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

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Driven to Discover®
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

<table>
<thead>
<tr>
<th>Windom</th>
<th>Westbrook</th>
<th>Worthington</th>
<th>Jackson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defries Collision Center</td>
<td>Maynard’s Food Center</td>
<td>Worthington YMCA</td>
<td>Coffee Choices</td>
</tr>
<tr>
<td>Windom Country Club</td>
<td></td>
<td>Sterling Drug</td>
<td>Livewire Printing</td>
</tr>
<tr>
<td>Big Game Tree Stands</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Most Common/Effective Recommendations

• Establishing a Waste-to-Feed Connection
• Utilizing Reusable Transport Packaging
• Rigorous Inventory Management and Purchase Monitoring
• Prioritization of Electronic Media
## Total Savings and Diversion Potential from Top Recommendations

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

<table>
<thead>
<tr>
<th>Sector</th>
<th>Annual Savings</th>
<th>Diversion Potential (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Services</td>
<td>$7,860</td>
<td>1,600</td>
</tr>
<tr>
<td>Restaurant/Food Service</td>
<td>$1,700</td>
<td>62,165</td>
</tr>
<tr>
<td>Warehousing</td>
<td>$11,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Fitness/Recreation</td>
<td>$9,854</td>
<td>24,000</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>$5,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>$300</td>
<td>1,500</td>
</tr>
<tr>
<td>Printing/Publishing</td>
<td>$400</td>
<td>2,875</td>
</tr>
</tbody>
</table>

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?