Report on 2000 **SCORE** Programs

A SUMMARY OF WASTE MANAGEMENT IN MINNESOTA

2000

April 2002

Minnesota Office of **Environmental Assistance**

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Chapter 1

Introduction

Minnesota has invested many resources to develop an effective management system for municipal solid waste (MSW). Planning in the state has focused particular attention on building recycling programs and on the recovery of resources from waste, reducing the state's reliance on landfills. These investments, coupled with the enthusiastic support of Minnesotans, have helped raise the state's recycling rate to nearly 48 percent in 2000.

This *Report on 2000 SCORE Programs* details the efforts around Minnesota—state, county and municipal—that have put the state among the nation's leaders in effective resource and waste management.

Development of statewide programs

Minnesota's efforts to develop an integrated municipal solid waste management system go back over 20 years.

The Waste Management Act (WMA)

Early efforts to develop an integrated solid waste management system began with the passage of the Waste Management Act (WMA) in 1980. This legislation set in place a vision for improving waste management in Minnesota so that it would better protect the state's environment and public health. The WMA laid the groundwork for developing programs to reduce the volume and toxicity of waste, fund waste management facilities, increase the separation and recovery of materials and energy from waste, and coordinate the statewide management of waste.

Minnesota's Waste Management Act *is Chapter 115A (Minn. Stat. § 115A). Full versions of state statutes, session laws and rules can be found online on the Minnesota State Legislature web site:* www.leg.state.mn.us/leg/statutes.htm.

Waste management hierarchy

The WMA established Minnesota's waste management hierarchy, which ranks waste management practices in order of preference. It was created to prioritize efforts to responsibly manage and reduce municipal solid waste (MSW) in the state according to the characteristics of each waste. This six-level hierarchy helps guide state and local spending on programs and activities that are most appropriate for the different types of waste that are collected and used as resources around Minnesota (Minn. Stat. § 115A.02).

1. Waste reduction and reuse.
2. Waste recycling.
3. Composting of yard waste and food waste.
4. Resource recovery through mixed municipal solid waste composting or incineration.
5. Land disposal which produces no measurable methane gas or which involves the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale.
6. Land disposal which produces measurable methane and which does not involve the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale.

The SCORE program

Minnesota's statewide recycling efforts began in earnest in 1989, when the Legislature adopted comprehensive legislation based on the recommendations of the *Governor's Select Committee on Recycling and the Environment*. This set of laws, commonly referred to as SCORE, initiated state funding for programs for recycling, as well as waste reduction and the improved management of household hazardous wastes and

problem materials. The legislation provided the basis for programs that are long-term and flexible within the scope of waste reduction, recycling, and problem materials management.

SCORE's fundamental elements

The SCORE law includes these essential components:

- Use of the solid waste management tax to fund state and local SCORE programs.
- County recycling goals. (No new recycling goals have been established since 1996.)
- Minimum program requirements to provide opportunities for residents to recycle.
- Local planning requirements for recycling, household hazardous waste, and other solid waste program activities.
- State planning requirements for problem materials management.

County programs eligible for SCORE funding

Counties manage extensive local programs for solid and hazardous wastes. Through their solid waste plans, which are updated every five years, counties lay out short- and long-term policies and programs for managing MSW.

Funding from the SCORE program can be used for a wide range of activities at the local level, including recycling, efforts to reduce waste (source reduction), management of yard wastes and composting, education programs, proper handling of problem materials and household hazardous wastes, and litter abatement. In 2001, the Legislature added an eighth eligible activity that allowed funds to be spent on resource recovery.

Each county is free to use the tools that they feel are appropriate for their population and for the challenges of the local waste stream.

Funding

Funding for state programs comes from the Legislature and local sources.

- **State funding.** Dedicated state tax revenue provides a stable funding source for recycling and waste reduction programs.
- **Local contributions.** County programs must provide at least a 25 percent match of state funds. In 2000, counties exceeded the required match by 8 times.

Details on SCORE funding are found in Chapter 6.

The SCORE report

A full report to the Legislature is required in December of odd-numbered years (Minn. Stat. §115A.551 sub. 4). Because data is collected annually, the OEA provides a partial report for even-numbered years.

This *Report on 2000 SCORE Programs* highlights the main components of SCORE—source reduction, recycling, waste management and waste generation—and reports on efforts to modify SCORE in the future.

