CRITICAL SOLID WASTE ISSUES

Diversion & Disposal Capacity

The 2009 Sustainable Solid Waste Management Study projected that regional landfill closures will lead to greater transportation and hauling costs for metro area residents and businesses. While transfer stations and landfills are components of an integrated system, redirecting public and private investment into proven diversion technologies like material recovery facilities (MRFs) and composting operations will create a more sustainable system in the long term and help to preserve regional disposal capacity.

Awareness & Sensitivity

The public desires more diversion programs like residential and commercial recycling and more local government leadership on sustainability issues. Local governments are working to address economic, community and environmental challenges. More public education and local government involvement are critical to success.

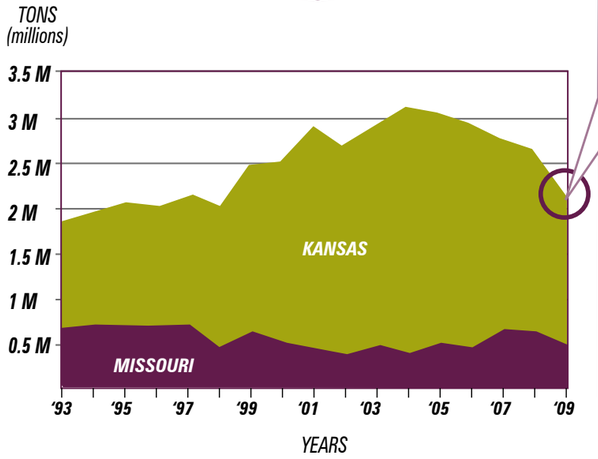
Diversion Services

Better access and participation in diversion programs are needed to reach the interim goals of 40 percent waste diversion by 2013, 60 percent by 2018, and 80 percent by 2023. Higher street maintenance costs and annual residential trash rates (an average of $80 more per household) are found in communities where local governments are not involved in arranging basic services like volume-based collection programs. Local governments playing an active role can help establish service levels and control costs to improve quality of services and quality of life.

Sustainable Funding

Tonnage fees assessed on disposed waste are the primary source of public funding for waste reduction planning and programs in our region. Forward-thinking strategies are needed to grow and sustain effective programs.

REGIONAL LANDFILL TRENDS



Disposal tonnages at the region's three municipal solid waste landfills were 2.3 million in 2008 but dropped nearly 20 percent in 2009. Possible factors affecting this trend will be reassessed once 2010 tonnage data is available:

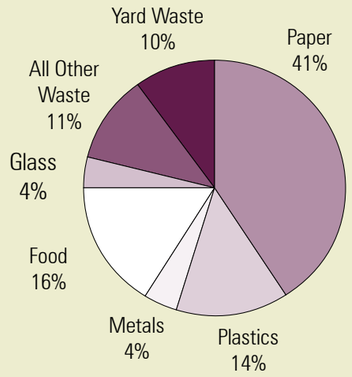
- Economic downturn
- More waste transferred to landfills outside the region
- Waste diversion activities

MUNICIPAL SOLID WASTE (MSW)

MSW consists of residential, commercial and institutional waste streams and makes up about 60% of our region's total landfilled waste.

WHAT ARE WE THROWING AWAY?*

The items below make up the major components of the MSW stream



*Source: *Missouri/Kansas waste sorts results*

MANAGING COSTS

By 2023, we will be in a better position to manage future landfill costs and explore emerging technologies with investment in diversion infrastructure today.

COSTS PER TON

25% STATUS QUO SCENARIO		40%>60%>80% DIVERSION SCENARIOS
$89	2008	$89
$108	2013	$113
$130	2018	$133
$181	2023	$151

Source: 2009 Sustainable Solid Waste Management Study

SUSTAINABLE SOLID WASTE MANAGEMENT

80% waste diversion by 2023

The 2009 Sustainable Solid Waste Management Study explored the costs of continuing to manage our waste in the same manner over the next 20 years. A comparison was made between the status quo and a phased-in approach to increase diversion during the same period. The results indicate that costs to improve and expand the diversion infrastructure is about the same as costs of keeping things at the same pace and that **by 2023 a diversion-based system becomes less costly**.

