

# 2011 Solid Waste Policy Report



## Legislative Charge

Minn. Stat. § 115A.411 Solid Waste Management Policy; Consolidated Report

*The commissioner shall prepare and adopt a report on solid waste management policy.*

Minn. Stat. § 115A.551 SCORE Reporting

*The commissioner shall monitor the progress of each county toward meeting the recycling goals in 115A.551, subdivisions 2 and 2a. The commissioner shall also report on how SCORE funding money was spent and the resulting statewide improvements in solid waste management.*

Laws 2009, chapter 37, article 1, section 62 SCORE Reporting Recommendations Report

*SCORE reporting requirements for the report that is due in April 2010 shall be abbreviated in scope. In addition, the commissioner of the Pollution Control Agency, in consultation with the Association of Minnesota Counties, the Solid Waste Administrators Association, the Solid Waste Management Coordinating Board, and other interested parties shall make recommendations to amend the reporting requirements under Minnesota Statutes, section 115A.557, subdivision 3, in ways that reduce the resources counties employ to collect the data reported.*

Minn. Stat. § 115A.559 Composting Competitive Grant Program

*By January 15, 2012, the commissioner shall report to the legislative committees with jurisdiction over environment and natural resources policy on:*

*(1) the mixed municipal solid waste diversion rates accomplished by the grant program under new Minnesota Statutes, section 115A.559;*

*(2) participants in the grant program and the programs developed with grant funds; and*

*(3) the potential for new permanent programs based on results of projects funded with grants issued under new Minnesota Statutes, section 115A.559.*

## Authors

Virginia Black  
Colleen Hetzel  
Garth Hickle  
Peder Sandhei  
Arlene Vee

## Contributors / acknowledgements

David Cera  
Madalyn Cioci  
Hank Fisher  
Wayne Gjerde  
Tina Patton  
Mark Rust  
Sigurd Scheurle

## Editing and graphic design

Theresa Gaffey

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## Minnesota Pollution Control Agency

520 Lafayette Road North | Saint Paul, MN 55155-4194 | [www.pca.state.mn.us](http://www.pca.state.mn.us) | 651-296-6300  
Toll free 800-657-3864 | TTY 651-282-5332

This report is available in alternative formats upon request, and online at [www.pca.state.mn.us](http://www.pca.state.mn.us)

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# Executive Summary

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This biennial Solid Waste Policy Report emphasizes key developments, trends, and challenges facing the solid waste system in Minnesota. The report illustrates those developments through the use of specific examples that are being implemented or under consideration across the state. The report summarizes the key system trends and then transitions to developments and challenges facing the strategies employed to manage solid waste—source reduction and reuse, recycling, organics management, and waste to energy. Finally, the report offers conclusions and recommendations for moving forward on solid waste issues and outcomes.

This report satisfies the requirements of Minn. Stat. § 115A.411, which directs the commissioner of the Minnesota Pollution Control Agency (MPCA) to prepare and adopt a report that summarizes the current status of solid waste management; evaluate the extent and effectiveness of our progress in accomplishing state policies, goals, and objectives; identify issues requiring further research, study, and action; and make recommendations regarding reasonable and necessary changes to the state's solid waste management policies, authorities, and programs.

The report builds on several of the themes identified in the 2007 and 2009 MPCA solid waste policy reports. Some of those themes include the need for government reform, reinvention in solid waste management, and further identification and re-alignment of roles and responsibilities of those engaged in the solid waste system, from product manufacturers to local governments to facility operators.

The report reflects the broader shift from waste management to materials management that is gaining momentum in the United States. While still in its infancy as a policy principle, materials management is focused on:

- Knowing and reducing the lifecycle impacts across the supply chain.
- Using less material inputs (reduce, reuse, recycle).
- Using less toxic and more renewable materials.
- Considering whether services can be substituted for products.

A fundamental underpinning of materials management is that significant economic value resides in the material that is treated as waste and significant economic opportunity exists when materials are recovered and recycled. For further reference, see *Sustainable Materials Management: The Road Ahead* (U.S. EPA): <http://www.epa.gov/epawaste/conserve/smm/pdf/vision2.pdf>.

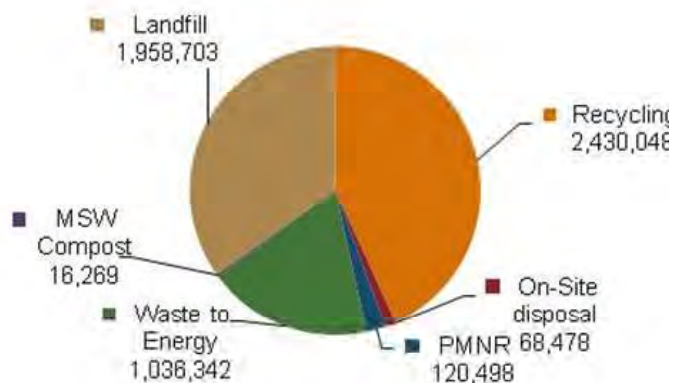


# Part 1: Systemic Developments

There are several overarching developments that will impact solid waste management in Minnesota over the next several years. These include: the Metropolitan Solid Waste Management Policy Plan that establishes goals and identifies strategies for improving the management of solid waste in the Twin Cities Metropolitan Area, the increase in single-stream collection of recycled materials and an expansion of product stewardship.

In 2010, Minnesota generation of mixed municipal solid waste (MMSW) totaled 5,630,339 tons, a 0.4-percent decrease from 2009. The seven Metro counties generate 57 percent of the waste, with the Greater Minnesota counties generating the remaining 43 percent. Figure 1 provides detail on the management method of the waste generated.

**Figure 1: Management methods of waste generated in Minnesota in 2010 (in tons)**



## Summary of Metropolitan Solid Waste Management Policy Plan 2010-2030

On April 6, 2011, the MPCA adopted the *Metropolitan Solid Waste Policy Plan 2010-2030* (Policy Plan), which sets solid waste goals, policies, and objectives for the metropolitan area: <http://www.pca.state.mn.us/hqzq86a>.

The goals of the Policy Plan are to:

- Protect the environment and public health, reduce greenhouse gas emissions, and conserve energy and natural resources.
- Manage waste in an integrated system to minimize landfilling.
- Manage waste cost effectively and internalize future costs to minimize long-term financial liability and maximize environmental benefits.
- Share responsibility and costs for environmentally sound management of waste among all those who use or benefit from the system.

The 12 specific policies in the Policy Plan are intended to support the four goals and guide actions and decisions on solid waste management in the metropolitan area.

## Metropolitan System Plan

The Policy Plan's Metropolitan System Plan describes broad regional objectives, a landfill diversion goal, and the strategies necessary for solid waste programs and services to meet the region's needs for the next 20 years.

System objectives maximize the upper end of the solid waste hierarchy, setting floor objectives for every five years for source reduction, recycling, and organics recovery; maintain existing resource recovery facility capacity; and place a ceiling on landfilling.

Table 1 shows solid waste management by method in the base year (2008) as compared to the maximum 2030 objectives found in the System Plan.

**Table 1: MMSW Management System Objectives in Percentages (2010-2030)**

Management method	Current system (2008)	2015	2020	2025	2030
<i>Floor – The lower range of the percentages below represent the minimum amount of MMSW that must be managed by these methods.</i>					
<b>Source reduction and reuse (cumulative)<sup>1</sup></b>		1 - 2%	2 - 4%	3 - 5%	4 - 6%
<b>Recycling<sup>2</sup></b>	41%	45 - 48%	47 - 51%	49 - 54%	54 - 60%
<b>Organics recovery<sup>3</sup></b>	2%	3 - 6%	4 - 8%	6 - 12%	9 - 15%
<i>Mandatory processing – The percentages below represent the amount of resource recovery expected to occur after maximizing reduction, recycling and organics recovery. Restrictions on the land disposal of processible MMSW will be enforced.</i>					
<b>Resource recovery<sup>4</sup></b>	29%	32 - 34%	32 - 33%	30 - 31%	28 - 24%
<i>Ceiling - The percentages below represent the maximum amount of MMSW land disposal that will be allowed.</i>					
<b>Max landfill<sup>5</sup></b>	28%	20%	17%	15%	9%

<sup>1</sup>The source reduction percentages are cumulative because once source reduction occurs it is assumed to occur each year thereafter. To avoid double-counting, the source reduction percentages cannot be added with the other MMSW management method percentages lower on the hierarchy.

<sup>2</sup>Does not reflect SCORE source reduction and yard waste credits. This does include residue after processing that cannot be recycled and is sent to a landfill.

<sup>3</sup>Organics may include: food to people, food to animals, composting of source-separated compostable materials and anaerobic digestion. Anaerobic digestion is an example of an emerging technology that may be able to process source separated organic waste into energy (in the form of biogas) and compost. For the purposes of this Plan, anaerobic digestion is considered a source-separated composting technology. As other technologies emerge, and when necessary, the MPCA will make a determination of their place with respect to the WMA hierarchy.

<sup>4</sup>Resource recovery through mixed municipal solid waste composting or incineration; Includes residue before and after processing that is sent to a landfill.

<sup>5</sup>This objective refers to TCMA-generated MMSW that is disposed of at all landfills that serve the Twin Cities metro area.

In its role, the MPCA will enforce all laws and rules under its authority; prioritize rulemaking and policy initiatives that advance the solid waste system; provide research, technical assistance and improved data collection; work with other agencies to develop consistency in state solid waste policies; and target its financial assistance to promote the policies in the plan.

### Additional benefits

If the 2015 system objectives are achieved, it will:

- Reduce greenhouse gas emissions by an amount equivalent to taking 1.6 million cars off the road.
- Save enough energy to power over 40 percent of the households in the Twin Cities metro area (TCMA).
- Divert approximately 17 million tons of MMSW from landfills.
- Benefit the economy by supporting approximately 380 additional jobs and increasing economic activity by \$160 million.

### Metropolitan county master plans

Minn. Stat. § 473.803 requires metropolitan counties to prepare master plans that implement the Policy Plan. Counties have revised their master plans to comply with the Policy Plan and all have been submitted on time. Any solid waste activity within the seven-county metropolitan area must be consistent with the Policy Plan and the county master plans.

## Organized collection

Cities and counties are granted the authority to organize the collection of mixed municipal solid waste in Minn. Stat. § 115A.94. No additional cities had organized the collection of residential trash since 1991, until the city of Maplewood authorized to organize collection of solid waste on November 28, 2011.

Several other cities have expressed interest in evaluating an organized collection system, including Brooklyn Park, Crystal, Dodge Center, Fridley, Golden Valley, Richfield, Roseville and Saint Paul.

Research into statewide collection arrangements for residential waste and recyclable materials identified many of the benefits of organized collection. [*Analysis of Waste Collection Service Arrangements* (2009): <http://www.pca.state.mn.us/bkzq87c>]

- Lower costs to residents for the same level of service.
- Ensures that all residents are using garbage service.
- Easier education because all residents have the same service.
- Reduces the wear on local streets, saving residents the cost to repair infrastructure.
- Provides the city with greater control over the services provided to residents which can include: bulky item collection, Christmas tree collection, and organics service.
- Can implement other tools through the contract, such as pay-as-you-throw and facility designation.

## Product stewardship

Product stewardship, also known as producer responsibility, continues to gain traction across the United States as a tool for addressing the economic challenges of collecting and recycling certain products and stagnant recycling rates for certain products. As has been demonstrated by the Minnesota Electronics Recycling Act, a product stewardship approach is an effective tool to expand collection opportunities for residents and increase recycling rates.

Product stewardship helps examine and realign roles and responsibilities for various actors along the product chain and, where feasible, promote private management of collection and recycling services. This outcome of product stewardship is particularly important in a time of limited public funding.

Product stewardship also demonstrates that this approach translates into expanded economic development opportunities and job creation. For example, Cal Recycles reports that following passage of the product stewardship statute for carpet in California, the number of private companies collecting and processing discarded carpet increased from 3 to 15 within one year.

## Part 2: Source Reduction and Reuse

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Source reduction and reuse are at the top of the solid waste hierarchy and offer significant environmental and economic benefits. However, effective policy and financial strategies to promote source reduction, whether enacted at the state or local level, are often difficult to identify and implement given that many of the most beneficial actions need to be adopted at the design and manufacturing stage for products and materials. However, several strategies including volume-based pricing show promise in promoting reduction as well as supporting recycling.

### Volume-based pricing

According to Minn. Stat. § 115A.9301, a local government unit that collects charges for solid waste collection directly from waste generators shall implement a fee structure that increases as the volume or weight of the waste collected on-site from each generator's residence or place of business increases.

Some cities, such as St. Cloud that changed their system in 1991, met this requirement by implementing a fee for each bag of garbage produced by the customer. Customers are required to place their garbage in the special bags or attach the bags to the garbage cart. This type of system provides an incentive to the waste customer to reduce and divert as much waste as possible to avoid paying the additional costs for each bag. Some cities have reported that although the system works well, worker compensation and high insurance coverage costs for workers might limit the cities' ability to continue with this type of program. Workers could get hurt climbing in and out of the trucks especially during winter months. Other cities have seen such a success with this type of program that they are willing to continue.

When a hauler uses a cart for service pick-up, the bag system can still be used but it becomes more difficult. The resident is still required to purchase the special bags to indicate how many bags of trash were placed in the cart. The special bags are attached to the outside of the cart which requires someone to leave the hauling truck and take the bags off of the cart. As technology advances and more garbage trucks are fitted with scales, it could be possible to weigh each cart and charge the resident by weight. This is not happening in Minnesota currently.

Another option for implementing volume-based pricing for cart systems is that as the cart size increases, the cost of the cart should also increase. According to Minnesota statute there is not a required monetary increase based on volume increase, which means a cart's volume can double but the cost of the cart could increase very little. One way to prevent this from happening would be to amend the statute to prescribe a minimum monetary increase for each volume increase.

### Economic assessment of reuse industry

After undergoing an assessment of potential areas of opportunity, the MPCA intends to focus source reduction activities on long-term projects in reuse and environmental preferable purchasing, with life cycle analysis (LCA) playing a key role in determining priority areas.

Currently, the MPCA is working in partnership with businesses, counties, and non-profits on several reuse projects, including the establishment of a state reuse networking group, creating a data standardization reporting mechanism for reuse organizations to report their impacts, and an economic activity report for reuse in Minnesota.

The MPCA worked with the Materials Analysis Division (MAD) at the Minnesota Department of Administration to conduct a study on the economic activity associated with reuse activities in the state. For the purpose of this study, the reuse sector encompasses three specific activities: used product sales, rental of equipment that reduces the need for new equipment to be purchased, and repair that reduces the need of a new purchase through the extension of the existing life of the product.

The analysis was conducted using data from Dun and Bradstreet and using the hybrid econometric model created by Regional Economic Models, Inc. (known as the REMI model). The North American Industry Classification System (NAICS) codes were used to determine the types of businesses (reuse, rental, and repair) included in the analysis. Using the NAICS codes, data related to salary, wages, and employee numbers were obtained from Dun and Bradstreet. The REMI model was then used to determine indirect and induced jobs as well as tax revenue, wages, and GDP.

The results of the analysis demonstrate that Minnesota's reuse sector directly employs almost 46,000 people (1.8 percent of Minnesota's total employment) and generates at least \$4 billion in gross sales annually (1.6 percent of the state's gross domestic product).

The top industries are:

- General automotive repair: 6,520 employees.
- New car dealers (used sales and repairs only): 6,070 employees.
- Automotive body, paint, and interior repair: 5,560 employees.
- Used merchandise stores: 2,930 employees.
- Other automotive mechanical and electrical repair: 2,240 employees.

Most firms engaged in reuse have one to two employees and represent a small portion of economic activity associated with reuse, while the largest firms account for the majority of reuse jobs and sales. Reuse jobs and sales are almost proportional to the density of the population center, though the type of reuse firms may differ among the areas. Low density population centers or Greater Minnesota counties have several smaller reuse stores, reflecting the trend in lower population densities.

Limited academic research exists on the economic impact of the reuse industry, but it is generally agreed that reuse activities keep money local thus increasing its economic impact. Minnesota's gross domestic product excludes the value of used items, which were counted in a previous year's output when new, but includes the value of services from repurposing and selling such items.

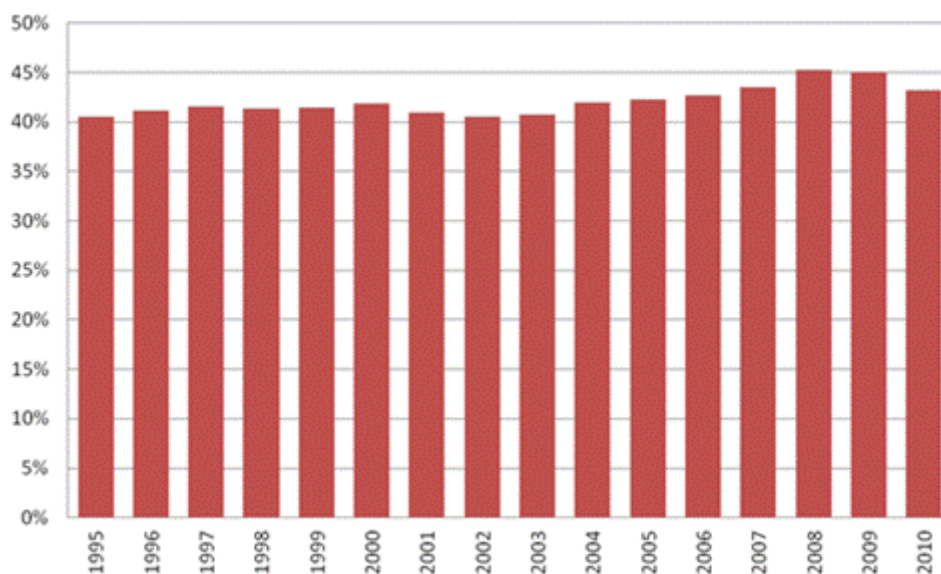
It is important to note that the study's results are conservative. Aside from the limits of the data used in the study, the study did not capture the economic reuse activity which occurs as person-to-person sales through online sites, and through less formal financial exchanges such as garage sales. Online reuse remains an unexplored question that deserves study.

It is important to note that the study did not look at the environmental impact of reuse. This is a completely different study that needs to be completed. The MPCA is working with partners to complete a data standardization that would allow reuse organizations to enter in information on their environmental, social and economic impacts in the future.

## Part 3: Recycling

Recycling remains the most prominent method of managing waste in Minnesota, and the recycling industry is a key economic engine in the state. However, as Figure 2 illustrates, the recycling rate has remained relatively stable over the past fifteen years with significant opportunities for improvement, particularly for certain products and materials. This stagnation of recycling rates, despite relatively high commodity prices for recovered materials and the transition to single-stream collection, argues for a robust examination of what other policies need to be implemented to support greater recycling.

**Figure 2: Minnesota recycling rates**



### Single-stream collection

There is a strong movement by the waste management industry towards the use of single-stream collection (one cart for all recyclables) to collect recyclables throughout Minnesota. There are several reasons for this trend including lower collection costs, worker safety improvements, increased collection efficiency, popularity with the general public and increasing rates of participation. Single-stream collection also enhances the feasibility of collection of source-separated organics due to a reduction in the number of containers that must be managed and stored by homeowners. The largest drawback to single-stream collection is an increase in the contamination of the bales of collected recyclables sent to end-markets. This contamination results in lower quality material sent to processors who are then responsible for removing the contaminants from their feedstock and are required to pay to dispose of the residuals.

A few examples of local governments adopting single-stream illustrate this trend.

- The **city of Plymouth** issued a request for proposals for recycling services in 2011. The new contract awarded to Allied Waste Services transitions the city from a weekly dual-sort collection method to a single-stream cart system with collection bi-weekly. In addition, Allied has added #3 through #7 plastics to its curbside collection, which was not previously collected in the community. Similar contracts are now starting in Minnetonka and Golden Valley.
- **Winona County** has also adopted single-stream collection. As with Plymouth, Winona County residents are now able to recycle #3 through #7 plastics under the new system. In addition, Winona County negotiated a revenue-sharing contract, so the county will be reimbursed for the value of material collected.

- The **city of Minneapolis** currently employs one of the last multi-sort residential curbside collection systems in the state. Residents are required to divide the recyclables into seven different categories. Motivated by requirements from Hennepin County to increase the amount of material that is recycled, Minneapolis is examining a switch to either dual- or single-stream collection. This change is expected to occur by 2013.

## Commercial recycling

Commercial and institutional establishments also offer significant opportunities for greater recovery of materials. Several jurisdictions across the state are focusing on this sector as an opportunity to increase recycling rates. For example, the city of Minneapolis passed a commercial recycling ordinance in 2011. Under the new ordinance, commercial property owners, such as offices, multi-family buildings, and retail, are required to provide:

- Regular recycling collection for all materials generated on-site deemed recyclable in Minneapolis, including paper, cardboard, metal cans, plastic bottles, and glass bottles and jars.
- Recycling containers.
- Recycling collection and storage areas.
- Written recycling information and instructions sent to tenants and/or employees.
- A written recycling plan.