Sources of data

Data for this *Report on 2000 SCORE Programs* were collected from all 87 counties in Minnesota and the Western Lake Superior Sanitary District (WLSSD)[1] using the annual SCORE survey.

[1] *WLSSD is a special-purpose subdivision of the state that is charged with addressing water pollution, solid waste collection and disposal of sewage. WLSSD, established in 1971, covers nearly 500 square miles in St. Louis County, and includes the cities of Duluth, Cloquet, Carlton, Scanlon, Wrenshall, Hermantown, Proctor and Thompson. It coordinates programs for nearly 115,000 people in the region—nearly 60 percent of the county's population.*

This detailed form is completed by county solid waste staff, providing details on local programs for solid waste management and recycling including:

- MSW delivered to transfer stations, processing and land disposal facilities.
- Estimates of wastes managed on-site or disposed of illegally.
- Residential, commercial and institutional materials collected for recycling.
- A general survey section covering county efforts toward recycling, household hazardous wastes, yard wastes and source reduction.
- County revenues and expenditures relating to SCORE programs

In addition to the data collected through the SCORE survey, counties in the Twin Cities metropolitan area—Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington—also submit annual Waste Certification Reports to the OEA, which provide added detail on waste processing in the region.

Analyzing the data

The OEA uses the data and information from these county reports to determine the state's recycling rates and to detail trends in waste generation and disposal.

The OEA's analysis of county progress in recycling and waste reduction is restricted to wastes aggregated for collection as MSW; recyclable materials are limited to those that would otherwise be disposed of in MSW. The OEA excludes wastes that are separated for disposal (such as most nonhazardous industrial wastes), and excludes materials recovered for recycling that are not considered MSW (such as concrete). The OEA also excludes wastes that historically have been managed and recovered separately, such as auto hulks, most scrap metal, and mill scraps.

The OEA has developed a formula for calculating recycling rates for the counties and the state, which is explained in Chapter 3.

Related research: Solid Waste Policy Report

The Office of Environmental Assistance submits a *Solid Waste Policy Report* to the Legislature every two years.

The *2002 Policy Report*, developed in concert with this *Report on 2000 SCORE Programs*, summarizes the current state of solid waste management in Minnesota, evaluates the extent and effectiveness of programs and policies, identifies issues requiring further research, and makes recommendations for establishing or altering state solid waste policies and programs.

The Solid Waste Policy Report *is on the OEA's web site:*

www.moea.state.mn.us/policy/policyreport.cfm

Chapter 2

MSW Generation in Minnesota

Total generation of the state's municipal solid waste (MSW) includes wastes discarded and recycled, including tons sent to disposal and resource recovery facilities, all materials collected for recycling, and tons disposed of on-site (burn barrels or farm dumps).

Mixed 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, plastic, paper, etc.

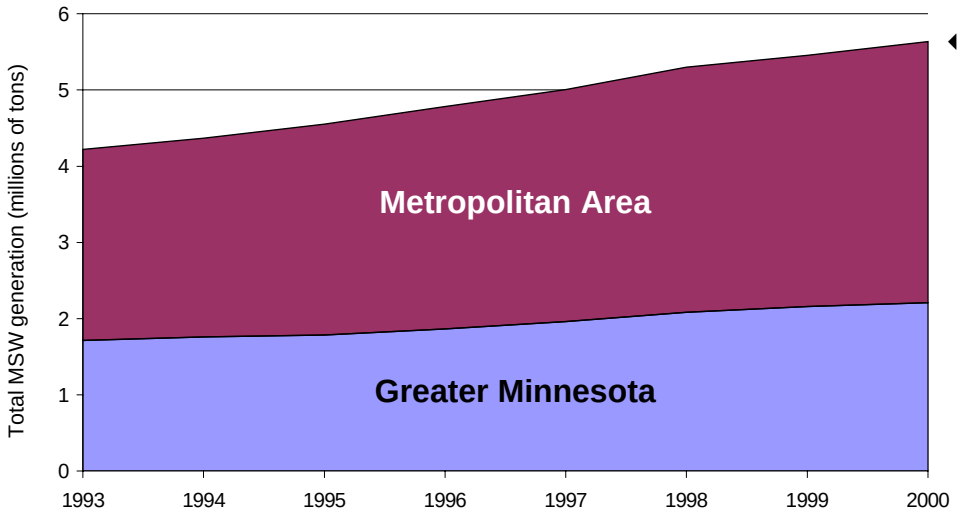
Municipal solid waste does *not* include auto hulks, street sweepings, ash, construction debris, mining waste, sludges, tree and agricultural wastes, tires, lead acid batteries, motor and vehicle fluids and filters and other materials collected, processed, and disposed of as separate waste streams, but *does* include source-separated compostable materials (Minn. Stat. § 115A.03, subd. 20).

