate (\%)} = \frac{\text{total amount of recycled materials (current year)}}{\text{total waste generation (current year)}} \times 100$$

The "total amount of recycled materials" includes all materials from Jefferson County that are diverted from the municipal waste stream for recycling or reuse. The "total waste generation" is the sum of recycled materials plus disposal amounts, and includes all waste produced in Jefferson County, whether it went to the Outer Loop Landfill or to other landfills outside Jefferson County.

In the case of contaminated soils, "the amount of recycled materials" will be considered to be the amount of soil that has been bioremediated, and "total waste generation" will consist of the total of bioremediated soil plus contaminated soil that has been landfilled. See attachment 4.1

Recycling Rate P/Recycling Charter Computation Method: This rate will be calculated in the same method as the Diversion Rate except that it will include construction & demolition materials (except road construction waste) and organic compostable waste (yard waste). In the case of construction and demolition debris, "the amount of recycled materials" will be considered to be the amount of debris which has actually been reused or recycled. "Total waste generation" will consist of material recycled or reused, plus material which has been landfilled, and material which has been diverted, but not recycled or reused. See the "Recycling Charter" for more details on this initiative. See attachment 4.2

Reduction/Recycling Programs

The District and Louisville Metro Government will continue the following recycling and reduction activities.

Operate five attended drop-off Recycling Centers. In 2011 these staffed centers collected and recycled 1,080,000 pounds of cardboard, 368,000 pounds of paper, 818,000 pounds of containers, and 15,832 gallons of used motor oil and anti-freeze.

Haz Bin, the Household Hazardous Materials Collection Center located at 7501 Grade Lane. This location is currently under contract due to the technical expertise of collection and managing HHW.

Thirteen unattended drop-off recycling centers are provided within Jefferson County. These sites are all single stream. In 2011 these sites collected 4,540,000 pounds of recycled materials.

The CyberCycle program is used to collect E-Waste and was started in 2000. The program is free to residents but businesses must pay a nominal fee per ton. The program accepts processors, monitors, laptops, keyboards, fax machines, printers, and other peripherals, as well as modems and cables and televisions. In 2011 Cybercycle collected over 695,698 pounds of computer-related equipment and recycled.

Annual Community Shredding Event. This event is held once a year in sponsorship with Shred-It. Items taken include documents, discs, hard drives and credit card. All paper materials are shredded on site and recycled. The 2011 event recycled 60,000 pounds of documents.

Junk/Recycling Drop-off: This event is held in the spring and fall with Waste Management of Kentucky as a sponsor. Last year 32,400 pounds of metal were collected and recycled.

Annual Drug Toss in partnership with AARP, KIPDA, TRIAD – Law enforcement and Seniors Working Together, and the L/JCM Police Department. This event gives residents the opportunity to properly dispose of expired or unused pharmaceuticals at no charge. Louisville Metro Police narcotics officers take immediate possession of the medications for proper disposal. Solid Waste Management Personnel recycle the containers.

Regulations

LMCO Chapter 51 currently requires that all curbside solid waste collectors make available recycling to residential, business, and industrial customers. It specifies a minimum list of recyclables to be accepted (# 1-7 plastics, newspaper; aluminum and steel cans; clear, green and brown container glass; HDPE and PETE plastic bottles and jugs).

Waste Tires/ Additional Energy Recovery Fuels

The District encourages new and different approaches to managing waste tires and materials that can be used as additional energy recovery fuels and particularly favors approaches that recycle or reuse the tires or materials in the tires. Further, the District supports businesses that offer such services by selecting them to handle waste tires collected during junk drop-offs, dump clean-ups and tire amnesty collections.

The District reserves the right to review any proposals to burn as supplemental fuel in addition to TDF and RDF, dispose or process, additional energy recovery fuels, on a case-by-case basis, for

consistency with this plan. The approval or denial of any proposals will be based on the factors of compliance with applicable regulations, protection of public health, and compatibility with the overall solid waste management plan.

In this review process the District has ruled as "consistent" a total ten year capacity of 365,000 – tons for the burning of waste tires, RDF and TDF by CEMEX (Kosmos Cement Co) as a Waste to Energy facility, which is regulated by permit and a Determination of Consistency approved by the Louisville/Jefferson County Metro Government Waste Management District 109 Board. CEMEX has agreed to make consideration, in its process of negotiating contracts for collection and delivery of appropriate tires to its premises, the following elements:

1. "Tire amnesty" days within Metro Louisville
2. The regular collection of waste tires that were derived from community clean-up and illegal dump sites from the Louisville Metro Waste Reduction Center

Composting/Mulching

In 1994 the District enacted a landfill ban on yard waste. The purpose was to permanently divert the yard waste stream from the landfill saving valuable space. The District continues to support private sector composting activities and has continued to offer public composting and mulching opportunities.

Composting or mulching opportunities supported by the District include the Metro Public Works Department's Fall leaf drop-off and the Tree-cycling Christmas tree/greenery mulching program

8. If either recycling or material recovery are deemed not feasible, provide specific factual analysis supporting that decision.

The District has included recycling and material recovery in the waste reduction and recycling plan.

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

Motor oil, auto batteries and antifreeze are currently accepted at all five Metro staffed Recycling Centers. Those materials, plus other automotive fluids, are also accepted at Haz Bin, Metro Household Hazardous Materials Collection Center. In addition, an extensive list of commercial operations also accepts these materials.

10. Describe how household hazardous waste is handled in your county.

MSWMD operates Haz Bin, a Household Hazardous Materials Collection Center that is open to Metro residents (no businesses) two days a week, year-round. Currently, no appointment is needed to drop off materials.