While several other jurisdictions, including Bloomington and Duluth, have implemented ordinances promoting commercial recycling, this is the first ordinance of its kind in Minnesota that targets all commercial entities, not just specific business sectors. It is anticipated that recycling will increase substantially from the commercial sector in Minneapolis. The MPCA will track the success of this ordinance and, if successful, encourage adoption of similar ordinances in other jurisdictions.

## Status of recycling markets in Minnesota

Minnesota is fortunate to have markets located in the state for a variety of common recyclables. With several new processing facilities opening in the past year, the MPCA is cognizant that careful monitoring, evaluation, and possible policy action may be necessary to ensure that the market context in Minnesota remains competitive and vibrant. The paper and high density polyethylene (HDPE) plastic industries are processing at capacity. However, Minnesota could benefit from developing facilities that would accept milk cartons, wet-strength paper, polyethylene terephthalate (PET), and polypropylene (PP). Our glass markets are currently able to accept more material.

In 2011, two new businesses opened in St. Paul: E-Cullet based in Palo Alto, California, and Strategic Materials of Houston, Texas. These facilities sort recycled container glass from curbside recycling programs by color for use in manufacturing bottles and fiberglass. They are particularly important given the transition to single-stream collection referenced above. As the recycling collection systems have transitioned to single-sort systems from multi-stream systems, glass sorted by color has become a scarce commodity, causing problems for bottle manufacturers that need sorted glass to run their manufacturing operations.

## Economic benefits of recycling

Recycling is important in Minnesota, for both economic and environmental reasons. Recycling conserves and reuses resources and creates new businesses and jobs. Manufacturers in Minnesota that use recycled materials continue to contribute to the state's economy and add manufacturing jobs resulting in millions of dollars of wages (Table 2). In addition to value-added manufacturing, there is economic activity associated with the collection, processing, and marketing of recyclables in Minnesota.

In 2010, approximately 2.6 million tons of recyclable materials (e.g., paper, metals, glass, and plastic) were collected across the state. The MPCA estimates that the majority of this material was processed by the more than 200 value-added recycling manufacturers operating in Minnesota.

The most dominant segment of the value-added recycling industry is composed of those manufacturers who use post-consumer paper as a feedstock, including Rock-Tenn (St. Paul), Liberty Paper (Becker), New Page (Duluth), Pactiv (Moorhead), and Insolution (Loretto). These companies annually use approximately 820,000 tons of old corrugated cardboard (OCC), office paper, and newspaper, much of which is generated by curbside and business recycling programs in Minnesota.

Minnesota has one of the largest concentrations of plastic lumber/sheet manufacturers in the U.S., including Master Mark Plastic (Albany), Bedford Technology (Worthington), and Recycled Plastic Inc. (Garfield).

**Table 2: Economic activity associated with Minnesota's value-added recycling manufacturers**

	<b>2004 employment</b>	<b>2011 employment</b>
<b>Direct jobs</b> at companies using recycled materials in the manufacturing process	9,003	15,221
<b>Estimated indirect jobs:</b> Impacts on local suppliers statewide, unadjusted for displacement effects.	3,057	13,627
<b>Estimated induced jobs:</b> Long-term effects on personal income and consumer spending, localized and statewide.	7,200	8,133
<b>Total estimated jobs</b>	<b>19,260</b>	<b>36,981</b>
<b>Total estimated wages and salary disbursements:</b> The monetary remuneration of employees, including compensation of officers, commissions, tips, and bonus and receipts-in-kind that represent income to the recipient.	\$760 million	\$1.96 billion
<b>Total estimated tax revenue on direct jobs:</b> Business/personal state income taxes, sales tax, excise tax and miscellaneous taxes, and business taxes	\$64 million	\$272 million
<b>Total estimated value-added activity:</b> Contribution to Gross State Product analogous to GDP (gross domestic product), output excluding the intermediate inputs (primarily compensation and profit).	\$1.29 billion	\$3.8 billion
<b>Total estimated gross economic activity:</b> Amount of production in total sales, includes intermediate goods purchased as well as value-added (compensation plus profit).	<b>\$2.98 billion</b>	<b>\$8.5 billion</b>

Source scenarios calculated using Regional Economic Models, Inc. (REMI) Minnesota Forecasting and Simulation Model, March 2011, Minnesota Pollution Control Agency, Wayne Gjerde.



## Impact of export markets

Many factors impact the price of the recycled material market, including transportation costs, virgin petroleum prices, and increasingly, the demand for recycled material overseas. Emerging economies, most prominently China, are experiencing expansive economic growth that drives significant demand for both virgin and recycled material. China, in particular, has little production of domestic virgin wood pulp and annually imports in excess of 13 million tons of waste paper, which equates to approximately 40 percent of the paper collected in the U.S.

This situation often results in recyclers placing a great deal of reliance on the overseas markets due to increased upward pricing opportunities. This has, at times, caused the local end users to purchase raw material from other sources because they were unable to obtain enough material from local markets. This increases costs for the end markets and makes them less competitive. The problem for the local recycler is that foreign markets are starting to purchase foreign material, reducing demand for material from the United States. Over time increased generation of recyclable material by foreign countries will provide less opportunity for local recyclers to receive a high price or even sell their material overseas. Local markets need to be supported to create a stable price structure and a steady supply of material. If this does not happen, eventually the local recyclers and end markets will become vulnerable.

## Public entity recycling

Minn. Stat. § 115A.151 (Public Entities Recycling Statute) directs the public entities in the state to collect at least three recyclable materials and provide containers to do so. The statute further requires that all recyclable materials collected must be transferred to a recycler. The statute's intent is to ensure the 5,000 public entities in the state capture the increasingly valuable commodity materials, conserve natural resources, and act in concert with Minn. R. 7035.0350 and Minn. Stat. § 115A.02. These articulate the state's goal that recycling is a preferred waste management method over disposal of any type.

Increasing the capture of recyclables offers the potential to reduce disposal costs for Minnesota's public entities. For example in 2010, the Metropolitan Airports Commissions (MAC) "recycled or diverted 910 tons of materials, avoiding more than \$86,000 in disposal costs."<sup>1</sup> The possibility of savings, however, has not been enough of a boost for all public entities to get over one of the main barriers to full compliance with the statute: upfront cost of the containers. K-12 schools are particularly constrained to adequately outfit schools with bins and effective signage.

The Public Entities Recycling statute is interpreted to require that containers should be readily available to users of the buildings where waste is generated, not only on a loading dock or in a cafeteria. Though not required, recycling best practice is to have recycling containers for collected materials paired with trash cans in all cases, and to be clearly differentiated by shape, color, or signage from trash cans. For school districts, setting up an effective program means bins and signage in every classroom.

In 2010 and 2011, the MPCA also worked with partners in two of the four more densely populated areas of the state (Rochester and St. Cloud) to develop school recycling efforts that could be sustained locally and expanded upon in other parts of the state. Case studies for those and other regional expansion projects are online: <http://www.pca.state.mn.us/enzgeaa>. The projects also spurred the development of a school recycling toolkit that is designed to help schools develop effective, integrated school recycling programs on a step-by-step basis. The toolkit is designed to help any school develop or improve their recycling efforts whether their recycling program is advanced or just getting started. The school recycling toolkit is available on the MPCA's Recycle More Minnesota website at <http://recyclemoreminnesota.org/how/school.html>; the agency plans to build off its current school recycling efforts over the next two years.

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<sup>1</sup> <http://www.msairport.com/about-msp/sustainability.aspx> accessed 10/31/11

In the course of providing recycling assistance, the MPCA discovered that some districts had been improperly advised by their service providers to collect MMSW and recycling together. This practice not only confuses users, leads to a contaminated recycling stream, and is a case in which the solid waste management tax is avoided by putting MMSW in a recycling container. The MPCA met with affected schools and service providers. After meeting in 2010, the MPCA obtained assurance from the service provider that they would cease recommending this system. If this practice continues, a stronger agency response is recommended.

## **Status of local government recycling infrastructure**

Many of the public recycling facilities in Greater Minnesota were built in the late 1980s and early 1990s. The last major investment in a new materials recovery facility (MRF) was in St. Louis County in 2001. Given the aging infrastructure, counties are now facing decisions on replacing or upgrading their recycling facilities.

Some counties have transferred recycling operations to the private sector. This has resulted in material being sorted outside of the county and potentially reduces the market access of processors in Minnesota due to the material being marketed on a national contract. The result is that many materials leave the state when the materials could be used locally. This increases the production costs for these manufacturers and results in less profit and job creation. Local haulers are sometimes faced with building their own sorting facilities or hauling to a distant MRF owned by a competitor. This can result in a competitive disadvantage when market prices drop such as the case in 2007 and 2008 when haulers delivering material to private MRFs were paying to deliver recycled material instead of receiving money for it.

The MPCA will continue to monitor the recycling infrastructure in Minnesota and promote activities such as regional cooperation to achieve economies of scale that may lead to cooperatively owned and managed facilities such as MRFs.

## Part 4: Organics Management

The management of organic materials has been a component of Minnesota's waste management system for over 20 years. From 1986 to 1995, processing facilities were built to manage the organic materials of MMSW. However, a ruling by the U.S. Supreme Court in 1995 overturned flow control, the tool used to direct MMSW to these processing facilities. Flow control has since been partially reinstated but market forces have moved the industry toward composting source-separated organic materials instead because it creates a clean marketable product.

The diversion of food waste from disposal began in the early 1990s with food-to-livestock programs. As a mature system the amount of food diverted by these programs was 174,755 tons in 2010. This particular form of recycling of food waste has neared its capacity and it is not expected to see large increases in diversion.

The collection and processing of source-separated materials for composting began in earnest in 1997 and has grown slowly. There have been a number of barriers to these programs including collection barriers and a lack of processing capacity. Table 3 below illustrates the management methods for organics in Minnesota.

**Table 3: Statewide source-separated organic materials by category (in tons) — 2008 to 2010**

Year	Food to livestock	Food to people	Source-separated compostable materials	Total organics diverted	Total MMSW generated	Percent of MMSW stream diverted
2008	144,127	1,672	7,681	153,481	5,926,951	2.6%
2009	160,057	2,007	15,891	177,955	5,650,780	3.1%
2010	174,755	2,291	20,864	197,909	5,630,339	3.5%

In 2010, approximately 200,000 tons of organic materials were diverted from disposal representing 3.5 percent of MMSW generated in the state.

Despite the growing interest in managing organic materials, there remains a significant opportunity to divert organic materials from disposal. The last statewide waste composition study completed in 1999 showed that organics account for 22 percent of the waste disposed in Minnesota. A regional study in 2007 indicated that these percentages are still accurate. Food waste in 2010 still comprises approximately 675,650 and non-recyclable paper comprises approximately 655,000 tons. The management and recycling of organics has been steadily rising and even though in 2010 approximately 200,000 tons of organics was recycled, there are still approximately 1 million tons of organic materials being disposed in MMSW.

There are essentially three strategies that could be chosen to address the remaining organic materials that are currently being disposed in MMSW:

- Strengthen the current voluntary system.
- Pursue a mandatory system.
- Ban organics from disposal.

Depending on the strategies chosen and the parameters set for each strategy, the amount of material recovered would vary widely.

Over the past 20 years, a number of studies and stakeholder dialogues have been undertaken to evaluate the successes of the state waste management system. The efforts have identified the barriers and opportunities to increase the diversion of organic materials.

## Barriers

Collection and processing infrastructure limitations/challenges are identified as the most significant barriers inhibiting significant growth in organics management in Minnesota. A secondary barrier is the availability of markets for finished compost.

However, due to actions by the counties in the Twin Cities metropolitan area, the composting industry, and the MPCA, several of the barriers to collection have been reduced or eliminated. For example, to reduce collection costs, Minn. Stat. § 115A.931 was amended to allow the co-collection of yard waste and source-separated compostable materials (SSCM). In 2011, SSCM was added to the “Recyclable Materials” definition in statute, thus allowing municipalities to add SSCM to the recyclable materials collected at the curb. This change is quite recent and, to date, no local units of government have used this tool. However, as cities renew their curbside recycling contracts, it is likely that organics will be included.

At this time, there are two primary remaining barriers: the lack of compost facilities that can handle source-separated organic materials in a cost effective way, and the shortage of wood waste resulting from the increased use of biomass burning facilities. Wood is used as a carbon source in the composting process to reduce compaction and improve aeration. A third possible barrier is the arrival of the emerald ash borer, which has the potential of restricting the movement of yard waste during the warmer months, April through September.

The MPCA is in the process of amending its current rule to facilitate the creation of facilities that will allow the co-composting of SSCM and yard waste. As cities begin to include SSCM in their recycling contracts, more composting capacity will be needed. Current MPCA rule-making efforts, when completed, will allow that capacity to be built more cost effectively while still protecting the environment.

For the past several years, the decreasing amount of wood waste available at composting facilities has raised the possibility of facilities not being able to get the right mix of carbon to nitrogen and the porosity needed to avoid operational issues such as odor generation. In addition, if compost facilities purchase the wood waste they need, they are subject to industrial stormwater regulations, something compost facilities currently are exempt from because they treat/use all water generated on-site.

The emerald ash borer (EAB) will eventually generate large amounts of wood waste in Minnesota. However, the presence of EAB results in restricted movement of wood waste from quarantine areas from April 1 to September 30, unless the wood waste is ground. Currently there are two counties, Hennepin and Ramsey, impacted by the EAB quarantine. The primary compost facility serving those two counties is located in Dakota County, so the vast majority of yard waste (because it usually contains wood waste) and all wood waste from these two counties must be ground for six months out of the year. This adds significant expense and creates a feedstock that is quite fine by compost standards.

During the past decade, a number of developments have increased the markets for finished compost in Minnesota. First, the MPCA worked with the Minnesota Department of Agriculture to classify compost as a soil amendment rather than a fertilizer, reducing the regulatory requirement for the sale of the finished product. The agency also included compost as a stormwater management tool in the Minnesota Stormwater Manual, creating new markets for compost. Specifically, research showed the value of compost in reducing stormwater runoff as a component in rain gardens and re-vegetating difficult areas such as steep slopes or road shoulders. Recent conversations indicate that metro watershed organizations are considering including compost in standards for post-development soil to increase infiltration of stormwater and reduce runoff. In sandy soils, compost increases the water-holding capacity and reduces the amount of water pumped from aquifers for watering vegetation. Finally, in 2008, the Legislature enacted a law requiring the use of compostable bags for the collection of yard waste in the metropolitan area, which reduced contamination in the finish product (of small pieces of plastic from yard waste bags); the cleaner compost contributed to increased demand and broader use.

## **Compost grant funding**

In 2009, the Legislature allocated \$500,000 to be distributed via a competitive grant program to increase composting, reduce the amount of organic wastes entering disposal facilities, and reduce the cost associated with hauling waste by locating composting sites closer to waste generators.

The MPCA issued a request for proposals in 2010 and 2011 for a competitive grant program. In 2010, eight proposals were received and seven were awarded. In 2011, four applications were received and three were awarded.

A total of \$462,904 was awarded to grantees, \$33,791 was allotted for staff hours to administer the grants, and \$3,305 was directed to the general fund. An update on the status of these grants can be found in Appendix 2.

## Part 5: Waste to Energy

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The use of waste to energy (WTE) plays a significant role in the recovering of materials and energy from municipal solid waste and currently one third of MMSW disposed in Minnesota is processed by these facilities. The use of waste to energy is preferred over land disposal in Minnesota and works in conjunction with the source separation of various materials by processing the remaining mixed waste stream.

Each of the waste-to-energy facilities in the state has been operating for more than 15 years. The WTE facilities fall into several categories:

- Small-scale MMSW mass-burn facility expansion
- Large-scale MMSW mass-burn facility expansion
- Refuse-derived fuel and recycling facilities
- Refuse-derived-fuel-fired power plants

Four trends characterize the current status of waste to energy in Minnesota. These include:

- Expansion of existing WTE facilities.
- Addition of pre-processing to recover recyclables at the small-scale mass burn facilities.
- Upgrade of recycling equipment at the large scale refuse-derived-fuel (RDF) facilities.
- Extension of steam lines at the existing WTE facilities.

These trends are illustrated by the following examples:

- The **Pope/Douglas WTE facility** completed an expansion in 2011 to double its capacity with the addition of a third combustion unit. The project is forecasted to operate at capacity in 2012 and serve a total of seven counties. This project has already installed a preprocessing system to remove recyclables and problem materials. This is expected to increase the recovery of recyclables by 5 percent to 8 percent. It is in the process of adding a new steam line to serve the Alexandria Technical College in addition to its other energy customers.
- The **Perham WTE facility** is proposing an expansion of its capacity to serve an expanded region of four counties. These four counties formed a joint powers board and took ownership of the facility in 2011. The Prairie Lakes Solid Waste Authority is proposing to add a pre-processing project integrated with the WTE expansion to add recyclables recovery from MMSW.
- The **city of Red Wing's existing WTE facility** recently commissioned a new pre-processing facility to both recover recyclables from MMSW and to sort/process source separated recyclables collected by city crews.
- The **Olmsted/Dodge WTE facility** completed its expansion of its third combustion unit in 2010. The project is extending steam lines to expand the district heating and cooling system to the Rochester Community and Technical College campus.
- **Hennepin Energy Recovery Center (HERC)** is proposing an amendment to its operating permit to process MMSW at the facility's full capacity. The HERC proposal is now pending as MPCA reviews the project's environmental assessment worksheet.

The refuse-derived fuel (RDF) and recycling facilities owned by RRT (Newport) and GRE (Elk River) have been upgraded to more effectively remove and recycle ferrous and non-ferrous metals from MMSW. The facilities produce RDF for shipment to three special power plants that burn RDF instead of fossil fuels to make electricity.

Industry watchers have proposed several forces that could be influencing developments in MMSW processing and WTE in Minnesota:

- Pre-processing has been demonstrated to reduce operating costs and unscheduled outages at small-scale WTE facilities whose combustion trains are more sensitive to glass and metal damage. Large-scale WTE facilities appear to be more robust and therefore may not significantly benefit from pre-processing.
- Commodity values for ferrous and non-ferrous metals were very high during the late 2000s and therefore highly effective metal recovery from MMSW had a shorter payback period.
- WTE systems have been shown to be highly effective and reliable power plants. Air pollution control system improvements made in the 1990s have generally given facilities an excellent emission control profile that far exceeded U.S. EPA and MPCA standards for air toxics. As the costs of these systems have been retired, facility financial capacity has grown. At the same time, MMSW generation outpaced projection thus exceeding capacity of some facilities. The positive track record of WTE has made more counties willing to join existing WTE projects. Together, these developments have made expansion more feasible.

## **Enforcement of Minn. Stat. § 473.848**

Given the existing, yet underutilized, waste-to-energy capacity available in the metro area, the MPCA is considering how to achieve compliance with Minn. Stat. § 473.848, often referred to as “restriction on disposal.” In 2011, the MPCA adopted the *Metropolitan Solid Waste Management Policy Plan 2010-2030*. The Policy Plan identified the four processing facilities that serve one or more of the seven counties in the metropolitan area. Of those four, only one of those facilities was operating at capacity. In 2010, approximately 300,000 tons of MMSW bypassed the processing facilities and were disposed in a landfill. In 2011, approximately 142,000 tons of MMSW bypassed processing facilities. In order to more effectively use the existing WTE capacity, the MPCA anticipates outlining a strategy to achieve compliance with “restrictions on disposal” of MMSW generated in the metropolitan area. To do so, the MPCA plans to collaborate with the seven counties in the Twin Cities metropolitan area, as well as the four Minnesota landfills and four processing facilities subject to the law in an effort to achieve compliance.

## **New technologies**

The technology to process waste is constantly evolving. This is exemplified by Rational Energies, a Minnesota-based company that produces synthetic crude oil from plastics waste. The company is locating a facility in Hennepin County and will separate plastics from MMSW waste at the Brooklyn Park Transfer Station in Hennepin County. After recovering any recyclable PET for recycling end markets, the facility will use the #2 through #7 plastics for processing into oil. The synthetic crude oil is then sent to a refinery for processing into gasoline or other fuel product.

The MPCA expects that other similar facilities, where components of MMSW are converted to a fuel, will be proposed for Minnesota in the coming years.

## Part 6: Revising SCORE Reporting and Solid Waste Data Management

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The 2009 Legislature (Laws 2009, chapter 37, article 1, section 62) required the MPCA, in consultation with the Association of Minnesota Counties, the Solid Waste Administrators Association, the Solid Waste Management Coordinating Board and other interested parties, to make recommendations to improve and abbreviate the SCORE reporting requirements under Minn. Stat. § 115A.557. A number of recommendations were developed for the *SCORE Implementation Plan* report (April 2011):

<http://www.pca.state.mn.us/index.php/view-document.html?gid=15726>.

The key recommendations from that report are:

- Rely on facility reporting rather than county reporting;
- Require haulers to report through their county licenses;
- Require select landfills to conduct periodic waste sorts;
- Simplify the existing SCORE survey form; and
- Reduce duplicative data collection through internal coordination.

Currently the MPCA is in the early stages of developing a new solid waste database for our data. Many of the recommendations will require a functioning database to be implemented. The database is expected to be fully operational in 2013.



## Part 7: Recommendations

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The MPCA recognizes the importance of monitoring and evaluating the existing solid waste policy framework to support a solid waste system that functions efficiently and achieves a high level of environmental performance.