Statewide totals and trends

Since the state first collected SCORE data in 1989, Minnesota has shown a steady growth in MSW, reflected in both the total amount of MSW generated and in the per capita figures.

In 2000, over 5.6 million tons of mixed MSW were generated in Minnesota. Statewide, this represents a 3.5 percent increase over 1999, and a 33 percent increase since 1993.

Figure 2-1: Minnesota MSW generation, 1993-2000



For 1999-2000, the amount of MSW generated in Minnesota increased by 3.5%, while population increased by just under 2%.

The average Minnesotan now creates 2290 pounds of waste and recyclable materials each year.

	1993	1994	1995	1996	1997	1998	1999	2000	Changes 1993-2000 MSW	Changes 1993-2000 Population
Greater Minnesota	1.72	1.76	1.79	1.87	1.96	2.08	2.16	2.21	29%	7%
Metropolitan Area	2.50	2.61	2.76	2.92	3.05	3.22	3.30	3.42	37%	11%
Minnesota	4.22	4.37	4.55	4.79	5.00	5.29	5.44	5.63	33%	9%

Waste generation by region

See Appendix A for county-by-county details.

- **Greater Minnesota.** In 2000, Greater Minnesota counties generated 39 percent of the state's MSW—over 2.2 million tons of MSW. This is a 2.4 percent increase from 1999 tonnages.

  From 1993 to 2000, MSW generation in Greater Minnesota increased by 29 percent, while population grew by just 7 percent.

- **Metropolitan Area.** In 2000, the Metropolitan Area—Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington Counties—generated about 61 percent of the state's MSW—over 3.4 million tons of MSW. This is nearly a 3.7 percent increase from 1999. Hennepin County reported the largest percentage of the region's total MSW at 45.6 percent. Carver County reported the lowest share at 2.5 percent.

  From 1993 to 2000, MSW generation in the Metro increased by over 36 percent, while population grew by 11 percent in that same time period.

Per capita MSW generation

In 2000, Minnesota's per capita figure for waste generation grew to 1.14 tons per person, an increase of 1.8% from 1999. This figure is calculated by dividing the state's total generation of waste (including materials recycled, both commercial and residential) by the state's population.

Calculating per capita

Total Waste Generation (5,633,931 tons)

Total Population (4,919,479)

From 1993 to 2000, Minnesota's population grew by 9 percent. Logically, additional people in the state would generate additional garbage. However, in that same period, the per capita generation of MSW grew by over 22 percent. Most significant growth occurred from 1996 through 1998; averaging nearly 4 percent increases each year. However, the rate of growth has slowed each of the last two years, averaging 1.75 percent.

The average Minnesotan is discarding more—420 pounds more waste per person since 1993. Based on 2000 percentages, this would equate to the average person burning, dumping or burying 17 pounds, recycling 168 pounds, and throwing out 235 pounds more MSW compared to 1993. Reducing both commercial and residential waste generation continues to be a high priority for the OEA and counties.

Figure 2-2: Minnesota per capita MSW generation, 1993-2000 (in tons)

	1993	1994	1995	1996	1997	1998	1999	2000	Change 1993-2000
Greater Minnesota	0.80	0.82	0.82	0.85	0.88	0.93	0.96	0.97	21%
Metropolitan Area	1.05	1.08	1.13	1.18	1.21	1.26	1.28	1.30	23%
Minnesota	0.93	0.96	0.98	1.02	1.06	1.11	1.12	1.15	23%

Per capita figures do not include yard waste. Yard waste was excluded from Minnesota MSW after 1994.

Identifying sources of increased waste generation

The SCORE data show a clear trend of increasing waste generation in Minnesota. Understanding the source of this increase is essential for planning an effective waste management system in Minnesota. Is it from the residential sector, the commercial, industrial and institutional (CII) sector, or some combination?