11. Are electronics/computers recycled in your county? Yes No
If yes, describe your electronics/computer (e-scrap) recycling program.

The District initiated an annual computer/electronics program entitled CyberCycle in 2000. The program has grown dramatically to the point that, since merged government began in 2003; it is now implemented year round. The program accepted processors, monitors, laptops, keyboards, fax machines, printers, and other peripherals, as well as modems and cables and televisions. CyberCycle is located at the Metro Waste Reduction Center, 636 Meriwether Avenue.

If no, discuss the possibility of your county starting an electronics/computer (e-scrap) recycling program.

N/A

12. Is office paper recycled in your county? Yes No
If yes, what businesses or agencies recycle office paper?

There are too many to list but many agencies and businesses currently recycle office paper through the urban services district municipal collection system or by private contractors. However, it is evident many businesses either do not understand the benefits to recycling office paper or just do not want to bother with recycling for various other reasons. Efforts to increase this aspect of recycling are listed in the action plan.

If no, explain why office paper is not recycled in your county.

N/A

13. What efforts has your county made to assist the local school boards in recycling white paper and cardboard to meet the statutory requirements of KRS 160.294?

Louisville Metro has entered into a partnership with educational entities located within the county named "Partnership for a Green city". The partners in the Partnership for a Green City (Louisville Metro Government, Jefferson Community & Technical College, Jefferson County Public Schools, and the University of Louisville) collectively dispose of thousands of tons of waste annually. It is the partnership's intention to move toward "zero waste". Many corporations and communities are moving to zero waste goals, which suggest that the entire concept of waste should be eliminated. Instead, waste should be thought of as a "residual product" or simply a "potential resource" to counter our basic acceptance of waste as a normal course of events. Opportunities, such as reduced costs, increased profits, and reduced environmental impacts, are found when returning these "residual products" or "resources" as feed stock to either natural and/or industrial systems. Zero waste focuses on investing in green businesses and infrastructure rather than in landfills. Corporations in our area that have adopted this concept include Toyota and Lexmark. Cities that have adopted Zero Waste Goals include Boulder (CO), Seattle (WA), Berkeley and San Francisco (CA), Bellefontaine (OH), Carrboro (NC), and the Central Vermont Waste Management District. This goal involves physical plants, waste, recycling, economic development, purchasing, and education.

Working together, the partner organizations already all participate in single-stream recycling, electronics recycling, fluorescent lamp recycling, ballast recycling, battery recycling, used oil recycling and antifreeze recycling. We have just entered into a joint Hazardous Waste disposal contract. Goals include adding recycling options for polystyrene trays at JCPS, increasing composting - including methane gas generation to fuel UofL's Steam & Chill plant, and other innovative source reduction and recycling options. Future initiatives could include intranet listings of office equipment and other items that are no longer needed in one office being made available for pick up by other offices or departments; metal recycling; carpet recycling; and other new innovative initiatives that develop.

Additionally, we are working together with our Partnership Purchasing Consortium (including the Louisville Water Company, the Metropolitan Sewer District, Transit Authority of River City and the Louisville Regional Airport Authority) to address waste on the front end of our operations. With

Green Purchasing Policies, how do we better request less packaging waste as we seek to buy in bulk when possible, purchase paper that is not wrapped in paper and promote synergies within the partner organizations? We focus on sustainability leadership by example, not only being good stewards of our environment, but also good stewards of taxpayer dollars.

B. Recycling Program Strengths

Describe the strengths of your existing recycling program.

Louisville Metro homeowners and business have access to curbside collection of recyclable materials either through municipal taxes, through homeowners associations, or by choosing to obtain curbside collection directly. For others who choose not to obtain curbside services, 13 unstaffed centers accept fiber products and containers and 5 staffed centers accept the same materials as the unstaffed centers, including used motor oil, anti-freeze, and batteries.

Electronics recycling is also provided through a program called CyberCycle. This program allows residents to drop off electronics, including televisions, free of charge. Businesses must pay a nominal fee to drop off electronics (E-scrap).

C. Recycling Program Weaknesses

Describe the weaknesses of your existing recycling program.

Many Louisville Metro homeowners and business do not recycle due to the cost for the service; therefore, do not aggressively reduce, reuse and recycle.

Easy access and significant capacity for disposal through landfilling do not create a sense of need to reduce waste disposal on the part of local residents and businesses.

Very little education is performed to give the community information on the economic value, environmental impact through reduced GHG emission (reference "Partnership for a Green City Climate Action Report), and sustainability benefits of recycling and composting.

Businesses do not understand how waste reduction, recycling or reuse of production waste can actually reduce solid waste disposal cost.

Recycling programs for residential apartment building having nine or more units within the Urban Services District are not available through the municipal collection system.

The use of small capacity open top recycling bins limits the amount of recyclable materials placed out for collection. These bins also contribute to litter issues in the community by wind blowing lighter materials out of the container.

Information does not exist on the potential amount of recyclable items being landfilled from various sources.

Yard waste collected during residential curbside routes is often heavily contaminated with plastic and other debris. Much of the contaminated yard waste is unsuitable for composting and is used for daily cover at the municipal solid waste landfill. The result is contaminated (with plastic bags/paper) yard waste is ending up in the landfill, defeating the purpose of the ban.

D. Recycling/Reduction Action Plan

Detail specific actions or projects the county will complete to maintain or improve its recycling system. The action plan should reflect the county's efforts to improve the weaknesses and maintain or improve the strengths previously identified. The action plan should also incorporate responses to each numbered item in the chapter.