The following recommendations are for future legislative consideration, policy research, and stakeholder dialogue.

### Product stewardship

The MPCA recommends that the Legislature enact a flexible, product stewardship approach for mercury-containing lamps, carpet, paint and mattresses, all products that pose challenges for the solid waste system.

Based on the experience with product stewardship for waste electronics and rechargeable batteries in Minnesota and with other products in other states in the U.S. product stewardship offers significant opportunities to reinvent the local government role in recycling by supporting a transition to private sector entities and reducing the taxpayer obligation to manage these products.

The following products were identified as priority products for a product stewardship approach due to presence in the waste stream, low recycling rates, high costs for management, potential for enhanced recycling and the economic development opportunities and in the case of mercury-containing lamps, a toxic constituent.

The MPCA will work with manufacturers, retailers, recyclers, local governments and others along the product chain to examine potential policy approaches and identify areas of common ground.

### Paint

- Leftover paint is the largest-volume and most expensive material collected by county household hazardous waste programs in Minnesota, with annual management costs of between \$5 million and \$6 million.
- Annually, 10 percent (1.3 million gallons) of paint sold in Minnesota is left over from projects, with nearly 500,000 gallons going uncollected.
- Liquid paint (latex and oil) is prohibited from disposal in landfills.
- Oil-based paint (which accounts for 27 percent of collected paint) is considered a hazardous waste due to its flammability. It is banned from disposal in landfills.
- Model state legislation developed by the American Coatings Association has been enacted in Oregon, California and Connecticut that created Paint Care, an industry funded and managed organization to manage the programs in the states with laws.
- Legislation was introduced in the 2012 legislative session in Minnesota that was supported by the American Coatings Association.

### Mercury-containing lamps

- All fluorescent bulbs contain mercury, which makes their safe disposal an important issue for both public health and the environment. Because of concerns about mercury, Minnesota law bans the disposal of household and business fluorescent lamps in the trash, and directs that they must be recycled. This applies to fluorescent lights of all shapes and sizes, including compact fluorescent lamps (CFLs).
- As sales of CFLs increase, concerns about their end-of-life management are growing as well. CFLs (and tubular lamps) are collected at most of the regional household hazardous waste programs in Minnesota, but at least eight counties/facilities do not collect lamps at all. Some retailers also offer collection services, including about 120 small hardware stores.
- In 2008, the national lighting industry estimated that residential CFL discards in Minnesota will increase from 346,000 in 2008 to 2.42 million in 2011, a seven-fold increase.

- Maine, Vermont and Washington are states that have enacted a product stewardship approach for mercury-containing lamps.

## Carpet

- Carpet is a bulky and difficult item to handle at time of disposal and it constitutes a sizable portion of the waste stream.
- Waste composition studies conducted at Minnesota MSW and construction and demolition (C&D) facilities indicate that carpet represents 3.7 percent of the material entering C&D facilities and between 1 and 4 percent of material entering MSW landfills and WTE facilities. The MPCA calculates that approximately 60,000 tons of carpet are disposed in MSW annually while approximately 40,000 tons are disposed in construction and demolition landfills.
- The SCORE report indicates approximately 830 tons of carpet were collected for recycling in Minnesota in 2010. There is one carpet recycler located in the state, Bro-Tex in St. Paul that processes approximately one million pounds annually.
- California enacted a state law (AB 2398) in 2010 that creates a product stewardship program for carpet and resulted in the creation of 14 new private sector collection and/or processing facilities in the state. To access the industry stewardship plan, please see: <http://www.calrecycle.ca.gov/epr/Carpet/CrptPlan.pdf>.

## Mattresses

- The MPCA estimates that 742,550 mattresses are discarded annually. Based on an estimated average unit weight of 55 pounds, that equates to nearly 20,500 tons of mattresses annually. The 2010 SCORE report indicates that 570 tons of discarded mattresses were collected for recycling during the year and processed at the facilities in Minnesota.
- While the MPCA does not have a firm estimate of the recycling rate for mattresses in Minnesota, there were sales of 386,194 mattresses in the Twin Cities Metropolitan Area in 2010 with only 10,930 recycled.
- Despite the challenges posed by management of mattresses, they do offer recoverable materials such as steel, cotton, foam and wood. There are currently two processing facilities located in the state: Goodwill (Duluth) and at PPL Industries (Minneapolis).

The MPCA suggests that manufacturers of the aforementioned products are well positioned to contribute to the financing and management of their products at end of life, thus creating greater recycling opportunities for Minnesota residents. By transferring financial responsibility for recycling from local government to manufacturers, it supports local government reform activity and recognizes the fiscal pressure facing communities in the state.

The MPCA suggests that product stewardship programs are most effective when implemented in accordance with the following program elements:

- Manufacturers have significant flexibility to achieve outcomes with minimal reporting requirements.
- The program supports private entity collection activity.
- The Agency role is focused on program oversight and enforcement if necessary but not operations of the program.

The MPCA's recommended approach is for manufacturers of each product, either individually or through a representative organization, to submit a stewardship plan to the agency that outlines their strategy for collection and recycling for those products throughout the state at end of life. The plan would identify proposed performance goals and be developed in consultation with key stakeholders including local government and recyclers.

Product stewardship, while still maturing in the United States, is able to offer demonstrable results from internalizing costs for end of life management including reduction in costs borne by local governments, economic development and job creation and improved environmental outcomes.

## Changes to SCORE reporting

In 2009, the Legislature instructed the Agency to provide recommendations regarding SCORE reporting with the following stipulations:

- The requirements for the SCORE report shall be abbreviated in scope.
- The agency, in consultation with the AMC, SWAA, and SWMCB, shall:
  - Reduce the resources counties employ to collect the data,
  - Ensure that estimation methods are consistent across counties, and
  - Ensure the data reported are accurate and useful for policy makers.

In order to reduce the reporting burden on counties, while ensuring that the data continues to be accurate and useful, the MPCA proposes shifting data collection and reporting to those entities best positioned to report accurately. For example, counties do not know how much waste is being collected or where it is being taken. Generally, haulers control the information that is needed for our policy analysis.

All haulers would report waste, recycling and organic tonnage data to the Agency to achieve effective and efficient reporting. Data from the haulers will result in more accurate information than has been collected in the past. Most importantly, this step will support the transition from the use of estimates to documented data.

These changes are necessary for the Agency to implement our proposed changes to the reporting form as well as transitioning to more facility based data that does not rely on estimated numbers. The *SCORE Implementation Plan* (April 2011) contains all of the recommendations from the stakeholder group: <http://www.pca.state.mn.us/index.php/view-document.html?gid=15726>.

## Revising solid waste planning

The Waste Management Act requires the counties in Greater Minnesota and one solid waste district to prepare solid waste plans every ten years and every six years for counties in the Metropolitan Area. The planning process is labor intensive and requires a great deal of effort, so it is unsustainable to continue to plan the same way.

The MPCA is examining strategies to reduce the planning requirements while seeking improved environmental outcomes. One approach under consideration is to reduce the number of single county plans by transitioning to a multi-county regional plan structure. Several counties share solid waste services or otherwise have similar systems so a regional planning effort would be constructed accordingly. Within each regional plan, each county can be summarized so as to maintain their autonomy. Another option is to essentially discontinue county planning and consolidate solid waste planning within a state solid waste plan that could be structured to address the various regions within the state.

## Beverage containers

In the 2007 Solid Waste Policy Report, the MPCA recommended the establishment of a goal to recycle 80 percent of beverage containers by January 1, 2012. It further recommended providing opportunities to recycle single-use beverage containers at the point of sale or distribution, and described its intention to conduct a dialogue with the beverage industry to achieve these goals. Significant opportunity exists to increase the collection and recycling of beverage containers and achieve higher economic value.

The MPCA, in collaboration with the Wisconsin Department of Natural Resources (WDNR), pursued a voluntary product stewardship agreement with the beverage industry to fulfill the objectives of the 2007 Solid Waste Policy Report. The MPCA and the WDNR convened four stakeholder meetings between September 2008 and January 2009 to offer stakeholders an opportunity to identify and develop potential strategies to increase the recycling of beverage containers.

MPCA's report on the stakeholder initiative (July 2009) is online:  
<http://www.pca.state.mn.us/index.php/view-document.html?gid=4811>.

Currently, the MPCA estimates that 35 percent of the beverage containers in Minnesota are recycled. The 80 percent goal has not been achieved through voluntary efforts and policy development to increase container collection will be analyzed. Two options exist: 1). Container deposit legislation has shown that 80 percent redemption of covered materials is possible in the United States. 2). Extended producer responsibility or product stewardship for packaging also has the potential to achieve 80 percent recycling rate of beverage containers while reducing the amount of taxpayer dollars spent to manage those containers.

## **Extension of the Metropolitan Landfill Abatement Account**

Strategies to create a level playing field for solid waste management include extension of the Metropolitan Landfill Abatement Account (MLAA) to mixed municipal solid waste generated in the metropolitan area that is accepted at land disposal facilities outside the metropolitan area. The fee would be remitted to the MLAA and the Metropolitan Landfill Contingency Action Trust Fund (MLCAT), in accordance with the disposition of proceeds described in Minn. Stat. § 473.843, subd. 2.

## **Burn barrels**

Each year, the open burning of household waste accounts for 50 percent of all dioxins and furans emitted in Minnesota compared to other sources: point (mining, electrical power generation, etc.), on-road (diesel, gasoline) and non-road (construction, mining, agricultural equipment). These dioxins affect people at high levels in close proximity to the source because of poor dispersion. However, the primary mode of uptake (over 90 percent) for a large segment of society comes from bio-accumulation. Dioxins from burning household garbage disperse and settle on crops and vegetation where it is absorbed and then consumed by animals and people at levels that pose significant health risks. Backyard garbage burning also contributes to roughly half of the wildfires in Minnesota each year.

The practice of burning household garbage in rural Minnesota continues to challenge the MPCA and local units of government despite increased efforts to reduce this practice. These efforts include: education and outreach, enforcement, direct assistance and grants to establish rural garbage and recycling collection sites through a "Burn Barrel Reduction Campaign" implemented from 2007 to 2010.

According to the 2010 Phase II Burn Barrel Study, the multi-faceted campaign resulted in a 12-percent reduction in the number of households (30,657) using garbage burning as means of disposal since the 2005 Baseline Study was completed. This, however, left an estimated 224,815 rural households still burning their garbage on-site each year.

Funded by the MPCA and the Solid Waste Administrators Association, the study also revealed that the overall degree of uncertainty whether garbage burning is permitted increased 7 percent among rural households. This level of uncertainty was even higher (12 percent) in the southwest region of Minnesota where backyard garbage burning is most prevalent.

This confusion comes as no surprise since Minn. Stat. § 88.171 prohibits the burning of nearly all materials found in garbage including plastics, rubber, chemically treated materials and those that create excessive or noxious smoke. Based on this, the MPCA's position is that burning garbage in Minnesota is illegal in nearly all cases.

However, Minn. Stat. § 17.135 allows farmers to burn or bury their garbage on site if it is done in a "nuisance-free, pollution free and aesthetic manner" and only if the county they farm in has not passed a resolution stating that garbage service is reasonably available. Because state statute allows some farmers to burn, it puts the onus of changing that on each county (along with the political challenges that come with it). To date, only 29 out of 87 counties in Minnesota have adopted such a resolution. Due to the inherent conflict between the two statutes confusion is created among residents, local law enforcement and elected officials

which allows on-site burning to continue. The Solid Waste Administrators Association and many other stakeholders are supportive of eliminating the farmer exception found in Minn. Stat. § 17.135.

Accordingly, the MPCA recommends the following course of action:

- Develop changes to current statutes to eliminate contradictory language that creates confusion among residents and enforcement personnel;
- Implement public education and outreach programs allowing local government time to educate, inform and provide citizens with convenient and affordable collection options;
- Establish convenient and affordable drop-off sites to collect garbage and recyclables from residents and farmers; and
- Continue enforcement.

To advance these recommendations, the MPCA submitted a funding proposal to the Legislative-Citizen Commission on Minnesota Resources (LCCMR) that would provide grants to counties and regional authorities to implement education, outreach activities and establish convenient but affordable garbage/recycling drop-off services in rural Minnesota. Although the proposal would provide local units of government the necessary resources to put these recommendations into action, its greatest outcome would be the reduction of dioxins created by the burning of household garbage and the negative environmental and health consequences associated with this practice.



# Report on 2010 SCORE Programs

A summary of recycling and waste management in Minnesota



Minnesota Pollution Control Agency

December 2011

## Legislative Charge

In 1989, the Legislature adopted comprehensive waste reduction and recycling legislation based on recommendations of the Governor's Select Committee on Recycling and the Environment (SCORE). This set of laws, Minn. Stat. § 115A.551-115A.557, commonly referred to as SCORE, initiated a stable source of state funding for recycling programs, as well as waste reduction and the improved management of household hazardous wastes, yard waste, and problem materials. SCORE legislation provides grant dollars, along with funding to counties and local government for long-term flexible programs.

## Authors

Arlene Vee

## Contributors / acknowledgements *(if any)*

Don Kyser

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520 Lafayette Road North | Saint Paul, MN 55155-4194 | [www.pca.state.mn.us](http://www.pca.state.mn.us) | 651-296-6300  
Toll free 800-657-3864 | TTY 651-282-5332

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# Summary

In 1989, the Governor's Select Committee on Recycling and the Environment (SCORE), recommended to the Legislature to adopt a comprehensive set of laws, commonly referred to as SCORE. This act initiated a state funding source for recycling programs, as well as waste reduction, management of household hazardous wastes, and problem materials. SCORE legislation and grant dollars, along with funding from counties and local government, provide the basis for long-term, flexible programs.

This report on the 2010 SCORE programs summarizes information submitted by all 87 counties and the Western Lake Superior Sanitary District on waste management efforts, including waste reduction activities, recycling, household hazardous waste programs, and problem materials collection. The report and information on SCORE programs are available at [www.pca.state.mn.us/score](http://www.pca.state.mn.us/score).

## MSW generation in Minnesota

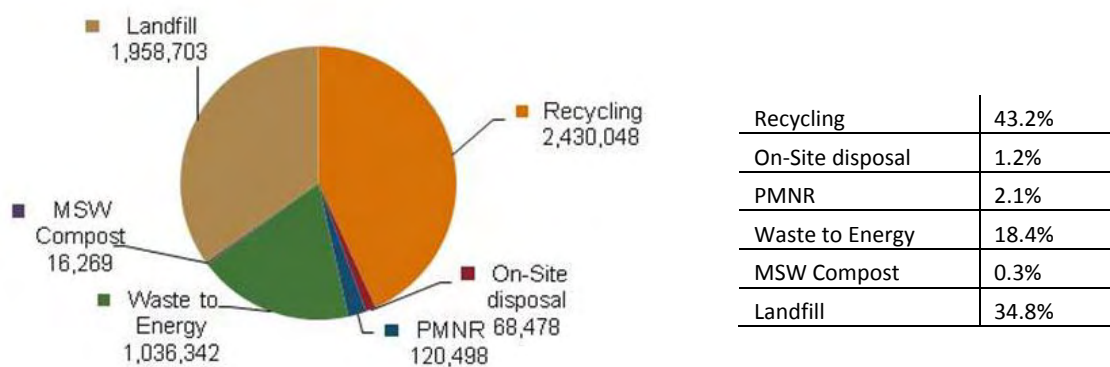
Mixed municipal solid waste (MSW) is defined by statute as garbage, refuse, and other solid waste from residential, commercial, industrial, and community activities that the generator of the waste aggregates for collection. It includes common materials found in household and commercial garbage, such as packaging materials, containers, food discards and other compostable materials, plastic, paper, etc.

MSW does not include auto hulks, street sweepings, ash, construction debris, mining waste, sludge, tree and agricultural wastes, tires, lead acid batteries, motor and vehicle fluids and filters, and other materials collected, processed, and disposed of as separate waste streams (Minn. Stat. § 115A.03, subd. 21).

MSW includes wastes recycled and discarded (including tons sent to disposal and resource recovery facilities), tons disposed of on-site (burn barrels or farm dumps), and problem materials not recycled (PMNR).

Minnesota's MSW generation totaled 5.63 million tons in 2010, a 0.4 percent decrease from 2009. The seven Metro counties generate 57 percent of the waste, with the Greater Minnesota counties generating the remaining 43 percent.

Figure 1: Total MSW generation in Minnesota



## Per capita MSW generation

Waste generation continues to decrease slightly. In 2010, the Minnesota per capita rate decreased insignificantly to 1.062 tons per person (2,123 pounds/person/year) from 1.066 tons per person in 2009, or .01 percent.

In 2010, Minnesota's population increased to 5,303,925, an increase of only 2,983 people, or .01 percent from 2009.

## On-site disposal and problem materials not recycled

On-site disposal of MSW, either burning or burying, has been an ongoing practice for many years. Although it is against the law for most people, some farmers are allowed to burn or bury household garbage under existing Minn. Stat. §§ 88.171 and §§17.135.

In the 2010 SCORE survey, counties reported an estimated 68,478 tons of waste disposed of on-site, or one percent of the total MSW generated. This is a decline from 2009 and can be attributed to increased awareness and education from the MPCA's Burn Barrel Reduction Campaign and increased investment in local programs by counties, cities, and townships, and through campaign grants to counties.

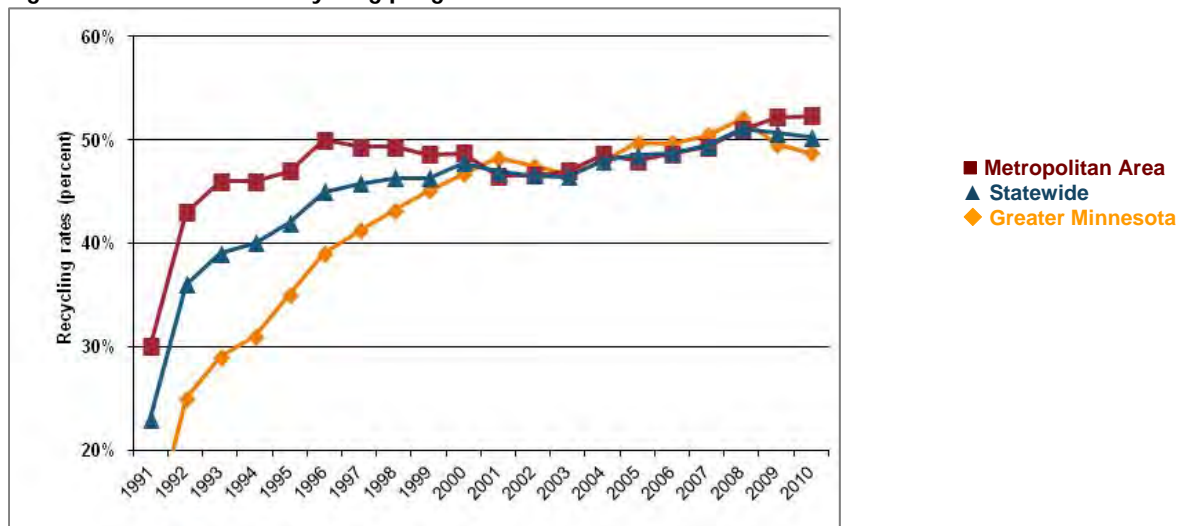
PMNR makes up two percent of the total MSW generation or 120,498 tons for 2010. PMNR includes five materials banned from disposal in Minnesota (vehicle batteries, tires, major appliances, motor oil, and oil filters).

## Recycling and waste reduction

Minnesota's recycling rate, a national leader, reflects strong local and state investment and good public participation. In 2010, 2.43 million tons of materials were recycled, or 43.2 percent (base recycling rate) of the total MSW generated. When credits for yard waste and waste reduction efforts are included, the recycling rate increases to 50.3 percent. The base recycling rate is a more accurate measure of progress as it is the actual percentage of materials recycled.

While this rate reflects the significant investment in our recycling system, as well as strong material markets, evidence suggests much more could be done to recover millions of tons of discarded recyclable and organic materials still disposed of each year.

Figure 2: Minnesota's recycling progress



Recycling tonnages decreased 1.1 percent from 2009. In 2010, 66 percent of the reported recycling tonnages is documented, as either residential; documented commercial/industrial/institutional; and mechanical/hand separated. The remaining 34 percent is estimated commercial/industrial/institutional recycling.

In 2010, textiles saw the largest decrease in recycling of 23 percent while both organics and plastics increased by 11 percent from 2009's reported tonnages.

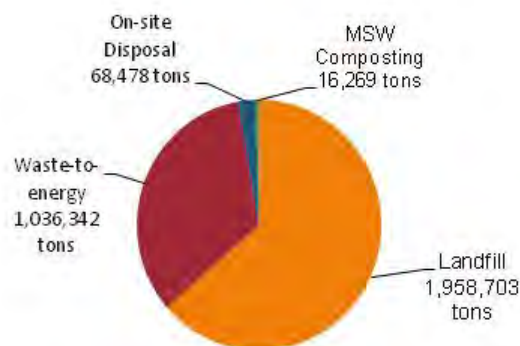
**Table 1: Material types recycled in tons**

Banned	124,789.23
Glass	126,022.02
Metal	411,514.97
Organic	197,909.50
Other	589,467.86
Paper	902,163.01
Plastics	63,227.90
Textiles	14,953.84

## MSW processing and disposal

In Minnesota, waste is managed through four main disposal methods: landfills, MSW composting, resource recovery facilities, and on-site disposal. In 2010, processed or disposed MSW totaled 3 million tons.