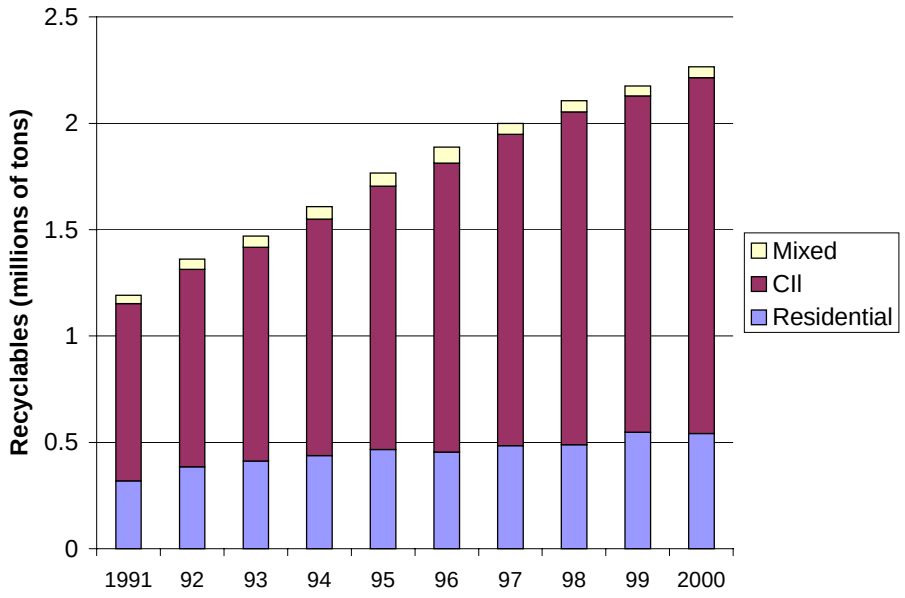
The OEA collects no statewide data that specifically show how much waste each sector generates. Because most waste haulers collect loads mixed with waste from residential and commercial generators, it is difficult to identify the source of MSW growth—just how much each sector contributes to the total.

However, a recent OEA research paper used available data on the sources of recyclable materials to make some educated guesses about the increases in waste generation.

SCORE data: Recycling

SCORE data does identify the sources of recyclable materials collected in Minnesota. Figure 2-3 shows that residential recycling numbers have stayed relatively static, and that most growth in recycling tonnages has come from the CII sector.

Figure 2-3: Recycling tonnages by economic sector, 1991-2000



Despite increased collection of recyclables, statewide recycling rates (recycling tonnages as a percent of total waste generated) have stayed level due to a proportionate increase in waste generation.

This dictates one of three conclusions:

- Commercial waste generation is increasing in proportion to recycling growth in that sector.
- Residential waste generation is increasing at a rate much faster than residential recycling growth.
- Some combination thereof.

Unfortunately, SCORE data alone do not include enough information to prove any of these conclusions.

Municipal data indicates commercial growth

For further analysis, OEA supplemented SCORE data with disposal data from five Minnesota cities where residential waste collection is tracked separately from waste from the CII sector. In all five cities (Minneapolis, St. Louis Park, Hopkins, St. Cloud and Luverne), residential waste generation and recycling per household have stayed relatively level over time.

This strongly indicates that the growth in waste generation cannot be explained by residential waste growth and, therefore, is best explained by growth in commercial, industrial and institutional waste.