Action Plan

The District and Louisville Metro Government will continue to offer current programs and services that emphasize the US EPA hierarchy: Reduction, Reuse, Recycling, and other diversion.

The District will work to help Louisville Metro Government in the implementation of the "Recycling Charter". This will include:

Instituting a Recycling Policy for LMG employees mandating participation by all LMG offices. This program will establish one centralized waste container per floor for non-recyclable items. All "office" trash bins will be converted to recycling containers. Custodial staff will only empty the recycle containers in each office...individuals will need to take non-recyclable materials to the central location.

Increase the number of privately owned office building that recycle by conducting pilot programs in the Central Business District (CBD) with the intention of extending to all offices in Jefferson County. An educational "Best Management Practices" packet will be developed addressing common methods or commodities associated with this entity type. Community groups and organizations will be contacted to help identify this type of entity to be targeted for door to door visits.

Increase the number of privately owned retail entities that recycle by conducting pilot programs at a shopping mall and strip mall in cooperation with private waste haulers. The program will then expand to all Jefferson County. An educational "Best Management Practices" packet will be developed addressing common methods or commodities associated with this entity type. Community groups and organizations will be contacted to help identify this type of entity to be targeted for door to door visits.

Expand recycling services to multi-unit apartments having 9 or more units by working to provide either curbside services or recycling dumpster service through private waste haulers. An educational "Best Management Practices" packet will be developed addressing common methods or commodities associated with this entity type. Community groups and organizations will be contacted to help identify this type of entity to be targeted for door to door visits.

Expand restaurant recycling programs. An educational "Best Management Practices" packet will be developed addressing common methods or commodities associated with this entity type. Community groups and organizations will be contacted to help identify this type of entity to be targeted for door to door visits.

Increasing visibility of recycling within the Central Business District (CBD) by installing recognizable recycling bins in high foot traffic areas the expanding outwards from the center.

Implement food scrap collection programs in all Jefferson County schools / colleges / community & technical schools. The program would then be expanded to correctional facilities, company/corporate cafeterias, and the restaurant sector. An educational "Best Management Practices" packet will be developed addressing common methods or commodities associated with this entity type. Community groups and organizations will be contacted to help identify this type of

entity to be targeted for door to door visits.

Institute a program where citizens can purchase large 95 gallon recycling carts within the Urban Services District (USD). Conduct a pilot program giving free for 95 gallon recycling carts for two collection routes (one with a high and one low projected participation rates) to gauge the increase in recycling. Success would lead to a roll out of recycling carts to all USD residents over the next four years.

Re-introduce an ordinance to ban plastics bags in yard waste collection to improve the quality of organic compost.

Implement a 'pay as you throw' (PAYT) 'access waste fee' ordinance to encourage recycling participation in both USD & Non-USD districts.

Implement a 'compostable waste' program – food scraps & yard waste (combined) collected at curbside. Will require: separate carts and/or bins

Initiate targeted education / marketing / awareness campaigns for new recycling programs

Create an educational zero-waste website to increase awareness of recycling benefits

Conduct Door-to-Door campaigns (with interns) to increase recycling participants

Conduct a waste characterization study every 5 years (per sector, per season) to determine progress within Master Business Plan

Launch a Master Plan that supports city's long-term commitment of achieving a 90% diversion rate by 2042

Revise the current solid waste ordinance to increase consistency in reporting by license solid waste, recycling, and composting industry.

Create an award program to recognize entities that are high performing recyclers (e.g., WeRecycle Brand)

Investigate contamination removal equipment, methods, and education programs for the removal of plastic bags and other non-compostable debris in the yard waste stream.

Recycling/Reduction Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/ Year to Begin	Month/Year to Be Accomplished
1. Continue Cyber Cycle, Staffed Centers	On-going	1/1/2013	12/31/2017
2. Un-Staffed Centers	On-going	1/1/2013	12/31/2017
3. Household Hazardous Materials Center	On-going	1/1/2013	12/31/2017
4. Continue Events: Junk Drop-off, Doc Shredding, Drug Toss, Tire Amnesty	On-going	1/1/2013	12/31/2017
5. Initiate Office Pilot and Rollout	Once	1/1/2013	12/31/2017
6. Initiate Retail Pilot and Rollout	Once	1/1/2013	12/31/2017
7. Initiate Program for recycling at multi-unit apartments	Once	1/1/2013	12/31/2017
8. Expand Restaurant Recycling Program	On-going	1/1/2013	12/31/2017
9. Implement of food scrap composting program at all schools and universities	Once	1/1/2013	12/31/2017
10. Institute a program where residents in the USD can purchase 95 gallon recycling carts	Once	1/1/2013	12/31/2017
11. Conduct a pilot program on two recycling routes where everyone is provided a 95 gallon recycling cart...measure successes	Once	1/1/2013	12/31/2017
12. Reintroduce a ordinance to ban on plastic bags	Once	1/1/2013	12/31/2017
13. Introduce a 'pay as you throw' (PAYT)	Once	1/1/2013	12/31/2017
14. Implement a compostable waste collection program for food waste and yard waste combined	Once	1/1/2013	12/31/2017
15. <u>investigate the event permitting process to include more recycling requirements</u>	Once	1/1/2013	12/31/2017

CHAPTER FIVE

OPEN DUMPS AND LITTER

A. Open Dumps and Litter

1. Describe the contents of the Ordinance with respect to open dumping. Provide a copy of the section of the Ordinance pertaining to Open Dumping as Appendix 5.1.