**Figure 3: MSW disposal**



Landfill	63%
Waste-to-energy	34%
On-site Disposal	2%
MSW Compost	1%

The amount of MSW processed and disposed of increased in 2010, by 6,367 tons, or 0.02 percent.

In 2010, 62 percent of the amount of total waste was diverted from landfilling by using management practices higher on the hierarchy; recycling, composting of yard waste and food waste, and resource recovery methods. Statewide, however, the amount of materials processed at a resource recovery facility or MSW composting facility decreased in 2010. This trend did not hold true in the northwest region of the state, as there is an increase of the amount of MSW being processed at resource recovery facilities for 2009 and in 2010.

In 2010, the amount of waste leaving Minnesota decreased. In 2010, 380,479 tons of waste was sent to Iowa, Wisconsin, North Dakota, and South Dakota. This is a drop of 21 percent from 2009, or approximately 98,000 tons. The amount of waste sent from Minnesota to Wisconsin was the most significant decrease by approximately 97,000 tons. The decrease of Minnesota waste to Wisconsin may be contributed by many factors (facility locations, hauling companies in operation, existing contracts, surcharges and tip fees, and gas prices). The primary reasons, most likely, are the economy, fuel costs, and the new Wisconsin Solid Waste Tax that was put on all out-of-state waste coming into Wisconsin.

## Funding of SCORE programs

In 2010, a total of \$57.7 million was spent on SCORE expenditures. State disbursement equaled \$14.3 million dollars, which is approximately 25 percent of the amount spent on SCORE-related programs. In 2010, county funds continued to exceed this match, spending more than \$43.4 million or 75 percent of the amount spent toward SCORE-related activities. This investment is in addition to undocumented dollars spent by other local units of government, such as cities and townships, on programs such as recycling, household hazardous waste collection, and waste education.

Money from the state is passed on to the county level in the form of annual block grants. Each county is required to match the funding from the Legislature with a local contribution of at least 25 percent.

Inflation and the poor economy have affected the counties' recycling programs. Counties continue to face challenges for collecting materials and delivering them to markets. Decreases in funding are not covering costs of existing recycling programs, and counties are hard pressed to expand recycling programs.

Counties are reporting that equipment and buildings are getting old and obsolete, and are in need of being replaced and/or updated. Millions of tons of recyclable materials remain in the waste stream along with the missed economic and environmental benefits associated with recycling.

## 2011 Solid Waste Policy Report

Every other year, the MPCA makes solid waste policy recommendations to the Legislature in the form of a solid waste policy report. The *2011 Solid Waste Policy Report* highlights policy recommendations and discusses other subsequent recommendations. Go to: [www.pca.state.mn.us/aj0r879](http://www.pca.state.mn.us/aj0r879)

# Appendix A:

## County Score Survey Responses

**County Survey Responses**  
**Finances: Revenues (Part 1)**

<b>County</b>	<b>CY2009 revenue carried over</b>	<b>Adjustment to carryover</b>	<b>General revenue</b>	<b>Service fee</b>	<b>Processing facility tip fee</b>	<b>Land disposal facility surcharge</b>
Aitkin	\$222,386	0	\$139,524	\$0	\$0	\$0
Anoka	\$0	0	\$15,855	\$1,041,243	\$0	\$0
Becker	(\$96,353)	96,353	\$0	\$18,640	\$0	\$0
Beltrami	\$63	0	\$0	\$520,645	\$0	\$0
Benton	\$0	0	\$0	\$177,673	\$0	\$0
Big Stone	(\$39,846)	39,846	\$117,617	\$26,670	\$0	\$0
Blue Earth	\$0	0	\$117,582	\$30	\$0	\$0
Brown	\$0	0	\$294,630	\$0	\$0	\$0
Carlton	(\$52,120)	52,120	\$0	\$0	\$76,216	\$0
Carver	\$0	0	\$0	\$377,476	\$0	\$0
Cass	\$0	0	\$0	\$628,630	\$0	\$0
Chippewa	\$0	0	\$121,937	\$0	\$0	\$0
Chisago	\$0	0	\$0	\$156,673	\$0	\$0
Clay	\$200,005	0	\$0	\$529,887	\$0	\$0
Clearwater	\$0	0	\$0	\$72,683	\$0	\$0
Cook	\$0	0	\$206,365	\$0	\$0	\$0
Cottonwood	\$229,474	0	\$185,464	\$0	\$0	\$0
Crow Wing	\$0	0	\$0	\$497,395	\$85,024	\$0
Dakota	(\$1)	1	\$0	\$0	\$0	\$1,304,941
Dodge	\$0	0	\$165,281	\$42,084	\$0	\$0
Faribault	\$5,869	0	\$36,534	\$0	\$0	\$0
Fillmore	(\$5,983)	5,983	\$0	\$0	\$0	\$0
Freeborn	(\$2,559)	2,559	\$370,528	\$0	\$0	\$0
Goodhue	\$260,995	0	\$44,986	\$0	\$0	\$0
Grant	\$63,420	1	\$36,256	\$130,280	\$0	\$0
Hennepin	\$0	0	\$0	\$5,107,539	\$157,368	\$0
Houston	\$0	0	\$2,501	\$0	\$0	\$0
Hubbard	\$0	0	\$499,298	\$0	\$0	\$0
Isanti	\$119,430	0	\$24,140	\$0	\$0	\$0
Itasca	\$0	0	\$377,814	\$0	\$0	\$0
Jackson	\$163,530	0	\$13,988	\$0	\$0	\$0
Kanabec	\$82,613	0	\$13,868	\$0	\$0	\$0
Kandiyohi	\$0	0	\$0	\$208,082	\$0	\$0
Kittson	(\$26,139)	26,139	\$96,617	\$0	\$49,404	\$0
Koochiching	\$0	0	\$92,971	\$93,446	\$10,301	\$0
Lac qui Parle	\$150,340	0	\$97,370	\$0	\$0	\$0
Lake	\$0	0	\$124,809	\$5,335	\$0	\$0
Lake of The Woods	\$0	0	\$142,151	\$0	\$0	\$0
Le Sueur	\$0	0	\$99,243	\$0	\$0	\$0
Lincoln	\$36,646	0	\$123,283	\$150	\$0	\$0
Lyon	\$0	0	\$0	\$243,951	\$0	\$96,638
Mahnomen	\$31,197	0	\$13,988	\$0	\$0	\$0
Marshall	\$0	0	\$14,954	\$0	\$0	\$0
Martin	\$88,937	0	\$235,457	\$0	\$0	\$0
McLeod	\$0	0	\$0	\$1,256	\$229,760	\$1,021,311
Meeker	\$24,808	0	\$15,000	\$0	\$0	\$0

**County Survey Responses**  
**Finances: Revenues (Part 1)**

<b>County</b>	<b>CY2009 revenue carried over</b>	<b>Adjustment to carryover</b>	<b>General revenue</b>	<b>Service fee</b>	<b>Processing facility tip fee</b>	<b>Land disposal facility surcharge</b>
Mille Lacs	\$50,637	0	\$49,195	\$0	\$0	\$0
Morrison	\$0	0	\$168,130	\$0	\$0	\$0
Mower	(\$44,100)	44,100	\$0	\$247,618	\$0	\$0
Murray	(\$8,078)	8,078	\$13,750	\$0	\$0	\$0
Nicollet	\$0	0	\$283,620	\$0	\$0	\$0
Nobles	(\$56,815)	56,815	\$1,958	\$80,042	\$0	\$224,585
Norman	\$0	0	\$50,315	\$0	\$0	\$0
Olmsted	(\$159,568)	159,568	\$0	\$0	\$0	\$0
Otter Tail	\$15,300	0	\$0	\$499,768	\$0	\$0
Pennington	\$102,580	0	\$13,987	\$0	\$0	\$0
Pine	\$109,612	0	\$119,469	\$0	\$0	\$0
Pipestone	\$0	0	\$137,530	\$0	\$0	\$0
Polk	\$238,915	0	\$0	\$260,742	\$0	\$0
Pope/Douglas	(\$21,039)	21,039	\$250,000	\$0	\$0	\$0
Ramsey	\$639,864	0	\$0	\$4,491,909	\$0	\$0
Red Lake	\$0	0	\$18,849	\$0	\$0	\$0
Redwood	(\$7,127)	7,127	\$340,026	\$1,750	\$0	\$0
Renville	\$25,295	0	\$220,525	\$0	\$2,536	\$0
Rice	(\$249,100)	249,100	\$0	\$641,010	\$0	\$0
Rock	(\$989)	989	\$70,996	\$0	\$0	\$0
Roseau	(\$94,105)	94,105	\$0	\$0	\$0	\$0
Scott	\$572,249	0	\$80,055	\$0	\$0	\$0
Sherburne	\$133,607	0	\$0	\$0	\$0	\$120,492
Sibley	\$0	0	\$128,521	\$0	\$0	\$0
St. Louis - partial	\$0	0	\$0	\$505,662	\$0	\$0
Stearns	\$21,547	0	\$73,615	\$84,741	\$0	\$0
Steele	\$0	0	\$0	\$391,164	\$0	\$0
Stevens	(\$15,607)	15,607	\$78,531	\$0	\$0	\$0
Swift	\$17,883	0	\$187,074	\$0	\$0	\$0
Todd	\$0	0	\$264,339	\$0	\$0	\$0
Traverse	(\$47,853)	47,853	\$13,988	\$0	\$0	\$0
Wabasha	\$0	0	\$33,528	\$0	\$0	\$59
Wadena	\$0	0	\$0	\$92,946	\$20,993	\$0
Waseca	\$0	0	\$0	\$71,412	\$0	\$0
Washington	\$0	0	\$0	\$1,133,312	\$0	\$0
Watsonwan	\$396,695	0	\$13,087	\$167,972	\$0	\$0
Wilkin	\$0	0	\$0	\$62,607	\$0	\$0
Winona	(\$35,380)	35,380	\$273,238	\$511,674	\$0	\$0
WLSSD	\$0	0	\$0	\$1,824,822	\$355,293	\$0
Wright	\$728,124	0	\$74,059	\$20,605	\$0	\$0
Yellow Medicine	\$17,760	0	\$0	\$53,828	\$0	\$23,981
<b>Metro Area</b>	<b>\$773,470</b>	<b>\$1</b>	<b>\$15,855</b>	<b>\$12,151,479</b>	<b>\$157,368</b>	<b>\$1,425,433</b>
<b>Greater Minn.</b>	<b>\$3,013,549</b>	<b>\$962,762</b>	<b>\$6,782,543</b>	<b>\$8,871,874</b>	<b>\$829,528</b>	<b>\$1,366,574</b>
<b>Minnesota</b>	<b>\$3,787,019</b>	<b>\$962,763</b>	<b>\$6,798,397</b>	<b>\$21,023,353</b>	<b>\$986,896</b>	<b>\$2,792,008</b>



**County Survey Responses**  
**Finances: Revenues (Part 1)**

<b>County</b>	<b>SCORE pass-through</b>	<b>Grants</b>	<b>HHW funding</b>	<b>Material sales</b>	<b>Other</b>	<b>Total revenue</b>
Aitkin	\$55,950	\$2,179	\$2,772	\$0	\$1,100	\$423,911
Anoka	\$824,534	\$130,874	\$0	\$12,467	\$58,078	\$2,083,051
Becker	\$79,503	\$0	\$33,952	\$0	\$23,518	\$155,613
Beltrami	\$108,653	\$0	\$6,709	\$0	\$0	\$636,070
Benton	\$98,453	\$0	\$484	\$0	\$9,028	\$285,638
Big Stone	\$55,950	\$0	\$2,400	\$0	\$600	\$203,237
Blue Earth	\$149,855	\$0	\$54,265	\$0	\$0	\$321,732
Brown	\$64,285	\$580	\$3,702	\$0	\$12,399	\$375,596
Carlton	\$84,414	\$17,276	\$5,998	\$3,700	\$190	\$187,795
Carver	\$223,198	\$112,261	\$0	\$0	\$253,756	\$966,691
Cass	\$70,342	\$0	\$6,044	\$0	\$0	\$705,016
Chippewa	\$55,950	\$0	\$3,204	\$0	\$2,497	\$183,588
Chisago	\$124,500	\$0	\$23,253	\$2,025	\$23,500	\$329,950
Clay	\$139,050	\$0	\$0	\$2,867	\$379	\$872,188
Clearwater	\$55,950	\$0	\$5,052	\$0	\$0	\$133,685
Cook	\$55,950	\$0	\$0	\$54,567	\$0	\$316,882
Cottonwood	\$55,950	\$0	\$0	\$781	\$22,199	\$493,868
Crow Wing	\$153,178	\$0	\$9,664	\$0	\$0	\$745,261
Dakota	\$985,614	\$0	\$167,383	\$0	\$0	\$2,457,938
Dodge	\$55,950	\$7,888	\$600	\$122,487	\$1,216	\$395,506
Faribault	\$55,950	\$0	\$0	\$0	\$6,620	\$104,973
Fillmore	\$55,950	\$0	\$0	\$0	\$13,750	\$69,700
Freeborn	\$77,060	\$0	\$6,732	\$613	\$2,575	\$457,508
Goodhue	\$113,821	\$0	\$6,220	\$252,193	\$0	\$678,214
Grant	\$55,950	\$0	\$0	\$0	\$11,969	\$297,876
Hennepin	\$2,891,767	\$372,889	\$81,770	\$1,631,009	\$18,665	\$10,261,007
Houston	\$55,950	\$0	\$5,606	\$114,988	\$17,803	\$196,848
Hubbard	\$55,950	\$0	\$0	\$32,654	\$0	\$587,902
Isanti	\$96,560	\$0	\$1,299	\$0	\$0	\$241,429
Itasca	\$109,898	\$0	\$4,325	\$5,193	\$0	\$497,230
Jackson	\$55,950	\$0	\$0	\$1,073	\$13,864	\$248,405
Kanabec	\$55,950	\$0	\$449	\$0	\$0	\$152,880
Kandiyohi	\$102,542	\$0	\$60,410	\$370,797	\$91,938	\$833,769
Kittson	\$55,950	\$0	\$4,651	\$54,642	\$5,651	\$266,915
Koochiching	\$55,950	\$0	\$3,353	\$29,460	\$0	\$285,482
Lac qui Parle	\$55,950	\$0	\$2,400	\$0	\$1,886	\$307,946
Lake	\$55,950	\$0	\$5,007	\$33,531	\$127	\$224,759
Lake of The Woods	\$55,950	\$0	\$0	\$45,100	\$0	\$243,202
Le Sueur	\$69,228	\$0	\$2,978	\$26,482	\$14,539	\$212,470
Lincoln	\$55,950	\$0	\$0	\$0	\$20,999	\$237,029
Lyon	\$61,500	\$0	\$51,551	\$0	\$35,791	\$489,431
Mahnomen	\$55,950	\$0	\$2,709	\$0	\$0	\$103,843
Marshall	\$55,950	\$0	\$0	\$27,525	\$7,949	\$106,378
Martin	\$55,950	\$0	\$0	\$0	\$5,630	\$385,974
McLeod	\$91,762	\$0	\$12,474	\$467,702	\$75,375	\$1,899,641
Meeker	\$57,039	\$0	\$3,330	\$0	\$949	\$101,126
Mille Lacs	\$65,290	\$0	\$2,385	\$0	\$0	\$167,507

**County Survey Responses**  
**Finances: Revenues (Part 1)**

<b>County</b>	<b>SCORE pass-through</b>	<b>Grants</b>	<b>HHW funding</b>	<b>Material sales</b>	<b>Other</b>	<b>Total revenue</b>
Morrison	\$80,908	\$0	\$5,600	\$0	\$231,652	\$486,290
Mower	\$94,056	\$0	\$7,822	\$202,426	\$900	\$552,822
Murray	\$55,950	\$0	\$0	\$0	\$1,287	\$70,987
Nicollet	\$79,209	\$0	\$5,340	\$0	\$7,665	\$375,833
Nobles	\$55,950	\$0	\$0	\$0	\$17,559	\$380,094
Norman	\$55,950	\$0	\$2,939	\$0	\$0	\$109,204
Olmsted	\$351,386	\$0	\$117,388	\$0	\$904,659	\$1,373,433
Otter Tail	\$140,000	\$0	\$34,909	\$721,388	\$0	\$1,411,365
Pennington	\$55,950	\$0	\$0	\$0	\$0	\$172,517
Pine	\$70,066	\$0	\$0	\$0	\$0	\$299,147
Pipestone	\$55,950	\$0	\$0	\$0	\$29,704	\$223,184
Polk	\$76,117	\$0	\$6,284	\$86,745	\$6,991	\$675,794
Pope/Douglas	\$145,412	\$0	\$14,130	\$2,280	\$600	\$412,422
Ramsey	\$1,277,612	\$171,539	\$0	\$0	\$160,558	\$6,741,483
Red Lake	\$55,950	\$0	\$4,852	\$3,136	\$0	\$82,787
Redwood	\$55,950	\$0	\$37,721	\$224,066	\$54,752	\$714,265
Renville	\$55,950	\$0	\$0	\$0	\$0	\$304,306
Rice	\$155,571	\$0	\$24,378	\$355,697	\$106,387	\$1,283,043
Rock	\$55,950	\$0	\$0	\$0	\$11,926	\$138,872
Roseau	\$55,950	\$0	\$5,478	\$36,403	\$62,999	\$160,830
Scott	\$317,831	\$0	\$0	\$0	\$0	\$970,135
Sherburne	\$217,245	\$0	\$4,279	\$0	\$1,939	\$477,563
Sibley	\$55,950	\$0	\$1,943	\$20,660	\$12,531	\$219,605
St. Louis - partial	\$230,367	\$0	\$15,480	\$17,837	\$632,252	\$1,401,598
Stearns	\$364,909	\$0	\$5,713	\$0	\$38,730	\$589,256
Steele	\$90,750	\$0	\$4,629	\$0	\$2,880	\$489,423
Stevens	\$55,950	\$0	\$0	\$0	\$415	\$134,896
Swift	\$55,950	\$0	\$2,400	\$157,835	\$0	\$421,142
Todd	\$59,522	\$0	\$4,499	\$119,917	\$0	\$448,277
Traverse	\$55,950	\$0	\$0	\$0	\$0	\$69,938
Wabasha	\$55,950	\$0	\$5,000	\$0	\$0	\$94,537
Wadena	\$55,950	\$0	\$0	\$0	\$0	\$169,890
Waseca	\$55,475	\$0	\$2,959	\$256,450	\$1,145	\$387,441
Washington	\$581,645	\$143,756	\$0	\$0	\$115,448	\$1,974,161
Watonwan	\$55,950	\$0	\$2,762	\$0	\$14,711	\$651,177
Wilkin	\$55,950	\$0	\$0	\$154,110	\$200	\$272,867
Winona	\$123,657	\$0	\$22,411	\$49,171	\$8,349	\$988,500
WLSSD	\$252,236	\$57,773	\$227,413	\$105,944	\$78,984	\$2,902,466
Wright	\$296,236	\$1,486	\$12,251	\$30,068	\$2,338	\$1,165,167
Yellow Medicine	\$55,950	\$0	\$0	\$0	\$1,988	\$153,507
<b>Metro Area</b>	<b>\$7,001,615</b>	<b>\$931,319</b>	<b>\$253,432</b>	<b>\$1,643,476</b>	<b>\$608,444</b>	<b>\$24,961,893</b>
<b>Greater Minn.</b>	<b>\$7,250,541</b>	<b>\$87,182</b>	<b>\$908,278</b>	<b>\$4,192,513</b>	<b>\$2,655,646</b>	<b>\$36,920,991</b>
<b>Minnesota</b>	<b>\$14,252,156</b>	<b>\$1,018,501</b>	<b>\$1,161,710</b>	<b>\$5,835,989</b>	<b>\$3,264,090</b>	<b>\$61,882,883</b>