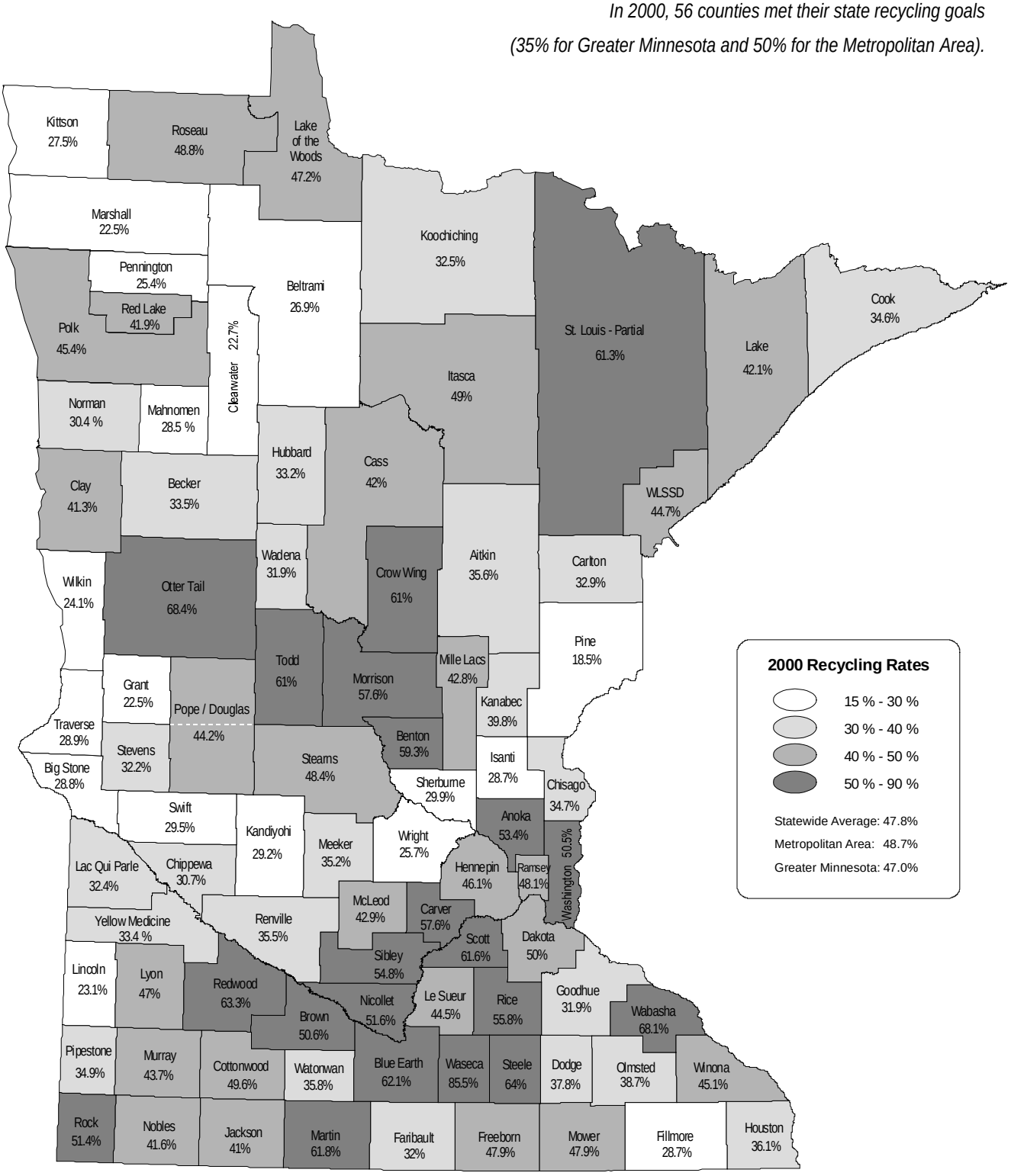
Conclusion

State and local recycling efforts in Minnesota have primarily been devoted to the residential sector. While residential MSW and recycling programs remain important—nearly half of Minnesota's MSW comes from the residential sector—the OEA is interested in further identifying and targeting the opportunities in the commercial sector in terms of reduction and recycling.

Download Ann Bernstein's full analysis, *MSW Generation Trends in Minnesota*, (Paper #362, June 2001), from the OEA web site: www.moea.state.mn.us/lc/score00.cfm

Figure 3-1: Recycling rates by county, 2000

In 2000, 56 counties met their state recycling goals (35% for Greater Minnesota and 50% for the Metropolitan Area).



Chapter 3

Recycling in Minnesota

The heart of SCORE is Minnesota's recycling efforts; and Minnesota's recycling programs are among the nation's most successful. The statewide recycling rate rose to nearly 48 percent in 2000, up approximately half a percent from 1999. Throughout the state, recycling programs collected almost 2.3 million tons of recyclable materials—paper, metals, glass, plastic, food, problem materials and more. Minnesota's recycling rates have been among the highest in the United States. In 2000, Minnesota was second in the nation only behind Delaware when the yard waste and source reduction credits are included and sixth if they are not.[2]

Recycling rates

For 2000, the OEA calculates a statewide recycling rate of nearly 48 percent.