LMCO Chapter 51.501 (A) No person shall deposit, dump, discharge, place or cause to be placed any solid waste upon any road, highway or alley or upon any public or private land other than a solid waste management facility permitted by the cabinet that meets all applicable L/JCM Zoning Regulations.

2. During what time frames will the annual survey to discover new open dumps be conducted by the county?

Dump Survey is ongoing.

3. Describe the procedures to identify and record open dumps found during the annual survey.

Citizens can report dumping through MetroCall and Enforcement Officers inspect such complaints.

4. What criteria are used by the county to prioritize the cleanup of illegal dumps?

All dumps are cleaned based on the impact to human health and the environment by Louisville Metro Solid Waste Open Dump Crew. The dumps are cleaned on a daily basis.

5. Describe the procedures to prevent the recurrence of illegal dumping at sites that have been cleaned.

Currently, MSWMD installs surveillance cameras at problem areas.

6. Describe any assistance the county offers to private property owners to clean up open dumps.

At present, no assistance is offered to private landowners.

7. Describe the planned programs for the control and clean up of litter, including the requirement to clean up litter along public roads three (3) times per year and city streets two (2) times per year.

Brightside operates the Green Mile road adoption litter awareness and clean-up program. Brightside will continue its litter prevention and beautification programs, as well as its environmental school curriculum. MSWMD will continue street-sweeping operations in urban and suburban districts.

Solid Waste Management and Brightside are teaming together to establish a program called "Litter - Free Events." Before an event receives a permit, the sponsoring organization must agree to:

1. Have trash baskets available at the event.
2. Have recycling baskets available at the event.
3. Recruit volunteers or hire staff specifically to monitor and clean up litter at the event.

4. Make litter-free event announcements on the public address if applicable.
5. Outline a clean-up plan in the application, including a drawing or site map of the festival, showing the types and locations of dumpsters and individual trash and recycling receptacles.

To comply with the requirement in HB 174 that directs counties to conduct clean-ups on county roads three times per year, the District will rely on the following annual activities at a minimum. The District will continue to sponsor litter clean-up activities in conjunction with Commonwealth Clean-up Week. Louisville Metro Government will continue its street-sweeping/litter clean-up program on streets within the urban service area a minimum of two times per year; the night sweeping program will continue to clean all main arterial roadways on a monthly schedule; and Brightside will continue its litter prevention and beautification programs.

8. Describe the coordination efforts that exist between county government and local, county and state law enforcement. If your county has a litter ordinance, provide a copy of the ordinance or the portion of the solid waste ordinance pertaining to litter as Appendix 5.2.

Presently, "Report-A-Litterer" is the program in place to combat littering. The public may call Metro Call (311) if they witness someone littering. The complainant gives the information including the license plate number, which is then forwarded to MSWMD. Owner information is obtained from the Department of Motor Vehicles, and a courtesy letter is generated and sent to the owner of the vehicle. An anti-litter trash bag is enclosed to help prevent future littering.

Louisville Metro government has revised LMCO Chapter 51.404 to include the following language:

IMPOUNDMENT. *Metro Government may impound a motor vehicle used in violation of the provisions of §51.404 as follows:*

A motor vehicle used for illegal dumping, in violation of §51.404(A), may be impounded for a period of not more than twelve months.

A motor vehicle used in violation of §51.404(B)-(F) may be impounded for a period of not more than six months.

In determining the impoundment period imposed pursuant this subdivision, the following factors will be considered:

The size and nature of the waste dumped.

Whether the dumping occurred for a business purpose.

AUTHORITY TO ENFORCE

LMPD police officers, Code Enforcement Officers, and any other city official authorized to enforce any provision of the Louisville Metro Code shall have the authority to enforce any provision of this section.

9. Complete the following page for each open dump in existence in your county.

Location/Name: N/A

TEMPO Number (If applicable): _____

Directions from County Courthouse: _____

Latitude: _____ Longitude: _____

Dump Size: _____ (ft) Width x _____ (ft) Length x _____ (ft) Depth = _____ (ft3) Volume

How many single axle dump truck loads? _____

- Contents: Household
- (check all that apply)
- CD/D Building Material
 - CD/D Concrete
 - Brush or landscape
 - Appliances How many? _____
 - Tires How many? _____
 - Any Hazardous Material Describe: _____
 - Other List: _____

- Accessibility: Paved Steep Slope Trees surrounding site
- (check all that apply)
- Gravel/Dirt Road Water Surrounding Site
 - Other List: _____

- Type of Setting: Public Property Residential Area Private Property
- (check all that apply)
- Floodplain/Floodway Woods
 - Open Field Creek/River Bank
 - Sinkhole Old Quarry Pit
 - Cliff Roadside
 - Hillside
 - Other List: _____

Is there a well within 500 ft. of an open dump? Yes No How Far? _____

Date Dumpsite Identified: _____

Date to Clean: _____

List any local (schools, historic sites, etc.) factors and environmental issues of concern: _____

Responsible Party Known? Yes No List names and describe evidence that identifies responsible persons. _____

Enforcement Actions Underway? Yes No

Provide Digital Photos When Available

10. Utilize the itemized guidelines listed below to formulate the total estimated cleanup cost for each open dump identified in the Area Solid Waste Management Plan 5-Year Update. Individual costs shall not exceed the listed rates.