**County Survey Responses**  
**Finances: Revenue Summary**

<b>County</b>	<b>Adjusted CY2009 revenue (carried over)</b>	<b>CY2010 revenue</b>	<b>Total revenue</b>
Aitkin	\$222,386	\$201,525	\$423,911
Anoka	\$0	\$2,083,051	\$2,083,051
Becker	\$0	\$155,613	\$155,613
Beltrami	\$63	\$636,007	\$636,070
Benton	\$0	\$285,638	\$285,638
Big Stone	\$0	\$203,237	\$203,237
Blue Earth	\$0	\$321,732	\$321,732
Brown	\$0	\$375,596	\$375,596
Carlton	\$0	\$187,795	\$187,795
Carver	\$0	\$966,691	\$966,691
Cass	\$0	\$705,016	\$705,016
Chippewa	\$0	\$183,588	\$183,588
Chisago	\$0	\$329,950	\$329,950
Clay	\$200,005	\$672,183	\$872,188
Clearwater	\$0	\$133,685	\$133,685
Cook	\$0	\$316,882	\$316,882
Cottonwood	\$229,474	\$264,394	\$493,868
Crow Wing	\$0	\$745,261	\$745,261
Dakota	\$0	\$2,457,938	\$2,457,938
Dodge	\$0	\$395,506	\$395,506
Faribault	\$5,869	\$99,104	\$104,973
Fillmore	\$0	\$69,700	\$69,700
Freeborn	\$0	\$457,508	\$457,508
Goodhue	\$260,995	\$417,219	\$678,214
Grant	\$63,421	\$234,455	\$297,876
Hennepin	\$0	\$10,261,007	\$10,261,007
Houston	\$0	\$196,848	\$196,848
Hubbard	\$0	\$587,902	\$587,902
Isanti	\$119,430	\$121,999	\$241,429
Itasca	\$0	\$497,230	\$497,230
Jackson	\$163,530	\$84,875	\$248,405
Kanabec	\$82,613	\$70,267	\$152,880
Kandiyohi	\$0	\$833,769	\$833,769
Kittson	\$0	\$266,915	\$266,915
Koochiching	\$0	\$285,482	\$285,482
Lac qui Parle	\$150,340	\$157,606	\$307,946
Lake	\$0	\$224,759	\$224,759
Lake of The Woods	\$0	\$243,202	\$243,202
Le Sueur	\$0	\$212,470	\$212,470
Lincoln	\$36,646	\$200,383	\$237,029
Lyon	\$0	\$489,431	\$489,431
Mahnomen	\$31,197	\$72,646	\$103,843
Marshall	\$0	\$106,378	\$106,378
Martin	\$88,937	\$297,037	\$385,974
McLeod	\$0	\$1,899,641	\$1,899,641
Meeker	\$24,808	\$76,318	\$101,126

**County Survey Responses**  
**Finances: Revenue Summary**

<b>County</b>	<b>Adjusted CY2009 revenue (carried over)</b>	<b>CY2010 revenue</b>	<b>Total revenue</b>
Mille Lacs	\$50,637	\$116,870	\$167,507
Morrison	\$0	\$486,290	\$486,290
Mower	\$0	\$552,822	\$552,822
Murray	\$0	\$70,987	\$70,987
Nicollet	\$0	\$375,833	\$375,833
Nobles	\$0	\$380,094	\$380,094
Norman	\$0	\$109,204	\$109,204
Olmsted	\$0	\$1,373,433	\$1,373,433
Otter Tail	\$15,300	\$1,396,065	\$1,411,365
Pennington	\$102,580	\$69,937	\$172,517
Pine	\$109,612	\$189,535	\$299,147
Pipestone	\$0	\$223,184	\$223,184
Polk	\$238,915	\$436,879	\$675,794
Pope/Douglas	\$0	\$412,422	\$412,422
Ramsey	\$639,864	\$6,101,619	\$6,741,483
Red Lake	\$0	\$82,787	\$82,787
Redwood	\$0	\$714,265	\$714,265
Renville	\$25,295	\$279,011	\$304,306
Rice	\$0	\$1,283,043	\$1,283,043
Rock	\$0	\$138,872	\$138,872
Roseau	\$0	\$160,830	\$160,830
Scott	\$572,249	\$397,886	\$970,135
Sherburne	\$133,607	\$343,956	\$477,563
Sibley	\$0	\$219,605	\$219,605
St. Louis - partial	\$0	\$1,401,598	\$1,401,598
Stearns	\$21,547	\$567,709	\$589,256
Steele	\$0	\$489,423	\$489,423
Stevens	\$0	\$134,896	\$134,896
Swift	\$17,883	\$403,259	\$421,142
Todd	\$0	\$448,277	\$448,277
Traverse	\$0	\$69,938	\$69,938
Wabasha	\$0	\$94,537	\$94,537
Wadena	\$0	\$169,890	\$169,890
Waseca	\$0	\$387,441	\$387,441
Washington	\$0	\$1,974,161	\$1,974,161
Watsonwan	\$396,695	\$254,482	\$651,177
Wilkin	\$0	\$272,867	\$272,867
Winona	\$0	\$988,500	\$988,500
WLSSD	\$0	\$2,902,466	\$2,902,466
Wright	\$728,124	\$437,043	\$1,165,167
Yellow Medicine	\$17,760	\$135,747	\$153,507
<b>Metro Area</b>	<b>\$773,471</b>	<b>\$24,188,422</b>	<b>\$24,961,893</b>
<b>Greater Minn.</b>	<b>\$3,976,311</b>	<b>\$32,944,679</b>	<b>\$36,920,991</b>
<b>Minnesota</b>	<b>\$4,749,782</b>	<b>\$57,133,101</b>	<b>\$61,882,883</b>

**County Survey Responses**  
**Finances: Expenditures by program area (Part 2)**

<b>County</b>	<b>Planning &amp; administration</b>	<b>Recycling</b>	<b>Yard waste</b>	<b>HHW and problem materials</b>	<b>Source reduction</b>
Aitkin	\$142,030	\$50,549	\$370	\$11,619	\$643
Anoka	\$698,398	\$27,110	\$78,980	\$364,025	\$30,091
Becker	\$81,137	\$142,558	\$5	\$164,632	\$0
Beltrami	\$0	\$604,769	\$0	\$30,024	\$0
Benton	\$121,427	\$227	\$0	\$67,150	\$0
Big Stone	\$65,636	\$117,421	\$0	\$11,817	\$0
Blue Earth	\$62,382	\$173,671	\$0	\$73,888	\$0
Brown	\$34,213	\$300,707	\$0	\$37,762	\$0
Carlton	\$74,918	\$100,839	\$6,499	\$49,629	\$0
Carver	\$346,175	\$61,464	\$67,784	\$388,240	\$2,768
Cass	\$100,000	\$526,489	\$0	\$78,527	\$0
Chippewa	\$34,240	\$123,320	\$0	\$24,687	\$0
Chisago	\$138,069	\$50,043	\$0	\$108,584	\$0
Clay	\$153,012	\$309,246	\$58,675	\$122,558	\$0
Clearwater	\$22,418	\$79,762	\$872	\$28,510	\$0
Cook	\$243,351	\$64,148	\$0	\$8,669	\$0
Cottonwood	\$146,688	\$62,841	\$0	\$23,108	\$0
Crow Wing	\$243,579	\$22,028	\$12,072	\$130,553	\$0
Dakota	\$485,399	\$33,456	\$0	\$1,378,869	\$0
Dodge	\$43,317	\$260,484	\$21,009	\$11,439	\$21,009
Faribault	\$24,500	\$25,288	\$0	\$2,983	\$0
Fillmore	\$0	\$71,760	\$0	\$0	\$0
Freeborn	\$115,965	\$288,083	\$0	\$28,144	\$0
Goodhue	\$409,866	\$103,141	\$0	\$30,300	\$0
Grant	\$0	\$189,526	\$0	\$18,212	\$0
Hennepin	\$1,728,080	\$1,776,291	\$13,902	\$3,257,968	\$210,038
Houston	\$22,776	\$264,406	\$0	\$60,455	\$0
Hubbard	\$30,881	\$324,616	\$2,410	\$212,301	\$0
Isanti	\$36,305	\$50,400	\$0	\$6,860	\$0
Itasca	\$96,261	\$363,936	\$0	\$36,667	\$0
Jackson	\$38,024	\$16,600	\$0	\$15,798	\$0
Kanabec	\$3,387	\$48,306	\$0	\$5,039	\$0
Kandiyohi	\$276,640	\$462,674	\$0	\$94,455	\$0
Kittson	\$32,703	\$1,166	\$0	\$7,702	\$0
Koochiching	\$109,308	\$137,895	\$11,250	\$21,066	\$0
Lac qui Parle	\$25,970	\$62,605	\$0	\$16,061	\$0
Lake	\$33,428	\$135,453	\$864	\$55,009	\$1
Lake of The Woods	\$5,343	\$198,022	\$1,183	\$38,029	\$0
Le Sueur	\$49,130	\$43,543	\$0	\$53,131	\$0
Lincoln	\$50,406	\$155,431	\$500	\$16,416	\$300
Lyon	\$35,788	\$260,401	\$0	\$145,672	\$4,000
Mahnomen	\$45,775	\$10,295	\$0	\$16,326	\$0
Marshall	\$30,652	\$0	\$0	\$10,514	\$0
Martin	\$30,809	\$218,898	\$856	\$5,669	\$1,257
McLeod	\$576,950	\$902,974	\$8,002	\$73,431	\$0
Meeker	\$10,684	\$16,800	\$0	\$13,508	\$0

**County Survey Responses**  
**Finances: Expenditures by program area (Part 2)**

<b>County</b>	<b>Planning &amp; administration</b>	<b>Recycling</b>	<b>Yard waste</b>	<b>HHW and problem materials</b>	<b>Source reduction</b>
Mille Lacs	\$0	\$65,035	\$0	\$20,821	\$0
Morrison	\$39,707	\$125,133	\$25,685	\$240,941	\$0
Mower	\$95,228	\$442,772	\$0	\$8,722	\$0
Murray	\$73,773	\$31,713	\$0	\$3,407	\$0
Nicollet	\$54,722	\$206,270	\$0	\$65,234	\$0
Nobles	\$98,315	\$216,921	\$0	\$27,518	\$0
Norman	\$21,773	\$65,858	\$0	\$20,177	\$0
Olmsted	\$60,796	\$739,819	\$122,398	\$493,618	\$144,887
Otter Tail	\$719,148	\$403,748	\$3,420	\$160,511	\$7,943
Pennington	\$21,213	\$8,890	\$0	\$11,394	\$0
Pine	\$46,400	\$108,000	\$0	\$5,200	\$0
Pipestone	\$18,697	\$136,052	\$0	\$8,162	\$0
Polk	\$47,864	\$256,674	\$8,485	\$72,743	\$0
Pope/Douglas	\$189,357	\$127,498	\$49,519	\$29,803	\$0
Ramsey	\$1,900,500	\$454,240	\$934,354	\$1,197,977	\$0
Red Lake	\$20,110	\$53,809	\$0	\$8,510	\$0
Redwood	\$215,033	\$261,600	\$13,134	\$50,850	\$8,008
Renville	\$97,467	\$120,728	\$0	\$38,104	\$0
Rice	\$462,566	\$1,058,801	\$34,000	\$176,718	\$200
Rock	\$66,482	\$57,532	\$2,610	\$8,497	\$900
Roseau	\$13,985	\$0	\$0	\$20,429	\$0
Scott	\$131,582	\$0	\$0	\$122,712	\$0
Sherburne	\$2,410	\$189,423	\$0	\$85,518	\$0
Sibley	\$49,730	\$71,745	\$0	\$27,452	\$0
St. Louis - partial	\$210,916	\$790,776	\$10,275	\$217,145	\$25,037
Stearns	\$117,399	\$49,309	\$14,239	\$157,937	\$14,239
Steele	\$118,859	\$345,849	\$0	\$10,619	\$0
Stevens	\$55,080	\$67,821	\$950	\$26,907	\$0
Swift	\$288,074	\$107,067	\$5,500	\$5,473	\$1,050
Todd	\$105,575	\$118,106	\$2,000	\$102,260	\$1,500
Traverse	\$78,005	\$30,940	\$0	\$9,533	\$0
Wabasha	\$90,882	\$37,221	\$0	\$0	\$0
Wadena	\$67,156	\$71,935	\$2,015	\$28,040	\$0
Waseca	\$78,371	\$240,640	\$4,425	\$64,005	\$0
Washington	\$257,981	\$9,254	\$0	\$1,262,802	\$7,736
Watonwan	\$13,968	\$223,661	\$0	\$24,577	\$0
Wilkin	\$36,168	\$186,257	\$4,200	\$45,027	\$0
Winona	\$307,946	\$608,457	\$0	\$73,516	\$0
WLSSD	\$1,557,366	\$369,901	\$395,865	\$313,398	\$0
Wright	\$71,795	\$3,632	\$5,076	\$52,026	\$0
Yellow Medicine	\$666	\$110,361	\$0	\$8,124	\$0
<b>Metro Area</b>	<b>\$5,418,944</b>	<b>\$2,551,238</b>	<b>\$1,095,020</b>	<b>\$7,935,399</b>	<b>\$250,634</b>
<b>Greater Minn.</b>	<b>\$9,540,141</b>	<b>\$15,261,854</b>	<b>\$828,362</b>	<b>\$4,727,013</b>	<b>\$230,973</b>
<b>Minnesota</b>	<b>\$14,959,084</b>	<b>\$17,813,092</b>	<b>\$1,923,383</b>	<b>\$12,662,412</b>	<b>\$481,607</b>

**County Survey Responses**  
**Finances: Expenditures by program area (Part 2)**

<b>County</b>	<b>Education</b>	<b>Market development</b>	<b>Litter prevention</b>	<b>County grants to other local units of government</b>
Aitkin	\$2,268	\$0	\$0	\$0
Anoka	\$120,806	\$0	\$0	\$763,641
Becker	\$7,644	\$0	\$2,000	\$58,250
Beltrami	\$1,277	\$0	\$0	\$0
Benton	\$33,325	\$0	\$0	\$63,509
Big Stone	\$608	\$0	\$0	\$0
Blue Earth	\$11,790	\$0	\$0	\$0
Brown	\$2,914	\$0	\$0	\$0
Carlton	\$7,145	\$0	\$0	\$15,000
Carver	\$3,846	\$0	\$19,634	\$76,779
Cass	\$0	\$0	\$0	\$0
Chippewa	\$1,341	\$0	\$0	\$0
Chisago	\$30,173	\$0	\$3,083	\$0
Clay	\$14,885	\$0	\$0	\$0
Clearwater	\$2,124	\$0	\$0	\$0
Cook	\$714	\$0	\$0	\$0
Cottonwood	\$5,579	\$0	\$0	\$0
Crow Wing	\$16,175	\$0	\$59	\$320,795
Dakota	\$165,409	\$0	\$0	\$394,805
Dodge	\$37,348	\$900	\$0	\$0
Faribault	\$3,206	\$0	\$376	\$48,620
Fillmore	\$0	\$0	\$0	\$0
Freeborn	\$15,448	\$0	\$0	\$0
Goodhue	\$4,053	\$0	\$0	\$0
Grant	\$0	\$0	\$0	\$0
Hennepin	\$238,388	\$0	\$0	\$3,036,340
Houston	\$1,545	\$0	\$0	\$0
Hubbard	\$17,394	\$0	\$300	\$0
Isanti	\$0	\$0	\$0	\$2,500
Itasca	\$365	\$0	\$0	\$0
Jackson	\$11,528	\$0	\$0	\$0
Kanabec	\$687	\$0	\$0	\$0
Kandiyohi	\$0	\$0	\$0	\$0
Kittson	\$0	\$0	\$0	\$245,442
Koochiching	\$5,843	\$0	\$119	\$0
Lac qui Parle	\$598	\$0	\$0	\$0
Lake	\$1	\$2	\$1	\$0
Lake of The Woods	\$624	\$0	\$0	\$0
Le Sueur	\$29,253	\$0	\$0	\$19,322
Lincoln	\$4,200	\$0	\$150	\$0
Lyon	\$43,570	\$0	\$0	\$0
Mahnomen	\$75	\$0	\$0	\$0
Marshall	\$0	\$0	\$0	\$65,212
Martin	\$5,207	\$0	\$422	\$22,315
McLeod	\$13,758	\$0	\$527	\$46,793
Meeker	\$19,016	\$0	\$0	\$19,451

**County Survey Responses**  
**Finances: Expenditures by program area (Part 2)**

<b>County</b>	<b>Education</b>	<b>Market development</b>	<b>Litter prevention</b>	<b>County grants to other local units of government</b>
Mille Lacs	\$0	\$0	\$0	\$0
Morrison	\$1,118	\$0	\$0	\$53,706
Mower	\$6,099	\$0	\$0	\$0
Murray	\$5,823	\$0	\$0	\$0
Nicollet	\$48,564	\$0	\$0	\$0
Nobles	\$10,952	\$0	\$0	\$0
Norman	\$1,395	\$0	\$0	\$0
Olmsted	\$181,233	\$0	\$0	\$0
Otter Tail	\$95,230	\$0	\$2,645	\$3,420
Pennington	\$155	\$0	\$0	\$0
Pine	\$2,000	\$0	\$0	\$0
Pipestone	\$475	\$0	\$0	\$59,798
Polk	\$9,532	\$0	\$0	\$15,000
Pope/Douglas	\$23,334	\$0	\$0	\$0
Ramsey	\$546,171	\$0	\$0	\$1,064,734
Red Lake	\$359	\$0	\$0	\$0
Redwood	\$4,336	\$0	\$2,067	\$0
Renville	\$3,287	\$0	\$0	\$0
Rice	\$15,000	\$1,850	\$200	\$0
Rock	\$3,459	\$0	\$0	\$0
Roseau	\$0	\$0	\$0	\$118,807
Scott	\$68,108	\$0	\$0	\$0
Sherburne	\$45,982	\$0	\$0	\$0
Sibley	\$15,044	\$0	\$0	\$42,364
St. Louis - partial	\$34,224	\$46,927	\$0	\$66,298
Stearns	\$28,998	\$14,239	\$14,239	\$137,511
Steele	\$14,096	\$0	\$0	\$0
Stevens	\$4,436	\$0	\$0	\$0
Swift	\$8,400	\$0	\$0	\$0
Todd	\$1,946	\$0	\$304	\$0
Traverse	\$286	\$0	\$0	\$2,000
Wabasha	\$0	\$0	\$0	\$0
Wadena	\$745	\$0	\$0	\$0
Waseca	\$0	\$0	\$0	\$0
Washington	\$41,167	\$0	\$0	\$395,221
Watonwan	\$3,035	\$0	\$0	\$0
Wilkin	\$1,215	\$0	\$0	\$0
Winona	\$11,017	\$0	\$0	\$0
WLSSD	\$165,351	\$5,380	\$0	\$95,205
Wright	\$482	\$0	\$0	\$177,528
Yellow Medicine	\$7,026	\$0	\$0	\$0
<b>Metro Area</b>	<b>\$1,161,770</b>	<b>\$0</b>	<b>\$19,634</b>	<b>\$5,731,520</b>
<b>Greater Minn.</b>	<b>\$1,128,443</b>	<b>\$69,298</b>	<b>\$26,492</b>	<b>\$1,698,847</b>
<b>Minnesota</b>	<b>\$2,290,213</b>	<b>\$69,298</b>	<b>\$46,126</b>	<b>\$7,430,366</b>



**County Survey Responses**  
**Finances: Balance Sheet**

<b>County</b>	<b>Total revenues</b>	<b>Total expenditures</b>	<b>Balance</b>
Aitkin	\$423,911	\$207,478	\$216,433
Anoka	\$2,083,051	\$2,083,051	\$0
Becker	\$155,613	\$456,226	(\$300,614)
Beltrami	\$636,070	\$636,070	\$0
Benton	\$285,638	\$285,638	\$0
Big Stone	\$203,237	\$195,482	\$7,755
Blue Earth	\$321,732	\$321,732	(\$0)
Brown	\$375,596	\$375,596	(\$0)
Carlton	\$187,795	\$254,030	(\$66,235)
Carver	\$966,691	\$966,691	\$0
Cass	\$705,016	\$705,016	\$0
Chippewa	\$183,588	\$183,588	(\$0)
Chisago	\$329,950	\$329,950	(\$0)
Clay	\$872,188	\$658,376	\$213,812
Clearwater	\$133,685	\$133,685	\$0
Cook	\$316,882	\$316,882	\$0
Cottonwood	\$493,868	\$238,216	\$255,652
Crow Wing	\$745,261	\$745,261	\$0
Dakota	\$2,457,938	\$2,457,938	\$0
Dodge	\$395,506	\$395,506	\$0
Faribault	\$104,973	\$104,973	\$0
Fillmore	\$69,700	\$71,760	(\$2,060)
Freeborn	\$457,508	\$447,640	\$9,868
Goodhue	\$678,214	\$547,359	\$130,855
Grant	\$297,876	\$207,738	\$90,138
Hennepin	\$10,261,007	\$10,261,007	\$0
Houston	\$196,848	\$349,182	(\$152,334)
Hubbard	\$587,902	\$587,902	\$0
Isanti	\$241,429	\$96,065	\$145,364
Itasca	\$497,230	\$497,230	(\$0)
Jackson	\$248,405	\$81,950	\$166,454
Kanabec	\$152,880	\$57,420	\$95,460
Kandiyohi	\$833,769	\$833,769	\$0
Kittson	\$266,915	\$287,014	(\$20,099)
Koochiching	\$285,482	\$285,482	\$0
Lac qui Parle	\$307,946	\$105,235	\$202,712
Lake	\$224,759	\$224,759	\$0
Lake of The Woods	\$243,202	\$243,202	\$0
Le Sueur	\$212,470	\$194,379	\$18,091
Lincoln	\$237,029	\$227,403	\$9,625
Lyon	\$489,431	\$489,431	\$0
Mahnomen	\$103,843	\$72,471	\$31,372
Marshall	\$106,378	\$106,378	\$0
Martin	\$385,974	\$285,433	\$100,541
McLeod	\$1,899,641	\$1,622,435	\$277,207
Meeker	\$101,126	\$79,459	\$21,667
Mille Lacs	\$167,507	\$85,856	\$81,651
Morrison	\$486,290	\$486,290	\$0