- The state's base recycling rate—tons recycled divided by tons of MSW generated—is 40.3 percent.
- Counties are eligible for credits of up to 8 percent for local programs dedicated to yard waste (5 percent) and source reduction (3 percent). Statewide, these credits averaged 7.5 percent for the 87 counties and WLSSD.
- As a region, Greater Minnesota's recycling rate was 47 percent; up only a little (three-tenths of a percent) from the previous year.
- The Metropolitan Area's 2000 recycling rate was 48.7 percent, up half a percent from 1999.

Read "Calculating Minnesota's Recycling Rate" for more information on how this rate is calculated and details about the yard waste and source reduction credits.

See Appendix A for county-by-county recycling data.

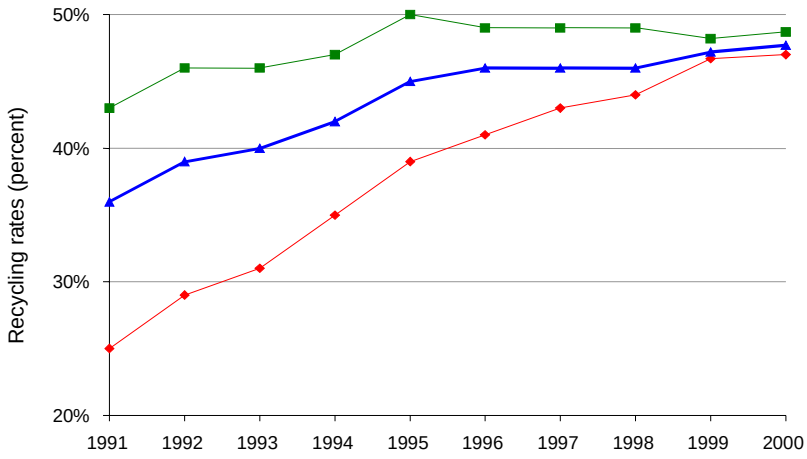
2000 Recycling Rates

	2000	Change
Statewide	47.8%	+0.6%
Metro Area	48.7%	+0.5%
Greater Minnesota	47.0%	+0.3%

Recyclables collected (tons)

	2000	Change
Paper	863,921	+60,601
Metal	324,368	(11,356)
Glass	106,656	(5,727)
Plastic	46,542	+4,254
Food Waste	196,016	+26,614
Problem Materials	98,648	(2,377)
Textiles & Carpet	15,646	(4,054)
Other	616,154	+22,671
Total	2,267,952	+90,627

Figure 3-2: Minnesota's recycling progress, 1991-2000



Since the SCORE legislation was enacted in 1989, Minnesota's statewide recycling rate has climbed by 25 percentage points. Dramatic increases were seen in the early 1990s.

Since 1995, the state's recycling rates have grown more slowly, although the tons collected for recycling continue to rise.

[2] *Delaware and most other states count yard waste tonnages in their recycling rate calculations.*

Minnesota's recycling rate: Smaller rates of increase

The statewide recycling rate has more than doubled since SCORE programs began, increasing by 25 percentage points between 1990 and 2000. As Figure 3-2 shows, much of that increase came in the early 1990s, followed by slower growth and smaller rates of increase. This trend has several explanations.

- **Maturity of collection programs.** By 2000, recycling systems in the state have become established. The period of rapid growth for the Metropolitan Area and Greater Minnesota has come to an end.

  Traditionally, collection programs have grown by adding additional recyclable materials. After ten years, much of the easy to collect and recycle material is gone. Additional tons can be added—for example, an estimated 78,000 tons of wooden pallets are discarded in the state annually—but improved targeting of generators takes time. Adding additional materials to collection programs can be expensive, and new materials may add significant incremental cost while adding little or no revenue.