Dump Cleanup Cost Estimate Worksheet

County _____ Date _____

TEMPO # _____ Dump Name _____

Equipment Costs

Equipment Type	Maximum Allowable Hourly Rate	Estimated Hourly Rate	Hours Used	Total
Bulldozer, 246-375 h.p.	\$124	_____	_____	_____
Bulldozer, 161-245 h.p.	\$79	_____	_____	_____
Bulldozer, 105-160 h.p.	\$55	_____	_____	_____
Bulldozer, 50-105 h.p.	\$40	_____	_____	_____
Rubber Tired Backhoe	\$50	_____	_____	_____
Crawler-Mounted Backhoe	\$73	_____	_____	_____
Excavator	\$70	_____	_____	_____
Track Loader	\$64	_____	_____	_____
Dumptruck, Single	\$28	_____	_____	_____
Dumptruck, Double Axle	\$47	_____	_____	_____
Passenger Van	\$9.75	_____	_____	_____
Pickup, 2 Wheel Drive	\$9.75	_____	_____	_____
Pickup, 4 Wheel Drive	\$13.35	_____	_____	_____
Crewcab, 2 Wheel Drive	\$13.35	_____	_____	_____
Crewcab, 4 Wheel Drive	\$16.50	_____	_____	_____
Pull Behind Flatbed Trailer	\$2.00	_____	_____	_____
Roll Off Boxes	_____	_____	_____	_____
Other	_____	_____	_____	_____
EQUIPMENT TOTAL:				_____

Disposal Fees

Facility Name & Location	Tons Estimated	Per Ton Cost	Total
_____	_____	_____	_____
_____	_____	_____	_____
DISPOSAL TOTAL:			_____

County _____ Date _____

TEMPO # _____ Dump Name _____

Labor Costs

Employee Title	Estimated Work Hours	Hourly Wage	Total
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

LABOR TOTAL: _____

Miscellaneous Supplies

Specific Item	Quantity	Per Unit Cost	Total
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

SUPPLIES TOTAL: _____

GRAND TOTAL COST ESTIMATE: _____

B. Open Dump Strengths

Describe the strengths of your existing system to eliminate open dumping.

The number of personnel dedicated to inspecting and remediating dumping incidents ensures that dumping is cleaned up within a short time.

C. Open Dump Weaknesses

Describe the weaknesses of your existing system to eliminate open dumping.

The extensive number of road miles and the relatively high number of “isolated” locations for an urban county means that it is difficult to prevent dumping incidents.

Enforcement of illegal dumping ordinance is a low priority for the law enforcement and court system community

Time required for meeting the reporting and inspection requirements to state inspectors for recovery of illegal open dump grant funds is too long. In most cases of illegally dumped materials in residential area this would leave the materials in the community too long

D. Open Dump Action Plan

Detail specific actions or projects the county will complete during the 5-year update period to eliminate open dumping. List all identified open dumps with scheduled clean up dates. The action plan should reflect the county’s efforts to improve the weaknesses and maintain or improve the strengths previously identified. The action plan should also incorporate responses to each numbered item in the chapter.

Action Plan

Metro Solid Waste Management Division will continue to employ three inspectors to inspect the illegal dumping incidents. 19 new surveillance cameras will be used by the officers in problem areas. Metro will continue to use MetroCall (311) to receive dumping reports and complaints.

The District will continue to operate annual junk drop-off and recycling day.

LMG will continue to provide twice a year junk pick-up in all neighborhoods within the urban service area. This collection of junk from residential properties is offered to citizens to prevent illegal dumping since it provides a convenient way to dispose of unwanted junk items. The Waste Reduction Center is open six days a week to take three large items free of charge from all Louisville and Jefferson County residents. In addition, household junk items, tree limbs and stumps up to 3 feet in diameter, tires, metal waste, household construction debris, furniture and appliances are accepted, and a fee is charged according to the size of the vehicle.

Also within the county, Metro Council Members will coordinate neighborhood clean-ups through Brightside and Solid Waste, to remove dumped material from alleys, vacant lots and roadsides.

Continue to educate citizens and law enforcement in the impacts of illegal dumping on the community as well as new ordinances allowing the impoundment of vehicles used for illegal dumping.

Open Dump Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/ Year to Begin	Month/Year to Be Accomplished
1. Solid Waste Enforcement Officers will continue to investigate reports of illegal dumping	Continuous	1/1/2013	12/31/2017
2. Continue to educate citizens and law enforcement in the impacts of illegal dumping	Once	1/1/2013	12/31/2017
3. Coordinate neighborhood clean-ups through Brightside and Solid Waste, to remove dumped material from alleys, vacant lots and roadsides.	Once	1/1/2013	12/31/2017
4. LMG will continue to provide twice a year junk pick-up in all neighborhoods within the urban service area	Once	1/1/2013	12/31/2017
5. The District will continue to operate annual junk drop-off and recycling day	Once	1/1/2013	12/31/2017

Appendix 5.1: Portion of ordinance pertaining to open dumping.

E. Litter Strengths

Describe the strengths of your existing system to eliminate littering.

The number of personnel dedicated to inspecting and remediating litter incidents ensures that litter is cleaned up within a relatively short time.

F. Litter Weaknesses

Describe the weaknesses of your existing system to eliminate littering.

The extensive number of road miles, including the relatively high number of interstate highway miles, and a very large transient (non-resident) population mean that it is difficult to prevent littering incidents.

G. Litter Action Plan

Detail specific actions or projects the county will complete during the 5-year update period to eliminate littering. The action plan should reflect the county's efforts to improve the weaknesses and maintain or improve the strengths previously identified. The action plan should also incorporate responses to each numbered item in the chapter.