**County Survey Responses**  
**Finances: Balance Sheet**

<b>County</b>	<b>Total revenues</b>	<b>Total expenditures</b>	<b>Balance</b>
Mower	\$552,822	\$552,822	\$0
Murray	\$70,987	\$114,716	(\$43,730)
Nicollet	\$375,833	\$374,790	\$1,044
Nobles	\$380,094	\$353,706	\$26,388
Norman	\$109,204	\$109,204	\$0
Olmsted	\$1,373,433	\$1,742,751	(\$369,318)
Otter Tail	\$1,411,365	\$1,396,065	\$15,300
Pennington	\$172,517	\$41,652	\$130,865
Pine	\$299,147	\$161,600	\$137,547
Pipestone	\$223,184	\$223,184	\$0
Polk	\$675,794	\$410,298	\$265,496
Pope/Douglas	\$412,422	\$419,509	(\$7,087)
Ramsey	\$6,741,483	\$6,097,977	\$643,506
Red Lake	\$82,787	\$82,787	\$0
Redwood	\$714,265	\$555,028	\$159,237
Renville	\$304,306	\$259,586	\$44,720
Rice	\$1,283,043	\$1,749,335	(\$466,292)
Rock	\$138,872	\$139,480	(\$608)
Roseau	\$160,830	\$153,221	\$7,609
Scott	\$970,135	\$322,401	\$647,734
Sherburne	\$477,563	\$323,333	\$154,229
Sibley	\$219,605	\$206,335	\$13,270
St. Louis - partial	\$1,401,598	\$1,401,598	\$0
Stearns	\$589,256	\$548,110	\$41,146
Steele	\$489,423	\$489,423	\$0
Stevens	\$134,896	\$155,194	(\$20,298)
Swift	\$421,142	\$415,564	\$5,578
Todd	\$448,277	\$331,691	\$116,586
Traverse	\$69,938	\$120,764	(\$50,826)
Wabasha	\$94,537	\$128,103	(\$33,566)
Wadena	\$169,890	\$169,890	\$0
Waseca	\$387,441	\$387,441	\$0
Washington	\$1,974,161	\$1,974,161	\$0
Watonwan	\$651,177	\$265,241	\$385,936
Wilkin	\$272,867	\$272,867	\$0
Winona	\$988,500	\$1,000,936	(\$12,436)
WLSSD	\$2,902,466	\$2,902,466	\$0
Wright	\$1,165,167	\$310,539	\$854,628
Yellow Medicine	\$153,507	\$126,177	\$27,330
<b>Metro Area</b>	<b>\$24,961,893</b>	<b>\$24,164,157</b>	<b>\$797,735</b>
<b>Greater Minn.</b>	<b>\$36,920,991</b>	<b>\$33,511,423</b>	<b>\$3,409,568</b>
<b>Minnesota</b>	<b>\$61,882,883</b>	<b>\$57,675,580</b>	<b>\$4,207,303</b>

**County Survey Responses**  
**Paper collected for recycling (tons)**

<b>County</b>	<b>Computer paper</b>	<b>Corrugated</b>	<b>Magazine/catalog</b>	<b>Mixed paper</b>	<b>Newsprint</b>	<b>Office paper</b>	<b>Other paper</b>	<b>Phone book</b>	<b>Total paper</b>
Aitkin	0	589	0	464	0	0	0	0	1,053
Anoka	16	47,298	803	12,990	13,866	840	6,181	72	82,066
Becker	0	5,477	103	457	1,219	48	0	9	7,313
Beltrami	25	2,788	0	840	23	69	66	3	3,814
Benton	0	1,696	8,751	364	696	164	289	11	11,970
Big Stone	0	274	0	153	164	0	0	0	591
Blue Earth	0	15,422	1,432	5,367	4,382	255	0	0	26,858
Brown	0	5,482	0	603	939	589	7	0	7,621
Carlton	0	1,500	232	647	663	45	0	0	3,086
Carver	0	6,027	0	13,749	3,422	97	0	0	23,294
Cass	0	2,721	0	566	1,269	184	4	0	4,744
Chippewa	0	1,253	3	19	281	2	0	0	1,558
Chisago	0	2,240	0	0	2,185	312	0	25	4,762
Clay	0	2,446	128	565	995	313	1	28	4,476
Clearwater	0	193	0	79	0	0	0	2	274
Cook	0	495	88	34	81	0	0	0	698
Cottonwood	0	1,371	18	0	188	13	0	0	1,590
Crow Wing	4,544	0	118	2,803	568	5	0	0	8,038
Dakota	0	22,100	168	48,454	17,105	1,270	2,092	0	91,188
Dodge	0	686	43	671	0	78	0	0	1,479
Faribault	0	3,429	0	2,692	0	2	0	0	6,123
Fillmore	0	265	0	918	0	52	0	0	1,235
Freeborn	0	6,434	0	1,043	0	0	0	0	7,477
Goodhue	0	4,179	220	3,873	1,107	3,034	0	0	12,413
Grant	0	133	27	0	79	31	0	0	269
Hennepin	0	46,696	3,853	34,116	37,550	9,761	3,245	113	135,334
Houston	0	294	0	355	192	0	0	0	840
Hubbard	0	1,190	0	0	740	131	0	0	2,061
Isanti	0	2,228	7	44	1,034	0	12	0	3,325
Itasca	20	3,701	90	695	1,300	425	0	20	6,251
Jackson	0	1,260	0	88	365	0	0	0	1,712
Kanabec	0	426	0	0	101	64	0	0	591
Kandiyohi	0	3,709	312	475	676	140	295	20	5,626
Kittson	0	143	25	0	90	5	0	1	264
Koochiching	0	1,527	0	282	105	22	0	0	1,936
Lac qui Parle	0	579	0	0	395	31	0	0	1,005
Lake	0	795	58	26	186	44	89	0	1,198
Lake of The Woods	0	63	0	0	0	0	0	0	63
Le Sueur	0	1,042	0	789	99	13	0	26	1,969
Lincoln	0	271	0	39	225	0	0	0	535
Lyon	0	3,582	657	536	643	14	0	0	5,432
Mahnomen	0	139	7	1	34	0	0	0	181
Marshall	0	65	4	24	117	6	0	2	218
Martin	0	7,098	0	3,968	0	2	0	0	11,068
McLeod	0	3,056	0	637	195	76	0	0	3,965
Meeker	0	1,116	4	346	109	63	0	0	1,637

**County Survey Responses**  
**Paper collected for recycling (tons)**

<b>County</b>	<b>Computer paper</b>	<b>Corrugated</b>	<b>Magazine/catalog</b>	<b>Mixed paper</b>	<b>Newsprint</b>	<b>Office paper</b>	<b>Other paper</b>	<b>Phone book</b>	<b>Total paper</b>
Mille Lacs	0	520	0	619	0	0	0	0	1,138
Morrison	0	2,985	662	2	716	832	0	0	5,197
Mower	0	13,783	46	0	889	227	32	7	14,984
Murray	0	430	16	17	776	23	0	0	1,262
Nicollet	7	2,735	0	4,346	977	2,385	5	229	10,684
Nobles	0	4,196	0	605	203	190	0	0	5,194
Norman	0	32	0	0	32	0	0	1	65
Olmsted	0	14,101	106	7,347	3,254	2,728	5,215	20	32,770
Otter Tail	0	1,950	124	0	816	209	0	0	3,099
Pennington	0	1,153	83	0	230	90	0	0	1,556
Pine	150	1,450	0	392	0	21	775	0	2,788
Pipestone	1	919	0	181	97	0	0	0	1,198
Polk	0	1,778	27	499	0	95	0	7	2,405
Pope/Douglas	0	5,935	0	532	1,398	66	0	0	7,931
Ramsey	0	4,925	1,495	5,037	21,318	58	0	445	33,279
Red Lake	0	100	12	0	72	3	0	0	188
Redwood	110	3,631	186	183	254	485	0	0	4,849
Renville	0	367	0	446	661	0	0	0	1,474
Rice	0	13,243	0	2,856	0	3	0	0	16,102
Rock	0	585	0	0	175	36	0	0	796
Roseau	0	1,868	96	0	172	87	0	0	2,223
Scott	632	11,194	0	11,438	1,803	312	186	0	25,565
Sherburne	0	33	0	10,104	0	0	0	0	10,137
Sibley	0	203	0	222	108	2	0	0	535
St. Louis - partial	0	3,536	0	3,664	764	378	0	0	8,342
Stearns	0	8,688	10,415	3,351	2,400	1,171	3	33	26,061
Steele	0	3,518	2	2,223	0	1,740	2,018	0	9,502
Stevens	0	399	7	53	141	15	0	11	626
Swift	30	696	67	0	515	107	0	3	1,418
Todd	0	1,343	0	10,074	0	0	0	0	11,417
Traverse	0	116	12	0	78	11	0	0	217
Wabasha	0	5,397	78	10	704	6	0	0	6,195
Wadena	0	1,201	0	93	0	2	0	0	1,296
Waseca	0	3,361	66	2,361	264	537	23,716	0	30,305
Washington	0	14,315	49	14,482	19,187	12,358	679	25	61,094
Watsonwan	775	0	0	0	1,086	207	0	0	2,069
Wilkin	0	437	11	0	213	51	0	0	712
Winona	0	10,855	0	3,941	1,494	0	0	0	16,290
WLSSD	0	12,306	504	2,786	5,744	1,195	382	0	22,916
Wright	0	12,371	56	1,442	4,166	4	0	0	18,039
Yellow Medicine	0	624	0	19	342	57	0	0	1,043
									0
<b>Metro Area</b>	<b>648</b>	<b>152,555</b>	<b>6,368</b>	<b>140,266</b>	<b>114,251</b>	<b>24,695</b>	<b>12,384</b>	<b>655</b>	<b>451,821</b>
<b>Greater Minn.</b>	<b>5,662</b>	<b>228,203</b>	<b>24,902</b>	<b>88,829</b>	<b>50,185</b>	<b>19,195</b>	<b>32,909</b>	<b>457</b>	<b>450,342</b>
<b>Minnesota</b>	<b>6,309</b>	<b>380,757</b>	<b>31,270</b>	<b>229,095</b>	<b>164,437</b>	<b>43,890</b>	<b>45,293</b>	<b>1,112</b>	<b>902,163</b>

**County Survey Responses**  
**Metal collected for recycling (tons)**

<b>County</b>	<b>Aluminum</b>	<b>Co-mingled alum/steel/tin</b>	<b>Other ferrous &amp; non-ferrous</b>	<b>Steel/tin cans</b>	<b>Total metal</b>
Aitkin	100	0	308	123	530
Anoka	1,187	256	22,249	6,598	30,291
Becker	123	13	3	81	220
Beltrami	101	79	678	427	1,285
Benton	249	883	5,689	374	7,195
Big Stone	0	158	189	0	348
Blue Earth	9,722	0	7,747	1,370	18,839
Brown	363	0	2,417	172	2,952
Carlton	191	0	43	119	353
Carver	80	336	4,662	120	5,198
Cass	202	0	0	108	310
Chippewa	98	356	0	32	486
Chisago	275	0	567	225	1,067
Clay	189	6,124	0	94	6,407
Clearwater	22	27	433	0	482
Cook	15	0	105	32	152
Cottonwood	13	0	18	92	123
Crow Wing	263	14,527	60	396	15,246
Dakota	2,006	12,532	10,123	4,540	29,201
Dodge	13	118	1,531	0	1,661
Faribault	277	557	731	0	1,565
Fillmore	59	0	137	132	328
Freeborn	1,203	3,397	110	0	4,711
Goodhue	398	70	397	186	1,051
Grant	10	0	10	19	39
Hennepin	5,955	1,229	41,826	2,343	51,353
Houston	232	0	480	13	725
Hubbard	71	329	640	86	1,126
Isanti	449	194	4,155	1,478	6,276
Itasca	76	125	850	150	1,201
Jackson	28	0	542	23	593
Kanabec	0	45	0	691	736
Kandiyohi	252	3	100	94	449
Kittson	6	46	27	24	103
Koochiching	66	0	720	18	803
Lac qui Parle	49	0	108	672	829
Lake	25	5	420	41	492
Lake of The Woods	1	194	0	2	197
Le Sueur	27	736	1,440	307	2,510
Lincoln	57	21	24	0	102
Lyon	278	0	4,200	304	4,783
Mahnomen	10	7	47	0	64
Marshall	6	155	255	0	416
Martin	1,846	3,102	2,723	0	7,671
McLeod	74	1,743	317	85	2,219
Meeker	233	135	349	71	787
Mille Lacs	0	355	0	0	355
Morrison	0	185	6,831	85	7,101

**County Survey Responses**  
**Metal collected for recycling (tons)**

<b>County</b>	<b>Aluminum</b>	<b>Co-mingled alum/steel/tin</b>	<b>Other ferrous &amp; non-ferrous</b>	<b>Steel/tin cans</b>	<b>Total metal</b>
Mower	553	0	89	67	709
Murray	75	129	198	28	430
Nicollet	261	969	581	76	1,888
Nobles	74	4,253	0	0	4,327
Norman	14	0	697	0	711
Olmsted	589	163	5,709	809	7,270
Otter Tail	281	0	3,914	136	4,332
Pennington	0	46	0	0	46
Pine	162	0	1,500	127	1,789
Pipestone	30	0	108	47	185
Polk	172	129	3,339	0	3,640
Pope/Douglas	1,043	0	369	687	2,099
Ramsey	855	124	1,174	8,672	10,825
Red Lake	0	29	275	0	304
Redwood	754	0	2,334	61	3,149
Renville	4	604	53	0	661
Rice	448	220	4,802	357	5,827
Rock	27	0	554	40	621
Roseau	64	0	559	93	716
Scott	158	367	14,172	2,451	17,148
Sherburne	0	14,233	2,151	0	16,384
Sibley	11	91	169	94	365
St. Louis - partial	589	1,890	34,825	352	37,656
Stearns	896	18,558	6,381	2,929	28,763
Steele	44	0	134	74	252
Stevens	60	0	265	153	478
Swift	146	0	49	97	292
Todd	14	0	316	45	375
Traverse	11	3	202	15	230
Wabasha	77	0	3,299	315	3,691
Wadena	0	150	5,456	0	5,606
Waseca	111	0	552	26	689
Washington	1,678	253	4,779	521	7,231
Watonwan	18	0	0	7	25
Wilkin	53	0	58	12	124
Winona	1,137	0	1,210	3,556	5,903
WLSSD	556	0	9,318	468	10,342
Wright	234	0	4,328	856	5,418
Yellow Medicine	3	0	0	81	84
<b>Metro Area</b>	<b>11,919</b>	<b>15,099</b>	<b>98,985</b>	<b>25,244</b>	<b>151,246</b>
<b>Greater Minn.</b>	<b>26,183</b>	<b>75,157</b>	<b>139,196</b>	<b>19,733</b>	<b>260,269</b>
<b>Minnesota</b>	<b>38,102</b>	<b>90,255</b>	<b>238,180</b>	<b>44,977</b>	<b>411,515</b>

**County Survey Responses**  
**Glass collected for recycling (tons)**

<b>County</b>	<b>Food &amp; beverage</b>	<b>Other glass</b>	<b>Total glass</b>
Aitkin	132	0	132
Anoka	5,687	27	5,714
Becker	603	0	603
Beltrami	536	9	545
Benton	1,214	352	1,566
Big Stone	104	0	104
Blue Earth	1,147	0	1,147
Brown	486	0	486
Carlton	695	0	695
Carver	1,663	0	1,663
Cass	148	0	148
Chippewa	14	0	14
Chisago	689	0	689
Clay	535	0	535
Clearwater	0	0	0
Cook	219	0	219
Cottonwood	102	0	102
Crow Wing	1,262	0	1,262
Dakota	10,359	1,437	11,796
Dodge	405	385	790
Faribault	89	49	138
Fillmore	584	0	584
Freeborn	957	0	957
Goodhue	1,474	0	1,474
Grant	89	0	89
Hennepin	22,097	0	22,097
Houston	0	120	120
Hubbard	454	0	454
Isanti	346	0	346
Itasca	1,030	0	1,030
Jackson	98	0	98
Kanabec	0	80	80
Kandiyohi	317	0	317
Kittson	123	0	123
Koochiching	90	0	90
Lac qui Parle	14	57	72
Lake	71	0	71
Lake of The Woods	0	0	0
Le Sueur	321	0	321
Lincoln	80	0	80
Lyon	400	0	400
Mahnomen	25	0	25
Marshall	121	0	121
Martin	896	253	1,149
McLeod	346	0	346
Meeker	248	0	248
Mille Lacs	201	0	201

**County Survey Responses**  
**Glass collected for recycling (tons)**

<b>County</b>	<b>Food &amp; beverage</b>	<b>Other glass</b>	<b>Total glass</b>
Morrison	408	0	408
Mower	376	0	376
Murray	160	0	160
Nicollet	256	0	256
Nobles	214	0	214
Norman	63	0	63
Olmsted	1,941	1,062	3,003
Otter Tail	718	0	718
Pennington	61	0	61
Pine	350	20	370
Pipestone	178	0	178
Polk	238	0	238
Pope/Douglas	1,196	0	1,196
Ramsey	9,429	0	9,429
Red Lake	110	0	110
Redwood	291	0	291
Renville	548	0	548
Rice	1,342	2,030	3,372
Rock	112	0	112
Roseau	207	3,205	3,412
Scott	409	0	409
Sherburne	3,553	0	3,553
Sibley	68	0	68
St. Louis - partial	1,407	0	1,407
Stearns	3,871	1,111	4,982
Steele	570	21,942	22,512
Stevens	121	0	121
Swift	290	0	290
Todd	159	0	159
Traverse	29	0	29
Wabasha	552	0	552
Wadena	125	0	125
Waseca	188	0	188
Washington	2,919	0	2,919
Watonwan	54	0	54
Wilkin	66	0	66
Winona	1,178	0	1,178
WLSSD	2,294	0	2,294
Wright	1,170	0	1,170
Yellow Medicine	193	0	193
<b>Metro Area</b>	<b>52,562</b>	<b>1,464</b>	<b>54,026</b>
<b>Greater Minn.</b>	<b>(52,562)</b>	<b>30,675</b>	<b>71,996</b>
<b>Minnesota</b>		<b>32,139</b>	<b>126,022</b>



**County Survey Responses**  
**Plastic collected for recycling (tons)**

<b>County</b>	<b>Film plastic</b>	<b>HDPE</b>	<b>Mixed plastic</b>	<b>Other plastic</b>	<b>PET</b>	<b>Polystyrene</b>	<b>Total Plastic</b>
Aitkin	0	0	115	0	0	0	115
Anoka	115	334	1,019	618	152	1	2,238
Becker	0	4	149	450	1	0	603
Beltrami	0	0	0	0	0	0	0
Benton	18	497	122	83	48	0	767
Big Stone	0	15	0	0	14	0	29
Blue Earth	1,471	46	300	703	531	40	3,091
Brown	0	0	735	0	0	0	735
Carlton	11	0	253	0	0	0	264
Carver	87	0	882	0	0	34	1,004
Cass	0	52	1,040	0	57	0	1,150
Chippewa	4	3	70	26	1	38	142
Chisago	2	0	314	0	0	0	316
Clay	0	15	160	9	15	0	199
Clearwater	0	0	0	0	0	0	0
Cook	0	0	44	0	0	0	44
Cottonwood	0	5	57	0	0	0	61
Crow Wing	0	0	996	0	0	0	996
Dakota	52	13	6,732	84	2	0	6,883
Dodge	0	0	95	164	0	0	260
Faribault	3	17	234	5	0	0	259
Fillmore	0	0	153	0	0	0	153
Freeborn	550	0	202	0	0	0	753
Goodhue	25	74	25	17	77	0	219
Grant	0	0	31	0	0	0	31
Hennepin	0	119	13,528	168	409	0	14,224
Houston	0	0	17	22	0	0	39
Hubbard	0	0	88	0	0	0	88
Isanti	50	0	153	0	0	0	203
Itasca	44	72	260	0	140	0	516
Jackson	0	0	33	0	0	0	33
Kanabec	0	0	224	0	0	0	224
Kandiyohi	66	102	3	20	88	0	279
Kittson	0	1	17	0	3	0	21
Koochiching	0	17	0	0	16	0	32
Lac qui Parle	0	0	60	3	5	0	68
Lake	0	0	60	0	0	0	60
Lake of The Woods	0	0	0	0	0	0	0
Le Sueur	1	0	98	255	31	0	386
Lincoln	0	5	6	0	11	0	22
Lyon	0	0	201	0	0	0	201
Mahnomen	0	0	7	0	0	0	7
Marshall	0	0	26	0	1	0	27
Martin	16	46	880	10	0	0	952
McLeod	3,514	0	167	0	0	108	3,789
Meeker	0	122	0	0	0	0	122
Mille Lacs	0	0	139	0	0	0	139

