



Improving Solid Waste Management and Recycling Southwest Regional Solid Waste Commission (SWRSWC)

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SWRSWC Overview

- **12 county joint commission (project focused in Nobles, Cottonwood and Jackson Counties)**
- **Development of comprehensive solid waste management plan**
- **Contracting of solid waste collection, processing, disposal and management**
- **Financing and orchestrating projects to improve solid waste management and improve recycling**

Motivations for Change

- Putting source-reduction measures to the forefront in the commercial sector
- Extending the life of landfills (environmental)
- Creating cost-savings opportunities for businesses and counties
- Servicing the public through conservation-forward practices

Reasons for MnTAP Assistance

- Fresh perspective on solid waste management
- Time constraints for pursuing projects
- Facilitation of the solid waste assessment process



Approach

- Conducted solid waste assessments for nine businesses
- Advertised the use of solid waste assessments through networking
- Developed a replication model for solid waste assessments



Replication Model

- **Eight step how-to for business owners and county staff to conduct their own assessments**
- **Straightforward and widely applicable**
- **Includes resources for research and charts for tracking information**
- **Publicly available and will be used by SWRSWC**

Determining Opportunities for Improvement

Three stages to a solid waste assessment:

- Facility walkthrough: observation, waste analysis, and interview
- Records analysis: identifying opportunities through cash flows
- Research: developing site-specific recommendations



Participating Businesses by City

Windom	Westbrook	Worthington	Jackson
Defries Collision Center	Maynard's Food Center	Worthington YMCA	Coffee Choices
Windom Country Club		Sterling Drug	Livewire Printing
Big Game Tree Stands			

Most Common/Effective Recommendations

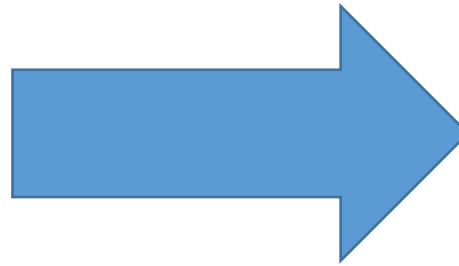
- **Establishing a Waste-to-Food Connection**
- **Utilizing Reusable Transport Packaging**
- **Rigorous Inventory Management and Purchase Monitoring**
- **Prioritization of Electronic Media**

Total Savings and Diversion Potential from Top Recommendations

Recommendation	Annual Savings	Diversion Potential (lb)
Establishing a Waste-to-Feed Connection	\$464	65,270
Utilizing Reusable Transport Packaging	~\$2,500	16,000
Practicing Rigorous Inventory Management	\$1,450	3,280
Prioritizing Use of Electronic Media	\$9,800	23,600
Total	\$14,214	108,150

Waste-to-Feed Connection

- Diverting food waste from landfills to feedlots
- Estimated 31% of MSW is food/organic waste (MPCA 2013)



Reusable Transport Packaging (RTP)

- Eliminating cardboard/packaging waste with RTP
- Ease of use
- Effective in most closed-loop shipping operations



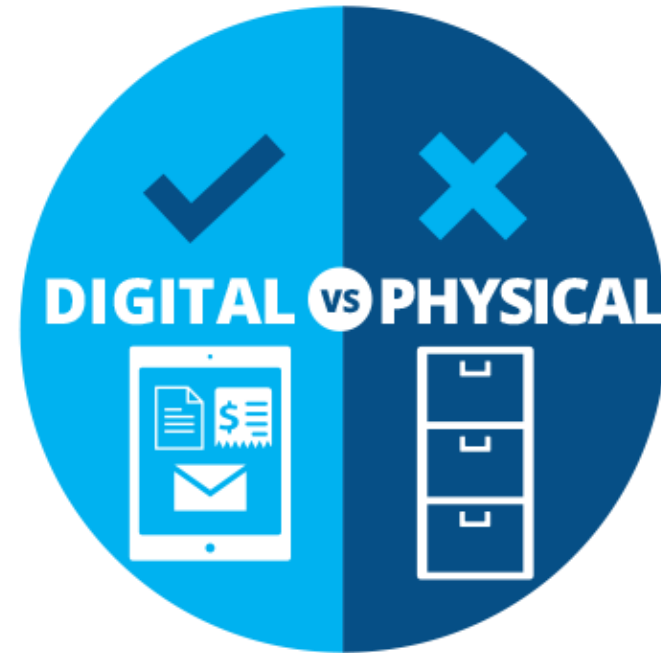
Inventory Management and Purchase Monitoring

- Source reduction through purchase reduction
- Reduced expiration waste
- Improving stock rotation practices



Prioritization of Electronic Media

- Reducing paper waste by going digital
- Estimated 25% of MSW is paper waste (MPCA 2013)
- Most effective in office settings and businesses with regular advertising



Total Savings and Diversion Potential by Sector

Sector	Annual Savings	Diversion Potential (lb)
Automotive Services	\$7860	1600
Restaurant/Food Service	\$1,700	62,165
Warehousing	\$11,000	20,000
Fitness/Recreation	\$9,854	24,000
Manufacturing	\$5,000	10,000
Pharmaceuticals	\$300	1,500
Printing/Publishing	\$400	2,875

Total Estimated Cost Savings:

\$36,114 annually

Total Estimated Landfill Diversion:

122,140 lb annually

Potential Future Projects

- Establishing reuse networking
- Conduct a Materials Recycling Facility feasibility study
- Establish a waste-to-feed network



Personal Benefits

- Experience in project management
- Exposure to solid waste infrastructure
- Time management skills
- Communication skills



Questions?