Action Plan

Brightside will continue to focus its litter awareness and reduction efforts by promoting the

Green Mile road adoption program to the community. The Green Mile program, modeled after the State’s Adopt-A-Highway program, recruits businesses and organizations to adopt sections of County-maintained roadways that are a mile or longer, and to clean up those sections at least four times a year. Brightside posts signs identifying the adopting organization and also provides safety vests, gloves, bags and safety instructions. It also picks up all bags of litter that have been collected and any larger items that have been identified.

Brightside welcomes any opportunity to partner with an organization or agency to promote litter reduction, and will continue to provide support in the form of services or supplies to any organization which requests assistance for any type of clean-up activity.

Within the urban service district, MSWMD will street-sweeping/litter clean-up program, and the night sweeping program will continue to clean all main arterial roadways.

Also within the urban service district, solid waste will promote the use of roll-out cart containers for recycling collection. These carts with attached lids greatly reduce the litter on streets and in alleys.

Louisville Metro will continue to place litter baskets at bus stops and high traffic areas. The litter baskets are emptied during normal waste collection services

Litter Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/ Year to Begin	Month/Year to Be Accomplished
1. Continue to promoting the Green Mile road adoption program to the community	Continuous	1/1/2013	12/31/2017
2. Partner with organizations or community groups to promote litter reduction, and will continue to provide support in the form of services or supplies to any organization which requests assistance for any type of clean-up activity.	Continuous	1/1/2013	12/31/2017
3. Continue the street-sweeping/litter clean-up program	Continuous	1/1/2013	12/31/2017
4. Promote the use of roll-out cart containers for recycling collection instead of small bins with not lid	Continuous	1/1/2013	12/31/2017
5. Continue to place litter baskets at bus stops and high traffic areas	Continuous	1/1/2013	12/31/2017

Appendix 5.2: Litter ordinance or portion of ordinance pertaining to littering.

CHAPTER 6

SITING

A. Siting

1. Describe your county's current siting ordinance. Attach a signed and dated copy of the current siting ordinance as Appendix 6.1.

The siting of any new residential or commercial operation in Jefferson County, including businesses, facilities, entertainment or other activities, including all solid waste operations, is currently subject to extensive planning and zoning regulations, known as The Development Code for All of Jefferson County, Kentucky, including Zoning District Regulations and Metropolitan Subdivision Regulations.

3. Describe the siting procedures for your county. Attach a copy of the siting procedures in the solid waste management area plan as Appendix 6.2.

Siting of a solid waste facility in Jefferson County under Zoning District Ordinances requires obtaining a Conditional Use Permit for all sites in large lot residential or heavy industrial zoning districts. The Conditional Use Permit process requires additional review for neighborhood impact as well as public input opportunities.

4. List any planned modifications to local ordinances or procedures.

No modifications are anticipated.

B. Siting Strengths

Describe the strengths of your existing siting ordinance.

Siting activities in Jefferson County are subject to extensive planning and zoning ordinances. Conditional Use Permits for specific solid waste operations are extremely detailed.

C. Siting Weaknesses

Describe the weaknesses of your existing siting ordinance.

There are no apparent weaknesses.

D. Siting Action Plan

Detail specific actions or projects the county will complete to maintain or improve its siting procedures. The action plan should reflect the county's efforts to improve the weaknesses and maintain or improve the strengths previously identified. The action plan should also incorporate responses to each numbered item in the chapter.

Action Plan

Metro intends to continue siting procedures established in Cornerstone 2020 Comprehensive Plan.

Siting Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/Year to Begin	Month/Year to Be Accomplished
1. Continue siting procedures and zoning review process as established in Cornerstone 2020 Comprehensive Plan.	Continuous	1/1/2013	12/31/2017

Appendix 6.1: Attach a signed and dated copy of the current siting ordinance.

Appendix 6.2: Attach a copy of the siting procedures from the county solid waste management plan.

CHAPTER 7

ENFORCEMENT

A. Enforcement Program

1. Describe your enforcement procedures and penalties to assure solid waste is properly managed and disposed for each of the following:

Attach a copy of the section of the ordinance or procedures pertaining to solid waste enforcement as Appendix 7.1.

- a) Non-participation in mandatory collection systems.

Handled in the same manner as in the other complaints.

- b) Open Dumping. Attach a copy of citation forms and/or form letters to violators as Appendix 7.2 See copies attached.

- c) Prevention and control of litter.

Handled in the same manner as other complaints. Litter prevention measures are addressed in chapter 5.

2. Describe any surveillance/enforcement activities used by your county; i.e., neighborhood watches, hidden cameras, etc.

20 digital surveillance cameras have been ordered to replace older models which are placed in areas that have a high rate of improper disposal (illegal dumping).

Illegal dumpers are identified through photographs, and their license plate is given to the Department of Motor Vehicles. After the information is received on the owner of the vehicle the District starts the Administrative Court process.

Illegal dumping citizen reporting procedures have been put into place to ensure investigation of dumping by code enforcement officers. Investigations resulting in identification of responsible parties are prosecuted in Administrative Court. Dumping incidents where responsibility cannot be determined are sent to Bulk Waste Night Service Crew for cleanup.

Notice of failure-to-comply language has been added to the notice of violations, resulting in a much higher compliance rate.

3. Do you use an Administrative Court for Solid Waste Issues? Yes No
Provide the date the court went into effect. April 20, 2007.

4. Describe the operating procedures of the Administrative Court for Solid Waste Issues. Attach a copy of the relevant documents or codes that relate to the Administrative Court as Appendix 7.3.