**County Survey Responses**  
**Plastic collected for recycling (tons)**

<b>County</b>	<b>Film plastic</b>	<b>HDPE</b>	<b>Mixed plastic</b>	<b>Other plastic</b>	<b>PET</b>	<b>Polystyrene</b>	<b>Total Plastic</b>
Morrison	34	0	163	89	0	0	286
Mower	60	99	0	19	57	0	235
Murray	0	2	72	0	0	0	74
Nicollet	0	71	332	96	96	0	594
Nobles	5	2	321	1,066	1	0	1,395
Norman	0	0	0	0	0	0	0
Olmsted	17	29	691	334	118	17	1,206
Otter Tail	0	130	0	72	145	0	347
Pennington	0	0	28	23	0	0	51
Pine	5	35	0	98	25	0	163
Pipestone	0	0	88	258	0	0	346
Polk	7	1	98	6	0	0	112
Pope/Douglas	58	9	377	43	2	0	488
Ramsey	77	663	420	0	731	0	1,891
Red Lake	0	0	12	0	0	0	12
Redwood	231	71	211	0	46	0	559
Renville	0	0	100	0	0	0	100
Rice	22	3	1,017	0	1	0	1,043
Rock	0	2	5	25	25	0	56
Roseau	221	0	66	139	0	0	426
Scott	41	70	453	305	219	0	1,087
Sherburne	0	0	1,120	0	0	0	1,120
Sibley	0	0	37	0	0	0	37
St. Louis - partial	8	226	30	0	236	0	500
Stearns	50	1,581	407	416	154	0	2,608
Steele	37	5	176	164	2	0	384
Stevens	0	26	0	15	26	0	67
Swift	0	74	0	0	69	0	143
Todd	20	0	51	0	0	0	71
Traverse	0	0	19	0	0	0	19
Wabasha	0	0	276	0	0	0	276
Wadena	3	3	157	0	0	0	164
Waseca	0	37	60	0	124	0	221
Washington	84	3	1,013	0	7	0	1,107
Watsonwan	0	0	12	0	0	0	12
Wilkin	0	0	20	0	0	0	20
Winona	0	0	411	0	0	0	411
WLSSD	160	87	866	0	0	12	1,125
Wright	10	6	2,658	0	1	0	2,675
Yellow Medicine	0	0	53	0	0	0	53
<b>Metro Area</b>	<b>456</b>	<b>1,201</b>	<b>24,047</b>	<b>1,175</b>	<b>1,520</b>	<b>35</b>	<b>28,434</b>
<b>Greater Minn.</b>	<b>6,723</b>	<b>3,593</b>	<b>17,471</b>	<b>4,629</b>	<b>2,164</b>	<b>215</b>	<b>34,794</b>
<b>Minnesota</b>	<b>7,179</b>	<b>4,794</b>	<b>41,518</b>	<b>5,804</b>	<b>3,684</b>	<b>250</b>	<b>63,228</b>

**County Survey Responses**  
**Organics collected for recycling (tons)**

<b>County</b>	<b>Food to livestock</b>	<b>Food to people</b>	<b>Source-separated organics</b>	<b>Total organics</b>
Aitkin	0	0	0	0
Anoka	3,436	0	29	3,465
Becker	0	0	0	0
Beltrami	0	0	0	0
Benton	0	0	0	0
Big Stone	0	0	104	104
Blue Earth	0	0	74	74
Brown	1,765	0	0	1,765
Carlton	0	0	185	185
Carver	10,911	0	257	11,168
Cass	0	0	258	258
Chippewa	0	0	42	42
Chisago	227	0	0	227
Clay	5,791	80	0	5,872
Clearwater	0	0	0	0
Cook	0	0	0	0
Cottonwood	23	0	0	23
Crow Wing	0	0	775	775
Dakota	13,736	0	650	14,386
Dodge	22	0	148	170
Faribault	0	0	0	0
Fillmore	0	0	0	0
Freeborn	0	0	0	0
Goodhue	200	0	42	242
Grant	0	0	0	0
Hennepin	39,221	0	10,751	49,972
Houston	0	0	0	0
Hubbard	39	0	0	39
Isanti	485	0	0	485
Itasca	0	0	0	0
Jackson	21	0	0	21
Kanabec	0	0	0	0
Kandiyohi	156	0	0	156
Kittson	17	0	0	17
Koochiching	0	0	0	0
Lac qui Parle	579	3	9	591
Lake	0	0	0	0
Lake of The Woods	0	0	3	3
Le Sueur	2,550	0	0	2,550
Lincoln	0	8	0	8
Lyon	0	42	0	42
Mahnomen	0	0	298	298
Marshall	0	0	0	0
Martin	0	0	0	0
McLeod	0	0	2,148	2,148
Meeker	0	34	0	34

**County Survey Responses**  
**Organics collected for recycling (tons)**

<b>County</b>	<b>Food to livestock</b>	<b>Food to people</b>	<b>Source-separated organics</b>	<b>Total organics</b>
Mille Lacs	0	0	0	0
Morrison	0	0	70	70
Mower	0	0	0	0
Murray	21	5	0	26
Nicollet	175	0	0	175
Nobles	183	24	0	207
Norman	0	0	0	0
Olmsted	785	0	173	958
Otter Tail	0	0	0	0
Pennington	0	0	0	0
Pine	970	0	0	970
Pipestone	97	0	0	97
Polk	2,319	0	0	2,319
Pope/Douglas	0	0	53	53
Ramsey	38,371	629	384	39,384
Red Lake	0	0	0	0
Redwood	1,890	540	0	2,430
Renville	650	240	0	890
Rice	29,628	0	148	29,776
Rock	0	0	0	0
Roseau	0	0	0	0
Scott	761	0	322	1,083
Sherburne	536	24	103	663
Sibley	5,440	0	0	5,440
St. Louis - partial	0	46	0	46
Stearns	0	0	0	0
Steele	0	0	48	48
Stevens	0	0	0	0
Swift	0	0	1,396	1,396
Todd	0	0	0	0
Traverse	0	0	0	0
Wabasha	4,368	0	0	4,368
Wadena	0	0	0	0
Waseca	0	0	0	0
Washington	7,808	428	185	8,421
Watonwan	0	0	0	0
Wilkin	0	0	0	0
Winona	1,467	0	0	1,467
WLSSD	106	189	2,211	2,506
Wright	2	0	0	2
Yellow Medicine	0	0	0	0
<b>Metro Area</b>	<b>114,244</b>	<b>1,057</b>	<b>12,578</b>	<b>127,879</b>
<b>Greater Minn.</b>	<b>60,510</b>	<b>1,234</b>	<b>8,285</b>	<b>70,030</b>
<b>Minnesota</b>	<b>174,755</b>	<b>2,291</b>	<b>20,864</b>	<b>197,910</b>

**County Survey Responses**  
**Textiles, other collected for recycling (tons)**

<b>County</b>	<b>Carpet</b>	<b>Textiles</b>	<b>Pallets</b>	<b>Unspecified or Other</b>	<b>Mattresses &amp; box springs</b>	<b>Total</b>
Aitkin	0	0	0	3	0	3
Anoka	1	2,760	0	5,208	7	7,976
Becker	0	121	0	0	0	121
Beltrami	0	0	0	0	0	0
Benton	0	0	0	0	0	0
Big Stone	0	7	0	0	0	7
Blue Earth	11	402	13,200	2,000	0	15,613
Brown	0	64	2,164	38	0	2,265
Carlton	0	7	0	0	35	42
Carver	45	147	938	0	0	1,130
Cass	0	41	0	200	0	241
Chippewa	0	0	0	75	0	75
Chisago	0	100	0	0	8	108
Clay	0	259	26	0	4	288
Clearwater	0	15	0	0	0	15
Cook	0	0	0	0	0	0
Cottonwood	0	0	1,200	0	0	1,200
Crow Wing	0	257	0	2	75	334
Dakota	0	2,787	14,888	39,965	0	57,641
Dodge	0	0	127	0	0	127
Faribault	0	15	0	0	0	15
Fillmore	0	14	74	916	0	1,004
Freeborn	0	1	230	0	0	231
Goodhue	0	25	7	0	0	32
Grant	0	0	0	72	0	72
Hennepin	0	0	10	269,025	267	269,302
Houston	0	0	0	97	0	97
Hubbard	0	180	0	0	0	180
Isanti	0	0	72	0	18	90
Itasca	0	0	0	0	0	0
Jackson	0	34	1,223	300	0	1,557
Kanabec	0	0	0	0	9	9
Kandiyohi	0	0	0	0	0	0
Kittson	0	0	0	0	0	0
Koochiching	0	0	4	12	0	16
Lac qui Parle	0	31	137	1	0	168
Lake	0	0	0	14	6	20
Lake of The Woods	0	0	0	0	0	0
Le Sueur	0	1	1,153	0	0	1,153
Lincoln	0	70	0	0	0	70
Lyon	8	875	1,338	1,633	0	3,853
Mahnomen	0	0	0	0	0	0
Marshall	0	0	0	0	0	0
Martin	0	8	0	0	0	8
McLeod	0	0	206	1,798	0	2,004
Meeker	0	0	800	118	0	918

**County Survey Responses**  
**Textiles, other collected for recycling (tons)**

<b>County</b>	<b>Carpet</b>	<b>Textiles</b>	<b>Pallets</b>	<b>Unspecified or Other</b>	<b>Mattresses &amp; box springs</b>	<b>Total</b>
Mille Lacs	0	0	0	0	2	2
Morrison	0	172	1,082	0	17	1,270
Mower	0	83	2,529	0	0	2,612
Murray	0	130	101	0	0	231
Nicollet	0	7	989	0	0	996
Nobles	0	366	1,914	0	0	2,280
Norman	0	0	0	4	0	4
Olmsted	550	500	0	4	0	1,054
Otter Tail	0	18	0	0	0	18
Pennington	0	0	0	1	0	1
Pine	0	0	25	0	23	49
Pipestone	0	266	1,668	0	0	1,934
Polk	0	0	0	5	0	5
Pope/Douglas	120	300	33	0	0	453
Ramsey	0	102	1	191,021	0	191,124
Red Lake	0	0	0	0	0	0
Redwood	19	1,319	550	6,491	0	8,379
Renville	0	45	0	0	0	45
Rice	0	573	3,136	0	0	3,709
Rock	0	39	428	0	0	467
Roseau	0	0	1,229	0	0	1,229
Scott	0	22	4,144	0	0	4,166
Sherburne	0	0	178	0	2	181
Sibley	57	0	13	0	0	70
St. Louis - partial	0	0	0	4	85	89
Stearns	0	0	808	0	0	808
Steele	0	161	1,790	19	0	1,970
Stevens	0	0	0	0	0	0
Swift	0	0	0	0	0	0
Todd	0	0	0	0	0	0
Traverse	0	0	0	0	0	0
Wabasha	0	0	0	5	0	5
Wadena	0	0	0	0	13	14
Waseca	0	0	144	142	0	286
Washington	0	12	0	4,487	0	4,499
Watsonwan	0	0	0	0	0	0
Wilkin	0	0	0	0	0	0
Winona	0	0	5,157	629	0	5,786
WLSSD	21	1,684	537	221	0	2,464
Wright	0	0	0	0	0	0
Yellow Medicine	0	105	0	136	0	241
<b>Metro Area</b>	<b>46</b>	<b>5,830</b>	<b>19,981</b>	<b>509,706</b>	<b>274</b>	<b>535,837</b>
<b>Greater Minn.</b>	<b>786</b>	<b>8,292</b>	<b>44,272</b>	<b>14,938</b>	<b>297</b>	<b>68,585</b>
<b>Minnesota</b>	<b>832</b>	<b>14,122</b>	<b>64,253</b>	<b>524,644</b>	<b>571</b>	<b>604,422</b>

**County Survey Responses**  
**Problem materials (banned) collected for recycling (tons)**

<b>County</b>	<b>Antifreeze</b>	<b>Electronics</b>	<b>Fluorescent &amp; HID lamps</b>	<b>HHW</b>	<b>Latex paint</b>	<b>Major appliances</b>	<b>Used oil</b>	<b>Used oil filters</b>	<b>Vehicle batteries</b>	<b>Waste tires</b>	<b>Total problem matls</b>
Aitkin	0	28	3	5	2	97	86	8	107	148	482
Anoka	79	381	29	5	110	2,012	268	157	2,058	671	5,768
Becker	1	78	2	6	9	258	47	15	200	170	785
Beltrami	3	160	4	22	8	336	36	21	273	123	985
Benton	0	22	0	7	14	241	32	19	246	80	663
Big Stone	0	10	1	1	1	32	11	3	33	48	141
Blue Earth	45	370	21	0	45	384	322	30	1,226	1,998	4,440
Brown	0	28	2	17	17	156	26	12	169	172	599
Carlton	5	43	3	2	8	280	202	25	217	122	906
Carver	3	419	8	46	73	547	73	43	560	183	1,954
Cass	0	124	4	15	5	198	23	13	175	405	962
Chippewa	1	17	3	0	0	95	18	6	86	358	583
Chisago	4	92	3	49	57	477	43	25	331	108	1,188
Clay	24	131	16	7	16	386	264	33	362	328	1,567
Clearwater	0	14	1	4	2	52	7	4	53	17	154
Cook	0	0	0	0	0	33	11	3	32	11	90
Cottonwood	0	10	1	1	3	70	9	5	72	83	256
Crow Wing	22	263	19	3	18	683	50	48	421	170	1,697
Dakota	123	5,296	76	116	274	2,404	321	187	2,459	801	12,058
Dodge	0	38	0	0	0	121	16	9	123	40	348
Faribault	2	32	1	2	1	98	15	9	89	41	290
Fillmore	5	314	5	0	16	125	17	10	128	42	662
Freeborn	1	19	0	0	0	188	25	15	192	63	501
Goodhue	0	30	0	0	0	277	37	22	283	92	741
Grant	0	30	3	3	3	36	5	3	37	12	131
Hennepin	36	2,920	40	76	809	7,014	935	546	7,175	2,338	21,889
Houston	0	90	0	188	0	114	16	9	119	215	751
Hubbard	0	152	9	0	0	123	56	10	125	350	825
Isanti	0	35	1	6	0	235	31	18	241	78	645
Itasca	2	73	4	0	0	750	36	21	277	90	1,253
Jackson	0	19	2	2	2	65	14	5	66	24	199
Kanabec	0	41	2	1	0	142	22	8	100	32	348
Kandiyohi	0	0	0	0	0	253	34	20	259	84	651
Kittson	0	4	1	0	2	27	4	2	28	9	77
Koochiching	0	19	1	2	0	80	11	6	82	27	226
Lac qui Parle	1	12	1	6	10	44	25	3	45	35	182
Lake	3	30	22	0	0	65	25	7	67	162	382
Lake of the Woods	0	0	1	2	5	47	3	3	25	84	170
Le Sueur	4	26	11	5	9	166	46	13	170	135	586
Lincoln	0	18	1	3	0	35	21	3	37	85	203
Lyon	0	0	5	12	3	155	21	12	159	52	419
Mahnomen	0	7	0	0	0	32	4	3	33	11	90
Marshall	1	6	1	1	1	57	8	5	61	40	181
Martin	4	46	33	6	2	177	35	15	176	96	590
McLeod	10	13	0	40	8	222	49	17	228	220	808
Meeker	0	56	20	14	0	140	19	11	143	47	449

**County Survey Responses**  
**Problem materials (banned) collected for recycling (tons)**

County	Antifreeze	Electronics	Fluorescent & HID lamps	HHW	Latex paint	Major appliances	Used oil	Used oil filters	Vehicle batteries	Waste tires	Total problem matls
Mille Lacs	0	12	0	0	0	157	0	0	0	52	221
Morrison	7	198	5	0	11	199	201	16	204	424	1,264
Mower	3	17	1	0	14	235	31	18	240	78	638
Murray	0	4	1	0	0	52	7	4	54	17	140
Nicollet	3	27	22	7	7	214	26	15	211	77	610
Nobles	46	11	4	4	4	128	17	10	131	43	399
Norman	0	19	3	0	2	41	5	3	42	14	129
Olmsted	21	528	34	1	44	865	554	75	885	474	3,481
Otter Tail	2	114	4	43	47	344	46	27	352	115	1,091
Pennington	0	30	2	0	0	84	11	7	86	28	247
Pine	4	22	0	0	0	179	24	14	183	60	484
Pipestone	0	67	5	4	0	112	10	5	59	24	285
Polk	0	72	3	7	6	190	25	15	194	148	659
Pope/Douglas	22	463	19	6	14	284	0	22	290	95	1,214
Ramsey	0	154	0	0	0	3,107	414	242	3,178	1,036	8,130
Red Lake	0	6	1	3	1	46	12	2	25	20	116
Redwood	47	494	30	23	9	193	394	10	328	1,328	2,855
Renville	0	76	6	2	6	195	15	8	105	102	515
Rice	49	163	14	37	56	385	51	30	412	128	1,325
Rock	0	12	1	1	2	58	8	5	60	339	487
Roseau	4	24	14	5	2	178	26	10	112	32	407
Scott	236	128	15	128	86	786	2,676	114	804	335	5,308
Sherburne	1	176	4	0	88	1,310	71	41	543	177	2,412
Sibley	6	18	4	11	2	91	12	7	93	152	396
St. Louis – partial	30	322	11	66	0	2,504	556	40	521	1,114	5,164
Stearns	46	156	5	0	0	904	788	70	925	1,300	4,193
Steele	0	78	13	7	13	221	29	17	226	74	678
Stevens	0	39	0	9	0	58	8	5	60	19	198
Swift	0	32	4	0	0	65	9	5	66	22	202
Todd	2	37	2	0	0	149	20	12	153	128	503
Traverse	0	0	1	0	1	22	3	2	22	7	57
Wabasha	0	0	2	0	0	140	18	10	133	44	347
Wadena	0	36	3	2	8	83	11	6	180	28	357
Waseca	0	45	2	3	0	117	16	16	120	79	398
Washington	11	862	14	0	215	1,429	191	111	1,462	476	4,770
Watsonwan	0	0	0	0	0	67	9	5	69	22	173
Wilkin	0	0	1	1	1	39	5	3	40	13	104
Winona	0	0	10	24	20	309	41	24	316	103	847
WLSSD	53	606	23	15	59	835	93	127	710	231	2,752
Wright	1	58	2	18	19	748	100	58	765	249	2,019
Yellow Medicine	0	5	0	2	0	234	8	5	64	21	339
<b>Metro Area</b>	<b>488</b>	<b>10,159</b>	<b>182</b>	<b>371</b>	<b>1,566</b>	<b>17,299</b>	<b>4,878</b>	<b>1,399</b>	<b>17,696</b>	<b>5,840</b>	<b>59,878</b>
<b>Greater Minn.</b>	<b>485</b>	<b>6,465</b>	<b>461</b>	<b>734</b>	<b>701</b>	<b>19,586</b>	<b>5,040</b>	<b>1,278</b>	<b>16,273</b>	<b>13,888</b>	<b>64,911</b>
<b>Minnesota</b>	<b>973</b>	<b>16,625</b>	<b>643</b>	<b>1,105</b>	<b>2,267</b>	<b>36,885</b>	<b>9,918</b>	<b>2,677</b>	<b>33,969</b>	<b>19,728</b>	<b>124,789</b>



**County Survey Responses**  
**Wastes generated (tons)**

<b>County</b>	<b>Estimated tons of MSW not collected</b>	<b>Problem matls not collected for recycling</b>	<b>Tons collected for recycling</b>	<b>Tons to MSW - landfill disposal</b>	<b>Tons to MSW - processing facilities</b>	<b>Total tons generated</b>
Aitkin	275	213	2,314	9,158	0	11,959
Anoka	0	8,275	137,519	58,625	121,503	325,922
Becker	252	645	9,645	16,360	0	26,902
Beltrami	0	1,020	6,629	9,425	13,100	30,174
Benton	2,673	944	22,161	16,429	609	42,816
Big Stone	840	87	1,323	2,112	0	4,361
Blue Earth	1,219	802	70,062	26,134	19,880	118,097
Brown	1,480	516	16,424	12,950	0	31,370
Carlton	685	613	5,530	12,319	0	19,147
Carver	294	2,293	45,410	45,639	4,533	98,169
Cass	0	466	7,813	15,500	0	23,779
Chippewa	1,679	182	2,901	7,820	0	12,583
Chisago	420	1,278	8,356	21,924	0	31,977
Clay	248	1,026	19,343	27,821	0	48,437
Clearwater	126	219	925	1,540	2,496	5,307
Cook	29	121	1,201	4,363	0	5,714
Cottonwood	1,006	235	3,355	7,559	0	12,155
Crow Wing	232	1,405	28,349	35,558	0	65,544
Dakota	0	10,019	223,154	188,854	45,891	467,917
Dodge	911	507	4,834	1,646	6,091	13,988
Faribault	2,180	340	8,390	753	6,735	18,398
Fillmore	2,959	526	3,967	4,567	720	12,739
Freeborn	168	788	14,629	25,688	0	41,273
Goodhue	420	1,165	16,171	2,175	22,866	42,797
Grant	730	151	631	0	1,977	3,489
Hennepin	0	28,809	564,171	414,457	352,052	1,359,489
Houston	546	325	2,572	1,320	4,955	9,717
Hubbard	0	312	4,773	13,667	0	18,752
Isanti	1,259	933	11,369	23,919	0	37,480
Itasca	371	1,069	10,251	25,705	0	37,396
Jackson	840	243	4,212	4,592	606	10,493
Kanabec	27	376	1,988	7,674	0	10,065
Kandiyohi	420	1,065	7,478	27,477	0	36,439
Kittson	84	114	605	1,600	0	2,403
Koochiching	315	336	3,103	7,655	0	11,409
Lac qui Parle	1,424	144	2,915	3,286	0	7,768
Lake	504	170	2,222	4,721	0	7,618
Lake of The Woods	17	63	433	2,707	0	3,220
Le Sueur	1,039	595	9,476	8,256	7,056	26,422
Lincoln	414	85	1,018	1,802	0	3,319
Lyon	730	652	15,130	14,244	0	30,757
Mahnomen	91	137	665	19	1,742	2,654
Marshall	315	213	964	4,730	0	6,221
Martin	2,375	411	21,438	0	8,928	33,152
McLeod	2,099	752	15,279	16,949	0	35,079
Meeker	1,469	588	4,194	9,386	0	15,637
Mille Lacs	1,049	248	2,056	11,160	0	14,513