  Recycling programs continue to increase the number of Minnesotans served, but the rates of increase have slowed. Curbside recycling programs continue to be available for over three-quarters of the population, but counties are challenged to find ways to serve additional customers in a cost-effective manner.
- **Increase in waste generation.** The annual tons of recyclables collected by cities and counties continue to grow. However, as shown in Chapter 2, the amount of waste generated in the state also continues to grow. The rate of increase in MSW is outpacing the collection of recyclables.
- **Market issues.** Traditional recyclables such as glass may require new applications as traditional markets disappear or become too expensive due to transportation or processing costs. Nontraditional materials may have limited markets, require longer storage time, or require greater processing, which results in lower per ton revenue.
- **Material shift.** Many products that were once packaged in heavier packaging like glass or steel now use plastic. Changes in consumer packaging have reduced the total weight of the recyclable materials collected.
- **Financial challenges.** While volumes of waste and recyclables have significantly increased, state funding has remained the same since the early years of the SCORE program. Counties must shoulder the cost of program changes and additions.
- **Waste reduction.** County efforts to reduce the amount of material generated for disposal are valued, but in some cases these efforts can actually result in a *reduction* in a county's recycling rate. For example, a company replacing corrugated cardboard boxes (OCC) with reusable transport packaging may reduce the tons of recyclable OCC a county can report. The OEA takes some of this into account through the source reduction credits, but continues to evaluate ways to best to measure overall county successes in recycling and waste reduction.

The OEA will continue to work with county programs to improve and expand collection efforts, highlighting opportunities and providing leadership to expand the markets for recyclable materials. Increasing organics recovery and commercial recycling are two top priorities.

Calculating Minnesota's recycling rate

First developed in 1989, Minnesota's formula for calculating county, regional and statewide recycling rates (Figure 3-3) has been refined over the years to better reflect local efforts to collect, recycle and prevent waste.

Base recycling rate

The base recycling rate is calculated by dividing the tons of material collected for recycling by the tons of total materials disposed of. This calculation uses actual weights of collected recyclables and solid waste, as well as tonnage estimates of wastes that are not recorded—on-site disposal of waste and problem materials that are disposed of improperly.

Credits

Counties can earn credits, in the form of percentage points added to their base recycling rate, by including activities for waste reduction and yard waste in their solid waste programs. The state places great emphasis on such programs, but measuring their impact on the disposal of MSW is a serious challenge. To reward counties

Figure 3-3: Minnesota's formula for calculating county recycling rates

$$\text{Recycling Rate} = \left(\frac{R + PMr}{MSW + Onsite + PMnotr + R + PMr} \right) + \text{YWcr} + \text{SRcr}$$

R = Materials collected for recycling

PMr = Problem materials banned, by statute, from disposal that are recycled (based on OEA estimates)

MSW = County-reported mixed municipal solid waste managed and land-disposed

Onsite = County-reported estimate of MSW disposed on-site or illegally disposed

PM not r = Problem materials banned, by statute, from disposal that are not recycled (based on OEA estimates)

YWcr = Yard waste credit (based on yard waste management programs and county education programs)

SRcr = Source reduction credit (based on answers to source reduction survey)

that put effort into these programs, and to simplify the year-end calculations, the annual SCORE survey includes sections (checklists) dedicated to waste reduction and yard waste composting efforts.

Source reduction credit. In 1993, the Minnesota Legislature adopted a 3 percent source reduction credit to reward counties that make an effort to reduce overall waste volumes—waste prevention or "source reduction." This "all-or-nothing" credit of three percent was awarded to counties that conducted at least 16 of the specific activities in the Source Reduction Checklist portion of the annual SCORE survey.

The revised Source Reduction Checklist is Appendix C. The complete 2000 SCORE Survey can be downloaded from the OEA's web site: www.moea.state.mn.us/lc/score00.cfm

Beginning in 1999, the credit system was changed from a system that was "all or nothing" (counties either got the full 3 percent or nothing, based on answers to a survey) to a more equitable credit of 1, 2 or 3 percent based on responses to a new, expanded checklist. In 1999, as counties with smaller waste reduction programs received some reward for their efforts, the average credit rose from 1.8 percent to 2.6 percent.

In 2000, the average source reduction credit remained largely unchanged at 2.7 percent; all but three counties received some credit.

Yard waste credit. By 1992, yard waste was officially banned from disposal in MSW in Minnesota. However, such wastes do require some type of disposal. Cities and townships are responsible for the majority of these yard waste composting sites, but most counties operate one or more sites as well.