Administrative Court proceedings shall be initiated by the issuance of a citation by a code enforcement officer. The person to whom the citation is issued shall respond within 10 days of the date of issuance, by either paying the civil fine or requesting in writing a hearing before the code enforcement board to contest the citation. If the person fails to respond to the citation within 10 days, the person shall be deemed to have waived the right to a hearing.

Upon appeal of a citation by an alleged violator, the code enforcement officer shall notify the code enforcement board by delivering the citation to the designated official of the code enforcement board. When a hearing has been requested, the code enforcement board shall schedule a hearing that shall be conducted within 30 days of the request.

All testimony is taken under oath and recorded. Formal rules of evidence shall not apply, but fundamental due process shall be observed and shall govern the proceedings. The code enforcement board shall, based on the evidence, determine whether a violation was committed.

A final order of the code enforcement board shall be reduced to writing, which shall include the date the order was issued. The appeal of any final order may be made through a Jefferson County District Court, within 30 days of the date the order is issued. The appeal shall be initiated in the same manner as any civil action under Kentucky rules of civil procedure.

A lien will be placed on property for all fines and fees not paid according to a final judgment of the Code Enforcement Board.

5. If your county does not have an Administrative Court for Solid Waste Issues, do you plan to initiate an Administrative Court during this plan period? Yes No

6. Describe any proposed modifications to your Open Dumping and Littering procedures/ordinances.

None

7. Describe enforcement actions or procedures taken by the county if an item is found in an illegal dump with a name on it.

An investigation is conducted by enforcement officers to determine who is responsible for the dumping. Most times Louisville Metro will find the address listed on the item to be more important than the name. If enough evidence is found a citation is sent to the person and a Louisville Metro crew is dispatched to remove the dumped material. The cost of the clean-up will be added to the citation.

B. Enforcement Procedures Strengths

Describe the strengths of your existing enforcement procedures regarding open dumping, prevention and control of litter and non-participation in a mandatory collection system (if applicable).

There currently is an active Code Enforcement Board in place and an aggressive enforcement unit. The three Solid Waste Officers have a good relationship with the Code Enforcement office.

C. Enforcement Procedures Weaknesses

Describe the weaknesses of your existing enforcement procedures regarding open dumping, prevention and control of litter and non-participation in a mandatory collection system (if applicable).

The amount of roadway for each officer to cover is very large.

D. Enforcement Action Plan

Detail specific actions or projects the county will complete to maintain or improve its Enforcement procedures. The action plan should reflect the county’s efforts to improve the weaknesses and maintain or improve the strengths previously identified. The action plan should also incorporate responses to each numbered item in the chapter.

Action Plan

Upgrade and expand the number of surveillance cameras in operation by solid waste enforcement officers.

Publish a new section of the Louisville Metro Solid Waste Management website to educate citizens on how to prevent illegal dumping and littering on their property.

Publish a new section of Louisville Metro Solid Waste Management where pictures from the surveillance camera program can be viewed by the public to identify persons caught in the act of illegal dumping. The site will allow citizens to report illegal dumpers anonymously as well as upload their own pictures or videos to our enforcement units for potential prosecution.

Continue to publicize a newly adopted section of Chapter 51 related to the impoundment of vehicles used for illegal dumping for up to 12 months

Enforcement Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/ Year to Begin	Month/Year to Be Accomplished
1. Upgrade and expand the number of surveillance cameras in operation by solid waste enforcement officers	Continuous	1/1/2013	12/31/2017
2. Educate citizens on how to prevent illegal dumping and littering on their property	Continuous	1/1/2013	12/31/2017
3. Place pictures from the surveillance camera program where they can be viewed by the public to identify persons caught on camera in the act of illegal dumping	Continuous	1/1/2013	12/31/2017
4. Allow citizens to report illegal dumpers anonymously as well as upload their own pictures or videos to our enforcement units	Continuous	1/1/2013	12/31/2017
5. Publicize a newly adopted section of Chapter 51 related to the impoundment of vehicles used for illegal dumping	Continuous	1/1/2013	12/31/2017

Appendix 7.1: Attach a copy of the section of the ordinance pertaining to enforcement.

Appendix 7.2: Attach a copy of citation forms and/or form letters to violators.

Appendix 7.3: Attach a copy of the relevant documents or codes that relate to the Administrative Court.

CHAPTER 8

PUBLIC PARTICIPATION/EDUCATION

Describe the public participation/education activities the county will complete to maintain or improve its Area Solid Waste Management Plan 5-year Update. Provide specific dates for the completion of the projects.

A. Collection Public Participation/Education Action Plan

Due to the urban nature of and the extensive services provided in Louisville/Jefferson County Metro, residents are automatically aware of and expect waste collection services. Generally new residents ask their neighbors who collects their garbage and contact that waste hauler or city accordingly. Residents may also learn whom they should or may call, depending on their address, by contacting Metro Call at 311. New residents receive this telephone number as well as information on garbage collection, recycling, Haz Bin, etc., through the Board of Realtors. In addition, an overview of solid waste-related services is currently featured on the Metro Solid Waste Management Division’s website (www.louisvilleky.gov/solidwaste).

Collection Public Participation/Education Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/ Year to Begin	Month/Year to Be Accomplished
1. Maintain web-site listing licensed collectors	Continuous	1/1/2013	12/31/2017
2. Release to the press through the Mayor’s office info for any event for collection of solid waste recycling, and yard waste	Continuous	1/1/2013	12/31/2017
3. Continue to educate citizens regarding collection options with educational letters during enforcement inspection	Continuous	1/1/2013	12/31/2017
4. Better publicize meeting of the Waste Management District Board	Continuous	1/1/2013	12/31/2017

<u>5. Begin education programs to reduce contamination levels of within various collection streams. Specifically plastics in yard waste, non-recyclable items in recycling collection, and reduction of recyclable and compostable materials in the waste stream.</u>	<u>Continuous</u>	1/1/2013	12/31/2017
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B. Disposal Public Participation/Education Action Plan

Because the utilization of waste collection services by residents and businesses in the county is so high, the District chooses to utilize education moneys to promote waste reduction and recycling, including alternatives to landfill disposal.