**County Survey Responses**  
**Wastes generated (tons)**

<b>County</b>	<b>Estimated tons of MSW not collected</b>	<b>Problem matls not collected for recycling</b>	<b>Tons collected for recycling</b>	<b>Tons to MSW - landfill disposal</b>	<b>Tons to MSW - processing facilities</b>	<b>Total tons generated</b>
Morrison	378	397	15,597	13,352	0	29,724
Mower	1,238	988	19,554	25,058	0	46,838
Murray	756	220	2,323	3,134	0	6,432
Nicollet	1,102	786	15,203	8,569	8,666	34,326
Nobles	756	539	14,015	11,600	0	26,910
Norman	23	173	972	395	2,923	4,486
Olmsted	2,373	3,007	49,743	18,764	66,591	140,478
Otter Tail	831	1,445	9,605	7,250	22,447	41,579
Pennington	1,637	351	1,962	10,052	0	14,003
Pine	1,679	750	6,612	16,891	0	25,932
Pipestone	1,196	220	4,222	4,287	0	9,926
Polk	182	712	9,378	6,305	11,123	27,700
Pope/Douglas	504	467	13,434	2,137	22,030	38,572
Ramsey	0	12,688	294,061	139,467	183,083	629,299
Red Lake	8	76	730	1,483	0	2,297
Redwood	1,175	0	22,512	6,286	0	29,974
Renville	2,057	292	4,233	8,209	0	14,791
Rice	2,560	1,599	61,154	41,473	0	106,787
Rock	420	166	2,539	3,815	0	6,940
Roseau	668	348	8,413	8,551	0	17,980
Scott	10	1,206	54,767	48,538	10,751	115,273
Sherburne	168	2,099	34,450	36,499	15,431	88,647
Sibley	487	263	6,911	5,992	859	14,512
St. Louis - partial	333	846	53,204	50,347	0	104,730
Stearns	1,259	2,133	67,415	64,122	1,664	136,594
Steele	1,007	919	35,346	33,569	0	70,842
Stevens	401	245	1,490	3,383	2,141	7,660
Swift	1,048	232	3,741	3,481	0	8,502
Todd	840	550	12,525	3,883	6,174	23,971
Traverse	504	89	553	1,115	0	2,261
Wabasha	630	535	15,434	8,334	713	25,646
Wadena	378	343	7,561	1,998	6,166	16,445
Waseca	78	435	32,087	6,599	2,014	41,213
Washington	0	6,006	90,039	21,892	67,693	185,630
Watonwan	986	283	2,332	8,599	0	12,200
Wilkin	840	166	1,027	1,301	0	3,333
Winona	881	1,298	31,882	28,512	402	62,975
WLSSD	2,796	2,756	44,399	53,984	0	103,935
Wright	1,133	3,145	29,323	75,650	0	109,251
Yellow Medicine	944	248	1,953	3,582	0	6,727
<b>Metro Area</b>	<b>304</b>	<b>69,295</b>	<b>1,409,122</b>	<b>917,472</b>	<b>785,506</b>	<b>3,181,700</b>
<b>Greater Minn.</b>	<b>68,174</b>	<b>51,203</b>	<b>1,020,927</b>	<b>1,041,231</b>	<b>267,105</b>	<b>2,448,639</b>
<b>Minnesota</b>	<b>68,478</b>	<b>120,498</b>	<b>2,430,048</b>	<b>1,958,703</b>	<b>1,052,611</b>	<b>5,630,339</b>

**County Survey Responses**  
**Recycling rate**

<b>County</b>	<b>Tons collected for recycling</b>	<b>Total MSW generated</b>	<b>Percent of MSW collected for recycling</b>	<b>Source reduction credit</b>	<b>Yard waste credit</b>	<b>Recycling rate with credits</b>
Aitkin	2,314	11,959	19.3%	3.0%	5.0%	27.3%
Anoka	137,519	325,922	42.2%	3.0%	5.0%	50.2%
Becker	9,645	26,902	35.9%	3.0%	5.0%	43.9%
Beltrami	6,629	30,174	22.0%	1.0%	5.0%	28.0%
Benton	22,161	42,816	51.8%	3.0%	5.0%	59.8%
Big Stone	1,323	4,361	30.3%	2.0%	3.0%	35.3%
Blue Earth	70,062	118,097	59.3%	3.0%	5.0%	67.3%
Brown	16,424	31,370	52.4%	1.0%	0.0%	53.4%
Carlton	5,530	19,147	28.9%	3.0%	5.0%	36.9%
Carver	45,410	98,169	46.3%	3.0%	5.0%	54.3%
Cass	7,813	23,779	32.9%	0.0%	5.0%	37.9%
Chippewa	2,901	12,583	23.1%	0.0%	5.0%	28.1%
Chisago	8,356	31,977	26.1%	3.0%	5.0%	34.1%
Clay	19,343	48,437	39.9%	3.0%	5.0%	47.9%
Clearwater	925	5,307	17.4%	2.0%	0.0%	19.4%
Cook	1,201	5,714	21.0%	3.0%	5.0%	29.0%
Cottonwood	3,355	12,155	27.6%	1.0%	5.0%	33.6%
Crow Wing	28,349	65,544	43.3%	8.0%	5.0%	56.3%
Dakota	223,154	467,917	47.7%	3.0%	5.0%	55.7%
Dodge	4,834	13,988	34.6%	3.0%	5.0%	42.6%
Faribault	8,390	18,398	45.6%	3.0%	5.0%	53.6%
Fillmore	3,967	12,739	31.1%	3.0%	5.0%	39.1%
Freeborn	14,629	41,273	35.4%	3.0%	5.0%	43.4%
Goodhue	16,171	42,797	37.8%	0.0%	5.0%	42.8%
Grant	631	3,489	18.1%	0.0%	5.0%	23.1%
Hennepin	564,171	1,359,489	41.5%	3.0%	5.0%	49.5%
Houston	2,572	9,717	26.5%	3.0%	5.0%	34.5%
Hubbard	4,773	18,752	25.5%	3.0%	5.0%	33.5%
Isanti	11,369	37,480	30.3%	2.0%	5.0%	37.3%
Itasca	10,251	37,396	27.4%	3.0%	5.0%	35.4%
Jackson	4,212	10,493	40.1%	3.0%	5.0%	48.1%
Kanabec	1,988	10,065	19.7%	2.0%	5.0%	26.7%
Kandiyohi	7,478	36,439	20.5%	2.0%	5.0%	27.5%
Kittson	605	2,403	25.2%	3.0%	5.0%	33.2%
Koochiching	3,103	11,409	27.2%	1.0%	5.0%	33.2%
Lac qui Parle	2,915	7,768	37.5%	3.0%	0.0%	40.5%
Lake	2,222	7,618	29.2%	1.0%	5.0%	35.2%
Lake of The Woods	433	3,220	13.4%	0.0%	5.0%	18.4%
Le Sueur	9,476	26,422	35.9%	3.0%	5.0%	43.9%
Lincoln	1,018	3,319	30.7%	3.0%	5.0%	38.7%
Lyon	15,130	30,757	49.2%	3.0%	5.0%	57.2%
Mahnomen	665	2,654	25.1%	3.0%	5.0%	33.1%
Marshall	964	6,221	15.5%	2.0%	5.0%	22.5%
Martin	21,438	33,152	64.7%	3.0%	5.0%	72.7%
McLeod	15,279	35,079	43.6%	2.0%	5.0%	50.6%
Meeker	4,194	15,637	26.8%	3.0%	5.0%	34.8%

**County Survey Responses**  
**Recycling rate**

<b>County</b>	<b>Tons collected for recycling</b>	<b>Total MSW generated</b>	<b>Percent of MSW collected for recycling</b>	<b>Source reduction credit</b>	<b>Yard waste credit</b>	<b>Recycling rate with credits</b>
Mille Lacs	2,056	14,513	14.2%	0.0%	5.0%	19.2%
Morrison	15,597	29,724	52.5%	3.0%	5.0%	60.5%
Mower	19,554	46,838	41.7%	2.0%	5.0%	48.7%
Murray	2,323	6,432	36.1%	3.0%	5.0%	44.1%
Nicollet	15,203	34,326	44.3%	3.0%	5.0%	52.3%
Nobles	14,015	26,910	52.1%	3.0%	5.0%	60.1%
Norman	972	4,486	21.7%	0.0%	5.0%	26.7%
Olmsted	49,743	140,478	35.4%	3.0%	5.0%	43.4%
Otter Tail	9,605	41,579	23.1%	3.0%	5.0%	31.1%
Pennington	1,962	14,003	14.0%	2.0%	5.0%	21.0%
Pine	6,612	25,932	25.5%	0.0%	5.0%	30.5%
Pipestone	4,222	9,926	42.5%	3.0%	5.0%	50.5%
Polk	9,378	27,700	33.9%	3.0%	5.0%	41.9%
Pope/Douglas	13,434	38,572	34.8%	3.0%	5.0%	42.8%
Ramsey	294,061	629,299	46.7%	3.0%	5.0%	54.7%
Red Lake	730	2,297	31.8%	3.0%	5.0%	39.8%
Redwood	22,512	29,974	75.1%	3.0%	5.0%	83.1%
Renville	4,233	14,791	28.6%	3.0%	5.0%	36.6%
Rice	61,154	106,787	57.3%	3.0%	5.0%	65.3%
Rock	2,539	6,940	36.6%	3.0%	5.0%	44.6%
Roseau	8,413	17,980	46.8%	3.0%	5.0%	54.8%
Scott	54,767	115,273	47.5%	3.0%	5.0%	55.5%
Sherburne	34,450	88,647	38.9%	3.0%	5.0%	46.9%
Sibley	6,911	14,512	47.6%	3.0%	5.0%	55.6%
St. Louis - partial	53,204	104,730	50.8%	3.0%	5.0%	58.8%
Stearns	67,415	136,594	49.4%	1.0%	5.0%	55.4%
Steele	35,346	70,842	49.9%	2.0%	5.0%	56.9%
Stevens	1,490	7,660	19.4%	3.0%	5.0%	27.4%
Swift	3,741	8,502	44.0%	1.0%	5.0%	50.0%
Todd	12,525	23,971	52.2%	3.0%	5.0%	60.2%
Traverse	553	2,261	24.5%	1.0%	5.0%	30.5%
Wabasha	15,434	25,646	60.2%	3.0%	5.0%	68.2%
Wadena	7,561	16,445	46.0%	1.0%	5.0%	52.0%
Waseca	32,087	41,213	77.9%	1.0%	5.0%	83.9%
Washington	90,039	185,630	48.5%	3.0%	5.0%	56.5%
Watonwan	2,332	12,200	19.1%	0.0%	0.0%	19.1%
Wilkin	1,027	3,333	30.8%	2.0%	5.0%	37.8%
Winona	31,882	62,975	50.6%	3.0%	5.0%	58.6%
WLSSD	44,399	103,935	42.7%	3.0%	5.0%	50.7%
Wright	29,323	109,251	26.8%	2.0%	5.0%	33.8%
Yellow Medicine	1,953	6,727	29.0%	2.0%	5.0%	36.0%
<b>Metro Area</b>	<b>1,409,122</b>	<b>3,181,700</b>	<b>44.3%</b>	<b>3.0%</b>	<b>5.0%</b>	<b>52.3%</b>
<b>Greater MN</b>	<b>1,020,927</b>	<b>2,448,639</b>	<b>41.7%</b>	<b>2.3%</b>	<b>4.7%</b>	<b>48.7%</b>
<b>Minnesota</b>	<b>2,430,048</b>	<b>5,630,340</b>	<b>43.2%</b>	<b>2.4%</b>	<b>4.7%</b>	<b>50.3%</b>

# Appendix 2

2010-12 Compost Grant Summary							
Grantee	Project Summary	Status	Metrics	End of Grant	Grant Award	Grantee Match	Total
Prairie Creek Community School (PCCS)	In the Fall of 2010, PCCS began a pilot program separating organic materials (food and non-recyclable paper) for composting. The goal of the project is to build a model for a successful zero-waste food service and teach students and staff about the benefits of recycling and composting.	The first year of the grant is complete and the interim report has been submitted	213 staff and students participate in the program; 4,939 pounds (2.5 tons) of organic materials was diverted in the first year. The school experienced an increase of 1,277 pounds in recycling, a 50% increase from the previous year; curriculum supporting the recycling efforts was developed. The final report is due June 30, 2012	June 31, 2012	\$11,460	\$9,750	\$21,210
Western Lake Superior Sanitary District (WLSSD)	WLSSD operates a source separated organics material/yard waste composting operation. Organic material is composted using aerated windrows system. Class I compost is produced and marketed in bulk as well as a bagged product. When the facility was constructed in 2001 the 300' x 200' compost pad was constructed using 8" class 5 aggregate over 3/8" cover soil and HDPE liner. Through normal operations, the compost pad had become uneven and potholed and in numerous areas the surface layers have been worn away exposing the HDPE liner. The proposed project would re-level the entire windrow area and replace the gravel surface with a concrete surface. The project would result in increased operation that will allow the facility to handle larger volumes of materials	Compost pad construction completed November of 2011. Increases in compost feedstocks are expected in 2011	Feedstock numbers for 2011 will not be available until the first quarter of 2012	March 31, 2012	\$100,000	\$107,895	\$207,895

2010-12 Compost Grant Summary							
Grantee	Project Summary	Status	Metrics	End of Grant	Grant Award	Grantee Match	Total
Carver County	Carver County and the University of Minnesota Landscape Arboretum constructed a compost site on the Arboretum property. The Carver County/Arboretum will conduct research to test the water that comes in contact with the organic materials to evaluate the risk to surface and ground water.	A variety of barriers delayed the construction of the compost facility. Construction was completed mid-summer 2011 and began accepting yard waste and source separated organic materials in September 2011. Drought conditions prevented the collection of on-site storm water samples.	Diversion of organic materials will not be available until the first quarter of 2012	June 30, 2012	\$100,000	\$50,953	\$150,953
Crow Wing Soil and Water Conservation District	The Crow Wing Soil and Water Conservation District partnered with the Northland Arboretum, Crow Wing County (CWC) Extension, CWC Master Gardeners, City of Baxter, City of Pequot Lakes, City of Crosslake and City of Fifty lakes to sell back yard compost bins. The goal is to sell 1,000 backyard compost binsover the two years of the project and to divert 500 tons of organic materials from the CWC landfill. The CWC Extension and CCWC Master Gardners conducted workshops "How to Compost in the back yard".	Mid-way through the project	9 workshops, 200 students in 2 presentations, 5 cities, 4 events (210 people), sold 510 backyard compost bins. Final report due June 30, 2012	June 30, 2012	\$41,615	\$62,330	\$103,945

2010-12 Compost Grant Summary							
Grantee	Project Summary	Status	Metrics	End of Grant	Grant Award	Grantee Match	Total
City of St. Cloud	The goal of the grant is to develop markets for compost. The City selected three locations to construct eight rain gardens, using a compost sand soil mixture, to treat the first one inch of runoff from each location. Each location had erosion issues with runoff directly entering the Mississippi River. Educational material installed at each site disseminate the value bioretention BMPs contribute to manage storm water in the City and neighborhood areas. The sites are used as examples for contractors, developers, engineers and residents on effective bioretention management of storm water.	Mid-way through the project, Final report due June 1, 2012	Waiting for interim report	June 1, 2012	\$46,300	\$48,220	\$94,520
Northfield Schools	The Projects goal is to establish a source-separated organic collection program District wide. The initial pilot program was conducted at Bridgewater Elementary in the 2010-11 school year. The Bridgewater Green Team educated their peers about the compost program, the benefits and the need for composting. The District has established a source-separated organics collection program in each of the schools in the District (6 schools total).	Mid-way through the project; Final Report due June 30, 2011	The Interim Report documented 19.7 tons of source separated organic materials composted and an increase of 350 pounds of recyclables in the 2010-11 school year. This was caculated to avoid the generation of 18 MTCO2E.	June 30, 2012	\$29,885	\$43,127	\$73,012

2010-12 Compost Grant Summary							
Grantee	Project Summary	Status	Metrics	End of Grant	Grant Award	Grantee Match	Total
Uof MN/Eureka Recycling	Of all the composting strategies, source reduction has the greatest impact on efforts to reduce waste and its impact on the environment. Eureka Recycling and behavioral psychologist Christie Manning will investigate the information people need to motivate them to prevent food from being wasted. This project provides new research about how and what types of food people waste in Minnesota (and the U.S.), their attitudes, practices, and barriers to wasting food. The project will use this data, to create tools, messages, and strategies to engage the community in wasting less food. Eureka used waste sorts to establish a baseline of data to determine the amounts and types of food being wasted (currently unknown) prior to the application of tools. The tools will be employed and Eureka will measure the amount of wasted food again after the application of tools to evaluate the effectiveness of those tools. The climate change impact of the amount of reduced food waste will be calculated. Eureka will use a variety of methods to get feedback on the final toolkit which will be published on the Eureka website.	Mid-way through the project: Final Report due June 30, 2012	To date the following has been completed: Designed and managed an initial set of interviews that were conducted with 26 residents in the originally identified area. Recruited 90 families total to participate in a pilot test of tools and messages designed to help prevent wasted food. Tools were developed based on research, and included meal planning, shopping tips, food storage tips, recipes for using up leftovers, and access to a website linked to more in-depth information about topics ranging from canning to freezing to building root cellars for cold storage. Participants applied these tools at home for 6 weeks, answer specific questions in their weekly journal, take notes on the usability of the content and tools, and share their feedback in a focus group or individual interview. Participants also gave permission for their waste to be collected and sorted during the pilot. All three groups of participants have completed the 6-week pilot testing phase, and feedback and results have begun to be collected.	June 30, 2012	\$50,000	\$18,475	\$68,475



## 2010-12 Compost Grant Summary

Grantee	Project Summary	Status	Metrics	End of Grant	Grant Award	Grantee Match	Total
Bell Plain School District	The Project goal is to reduce the amount of food waste that is generated during the school's lunchtime. Currently, Oak Crest Elementary alone (~360 students) throws out up to 80 gallons a day of total waste at lunch time. We are looking to source-separate this waste, and reduce that number by 75% or more.	Awarded April 12, 2011	No Data available at this time - Final Report June 30, 2012	June 30, 2012	\$4,537	\$3,750	\$8,287
City of Elk River	The City of Elk River has offered a residential source separated organics collection program since 2008. It started as a Pilot program and went city-wide in 2009 through a grant from Sherburne County. Due to lack of funding, the City has struggled to encourage more residents to participate in the program. This grant increases the programs advertising and help off-set the costs of the carts and monthly fee to the residents of Elk River. The initial goal was to get 1,700 residents or 25% of the residents to participate in the program. Lack of funding and staff time made this goal difficult to achieve. The goal of the MPCA grant is to increase participation to 1,000 of the 6,920 Elk River residents.	Awarded March 1, 2011	Approximately 322 households participated prior to the grant. 79 new participants since the grant. This is a 25% increase in participation. Final report due June 30, 2010	June 30, 2012	\$29,107	\$9,703	\$38,810

2010-12 Compost Grant Summary							
Grantee	Project Summary	Status	Metrics	End of Grant	Grant Award	Grantee Match	Total
City of St Paul/Science Museum	<p>The City of Saint Paul (the City) is committed to being a leader in sustainability and expanding recycling and composting opportunities in public spaces, at events and other venues. In February 2010, the Science of Museum of Minnesota (SMM) contracted with Progressive Associates to assess its waste stream and provide recommendations for improvement. The assessment revealed that SMM generated 516,160 lbs of waste per year; recycled at a rate of 18% and that 50% by weight of discarded material was food waste and other organic materials. The City and the SMM are seeking funds to initiate "Project No Waste". The goal is to increase the SMM's recycle rate from 18% to 75% in two years through a combination of compost collection and improved recycling practices. In addition, there is a significant educational component within this project allowing SMM to educate over one million visitors annually.</p>	Awarded March 9, 2011	The project is on going. The final report is due June 30, 2012	June 30, 2012	\$50,000	\$152,200	\$202,000