As a result, the MARC Solid Waste Management District has embraced a goal to reduce solid waste currently disposed of in landfills by 80 percent by 2023. The district is seeking the commitment of its local government members to work toward a sustainable solid waste management system using proven diversion practices. This phased-in approach uses incremental steps to target residential, commercial, and construction-and-demolition waste streams.

SUSTAINABLE SOLID WASTE MANAGEMENT SYSTEM:

- Protects human health and the environment
- Produces less waste
- Uses waste as a resource whenever possible
- Advances economic development and job creation through materials management

A sustainable system requires a pivotal change in how waste is handled and viewed in the region. What we think of as waste is a pool of individual materials waiting for a second life. This 80/2023 goal creates a vision for what is possible when we practice *resource* management instead of *waste* management.

Countless natural resources are used to mine, manufacture and transport the products we readily use and discard every day. Large volumes of quality recovered materials can reduce the manufacturer's demand for virgin raw materials and attract investment in local markets, resulting in more jobs and less waste.

The rewards for redirecting our dollars today for a sustainable system tomorrow are boundless — more diverse jobs, better use of natural resources, longer life for regional landfills, lower economic and environmental costs, and better quality of life.

Re·think Re·do Re·new

Mid-America Regional Council
Solid Waste Management District

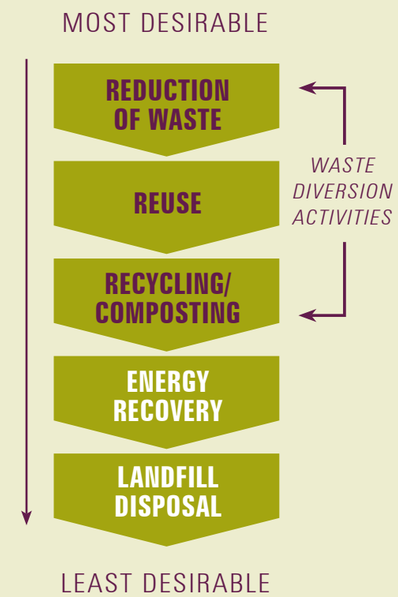
www.marc.org/Environment/SolidWaste

DIVERSION

redirects items from the trash stream that would usually go to landfills and instead prepares them to be RECYCLED, COMPOSTED or REUSED.

WASTE HIERARCHY

Sustainable solid waste management moves from the most desirable practices to the least desirable in this order:



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80/2023 GUIDE FOR LOCAL GOVERNMENTS

A sustainable solid waste management system will help local governments reduce waste, increase diversion through improved programs and policies, and provide for reasonable processing capacity while preserving existing regional landfill capacity. The 2009 Sustainable Solid Waste Management Study, assessing the region's current waste practices, establishes incremental steps to achieve 40, 60 and 80 percent waste diversion over time.

Local governments are rising to the challenge to improve services and ensure affordable, long-term solutions to managing waste as useful resources. To support these efforts, the district has created a guidance document, **the 80/2023 Guide for Local Governments**, as a road map to services, policies and programs needed for success. These best-practice strategies support incremental steps to achieve 40 percent waste diversion by 2013, 60 percent by 2018 and 80 percent by 2023.

Divided into three phases, the strategies provide **flexible milestones** to address individual community needs. Initial steps to reach the 40 percent goal focus on increased access to residential and commercial services, more public awareness and participation, and better data collection to measure and monitor success. Subsequent goals of 60 and 80 percent build on the successes from improving basic services. Collaborative partnerships and public/private investments in education, recycling and composting services, and diversion infrastructure are needed during the next 10-12 years.

WASTE DIVERSION PHASES

40% x 2013
- Recycling and yard waste services
- Waste reduction practices

60% x 2018
- Transition to volume-based rates
- Green building incentives

80% x 2023
- Food waste collection programs
- Construction waste recycling

Waste minimization and recycling activities benefit quality of life and economic development. Volume-based rate incentives for residential programs are proven nationally to reduce waste and increase recycling. Often the consumer experiences additional services and cost savings. Demand for these services in turn supports public and private investment in collection and processing with higher quality and volumes of recovered materials to sell on the open market, ideally attracting local manufacturers. Growing local markets for recovered materials can potentially create 10 times more jobs than landfill disposal.

The region can look to national and local models of success in Zero Waste® businesses and progressive communities. And while we work toward meeting our goal, industries and manufacturers are increasingly working to design waste out of the system through product stewardship.