Disposal Public Participation/Education Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/ Year to Begin	Month/Year to Be Accomplished
1. None		1/1/2013	12/31/2017

C. Recycling/Reduction Public Participation/Education Action Plan

The District shall help Louisville Metro Government to implement its “Recycling Charter”. A major part of the charter is education and public outreach. It is the intent to attain the services of a public relations company to develop an education, marketing, and awareness campaign for all of the new initiatives.

Louisville Metro has also hired the services of a “Sustainability Director”. This director will work in many areas of sustainability including waste management. This section of Metro Government will develop and maintain an educational section on the Louisville Metro website promoting “zero-waste” and its benefits to the community. This website and the Solid Waste Management site will link and complement each other with educational materials.

Also part of the charter Louisville Metro will develop industry specific packets that will give “best management practices” for recycling and waste reduction. These packets will be available on our website and be used by “specialist” that will conduct door to door campaigns to increase recycling and solid waste diversion.

Finally, a branding and award program will be developed to reinforce good recycling programs that show increases in recycling.

Recycling/Reduction Public Participation/Education Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/ Year to Begin	Month/Year to Be Accomplished
1. Develop recycling campaign	Once	1/1/2013	12/31/2017
2. Develop “Best Management Practices” that are industry specific	Once	1/1/2013	12/31/2017
3. Create a “zero-waste” website	Once	1/1/2013	12/31/2017
4. “Brand” the program and give awards	Once	1/1/2013	12/31/2017

D. Open Dump/Litter Public Participation/Education Action Plan

Both the Metro Solid Waste Management Division and Brightside will continue to present a wide variety of programs on litter, dumping and clean-up to civic, business, community, school and church organizations. Brightside will continue to promote Green Mile at such presentations and will seek other opportunities to recruit sponsors for the road adoption program. The District will continue to provide support in the form of services or supplies to any organization which requests assistance for any type of clean-up activity, and welcomes any opportunity to partner with an organization or agency to promote litter reduction. In addition, Brightside intends to continue its Neighborhood Blitz clean-up programs, as well as other beautification programs such as community gardens.

Open Dump/Litter Public Participation/Education Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/ Year to Begin	Month/Year to Be Accomplished
1. Continue current initiatives	Continuous	1/1/2013	12/31/2017

E. Enforcement Public Participation/Education Action Plan

Public information mechanisms will be developed to educate the public with respect to enforcement of littering and dumping compliance with District ordinance, etc.

Enforcement Public Participation/Education Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/ Year to Begin	Month/Year to Be Accomplished
1. Promote awareness of changes in enforcement and enforcement activities (surveillance camera, etc.) through information dissemination and website.	Continuous	1/1/2013	12/31/2017

F. Siting Public Participation/Education Action Plan

Any efforts to site solid waste facilities will be subject to public participation requirements contained in The Development Code For All of Jefferson County, Kentucky, Including Zoning District Regulations and Metropolitan Subdivision Regulations. These requirements include the posting of informational posters to notify the general public; letters mailed to adjacent property owners; and at least one public hearing during the process.

Siting Public Participation/Education Implementation Schedule

The implementation schedule should reflect an aggressive approach with all activities.

List specific actions detailed in the Action Plan and the specific time frames for the action.	Frequency	Month/ Year to Begin	Month/Year to Be Accomplished
1. Continue existing public information mechanisms.	Continuous	1/1/2013	12/31/2017

CHAPTER 9

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 below)
 KRS 68.178 License Fee

2. The Solid Waste Coordinator’s position is funded by what source?

Line Item in County Budget Collection franchise fees 109 Taxing Board
 General Fund Host agreement fees Other: (List below)

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				
	1st Year	2nd Year	3rd Year	4th Year	5th Year
Waste Mgmt. Facilities KRS 68.178 (license fee)	850,000	850,000	850,000	825,000	800,000
Municipal Garbage Collection (city and/or county)					
Franchise fee					
Permit fee	20,000	20,000	20,000	20,000	20,000
Transfer station					
Convenience center					
109 or other tax					
Proceeds from sale of recyclables	50,000	50,000	50,000	50,000	50,000
Landfill user fees					
Host Agreement					
General Revenue					
Eastern Kentucky PRIDE					
Bluegrass PRIDE					
State illegal dump grants					
State litter abatement grants	375,000	375,000	375,000	375,000	375,000
Other:					
Total Amount Anticipated	1,295,000	1,295,000	1,295,000	1,270,000	1,245,000

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

	Anticipated Expenditures/Budget				
	1st Year	2nd Year	3rd Year	4th Year	5th Year
Capital Expenditures	0	50,000	0	0	0
Personnel	581,000	592,620	604,472	616,561	628,893
Collection	190,000	190,000	190,000	190,000	190,000
Disposal					
Enforcement					
Open Dumps					
Litter Cleanups	375,000	375,000	375,000	375,000	375,000
Education Activities	0	50,000	50,000	50,000	50,000
Recycling Costs/Expenses					
Other Expenditures:					
Total Costs	1,146,000	1,257,620	1,219,472	1,231,561	1,243,893