ELEMENTS FOR SUCCESS

Greater waste diversion occurs with improved access and participation in waste minimization and recycling efforts.

Adequate infrastructure and viable end markets are key to capturing more materials and supporting diversion activities.

Engaged local governments use public education, policies, programs and services to set the stage for better resource management.

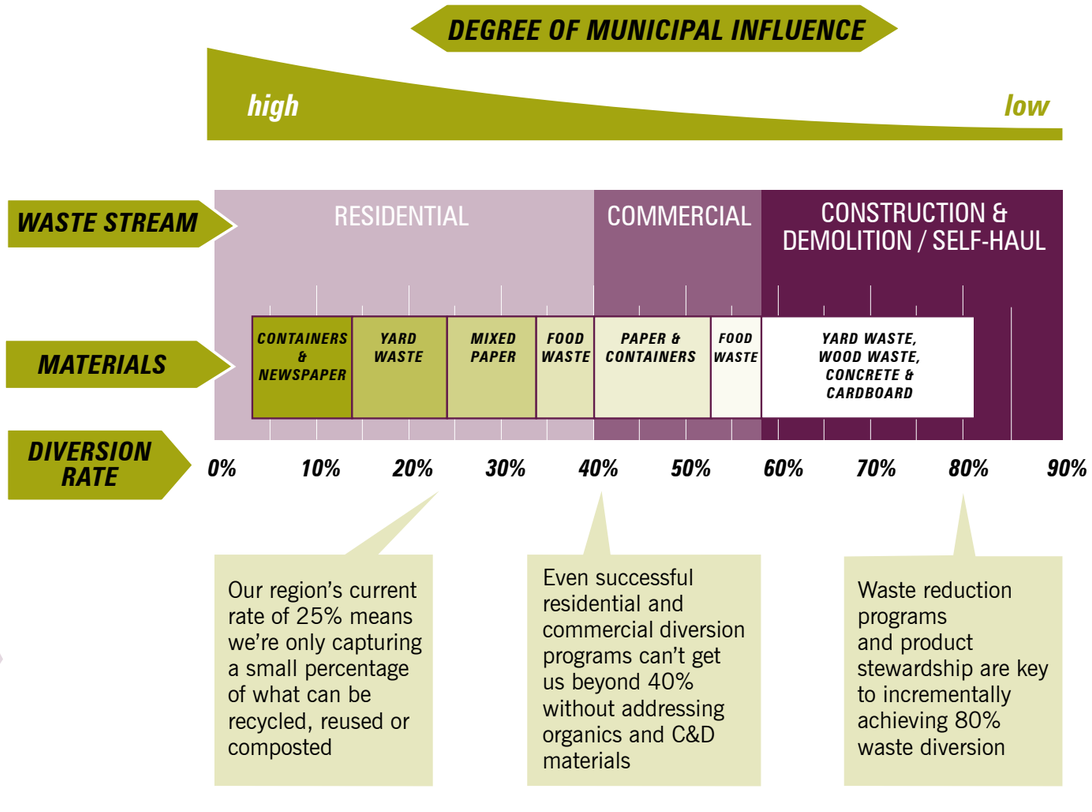
LOCAL GOVERNMENT ACTION

The 80/2023 Guide for Local Governments complements the district's original solid waste management plan, adopted by the district members in 1994 in accordance with Missouri law. The 80/2023 strategies support these major work areas:

- Offer accessible core residential services (trash, recycling, yard waste, bulky item, household hazardous waste, cleanup days)
- Improve quality of services and control costs through permitting, contracting or cooperative arrangements
- Improve community participation and diversion rates through mandatory recycling and pay-as-you-throw incentives
- Strengthen enforcement of illegal dumping ordinances
- Encourage waste minimization and diversion, eco-purchasing, and green building practices through policy development and implementation
- Ensure appropriate processing and disposal capacity through collaboration on infrastructure development

GETTING TO 80/2023, STEP BY STEP

A phased-in, incremental approach to waste management helps steadily increase diversion rates. More reduction, reuse, recycling and composting activities over time leads to fewer items ending up in landfills.



Our region's current rate of 25% means we're only capturing a small percentage of what can be recycled, reused or composted

Even successful residential and commercial diversion programs can't get us beyond 40% without addressing organics and C&D materials

Waste reduction programs and product stewardship are key to incrementally achieving 80% waste diversion