Due to a statutory change, 1994 was the last year that counties reported actual tons of yard waste recycled. Similar to the source reduction credit, the Legislature provided for a yard waste credit of up to 5 percent beginning in calendar year 1995. Credit is awarded based on answers to a series of questions on yard waste programs in the annual SCORE survey instead of providing tonnage data.

Impact of the credits

Without credits, Minnesota's base recycling rate for 2000 is 40.3 percent. The U.S. EPA reports that in 2000, the average national recycling rate was 30 percent, which, for many states, includes yard waste tonnages.

The credits for source reduction and yard waste activities increase Minnesota's reported recycling rate by 7.5 percent. The OEA feels that this adjustment is justified, and better reflects the impacts of efforts to reduce and recycle waste in Minnesota.

Reducing the reporting burden placed on counties. Generally, both waste reduction and yard waste recycling are difficult for county offices to measure in terms of tons. SCORE survey questions regarding programs help the OEA and counties make reasonable estimates of tons diverted or prevented without complicated new record-keeping procedures.

However, some counties do have data for the impacts of waste reduction. For example, Crow Wing County received an 8 percent credit for quantifiable source reduction activities. This option is available to any county that is able to demonstrate actual tons of MSW that have been reduced above and beyond the 3 percent credit available through the checklist.

Accounting for yard waste. Thanks to education efforts at the local level, many residents have begun home composting and changed their landscaping efforts to reduce yard waste. Although yard waste is banned from disposal as garbage, waste sorts have shown that it still makes up about 2 percent of Minnesota's MSW.

Materials collected for recycling: Tons and trends

Almost 2.3 million tons of recyclable materials were collected in 2000, a statewide increase of over 4 percent from the previous year. In a reversal from 1999, counties in the Metropolitan Area showed the greatest growth, rising over 5 percent, while Greater Minnesota counties collected 2.5 percent more material.

Areas of greatest growth

For 2000, counties reported the largest increases in polystyrene, PET, electronics and various grades of paper.

Plastics. Total tons of polystyrene collected for recycling increased to over 2,600 tons in 2000, a 1,400-ton increase from 1999. PET recycling showed similar growth, more than doubling to 2,700 tons in 2000.

Increases in plastics recycling can be attributed to factors like increased processing capacity and demand, and education efforts such as those spearheaded by America Recycles Day.

Electronics. Nearly 2700 tons of electronic products were collected in 2000, a 73 percent increase from 1999. Building on OEA's successful recycling pilot projects in 1999, this progress reflects local educational efforts and expanded collection opportunities for residents. For example, Washington County and Best Buy collected 22 tons of electronics at a two-day pilot event in Woodbury.

In October 2000, Sony Electronics announced a landmark effort with its vendor, Waste Management (WM), to recycle Sony-brand electronics from consumers. Through this program, the first program of its kind in the U.S., Minnesota residents can recycle Sony products at no charge by dropping them at designated WM sites. Learn more on the OEA's web site: www.moea.state.mn.us/plugin/.

Figure 3-4: Materials collected for recycling, by grade, 2000

County-by-county details on materials recycled in Minnesota are found in Appendix A.

Material/Grade	Tons	One-year Change
Corrugated (OCC)	341,479	+17%
Mixed paper	220,249	+3%
Newsprint	182,174	(8%)
Office paper	37,666	(9%)
Magazine/catalog	36,688	+33%
Other paper	39,730	+46%
Phone book	3,487	+15%
Computer paper	2,448	+889%
Ferrous & non-ferrous	242,082	+8%
Commingled metals	23,993	(47%)
Steel/tin cans	26,252	(30%)
Aluminum	32,041	+16%
Mixed plastic	35,520	+12%
Film plastic	1,017	(68%)
HDPE	3,103	+10%
Other plastic	1,481	(31%)
PET	2,749	+107%
Polystyrene	2,670	+118%
Container glass	70,032	(2%)
Other glass	36,625	(10%)
Food waste	196,016	+16%
Textiles	15,479	(5%)
Carpet	167	(95%)
Major appliances	34,231	(6%)
Vehicle batteries	30,635	0%
Pallets	57,101	n/a
Waste tires	16,999	+10%
HHW	1,021	(39%)
Latex paint	1,085	n/a
Used oil	8,565	+39%
Used oil filters	2,562	+6%
Electronic appliances	2,686	+73%
Fluorescent/HID lamps	546	(50%)
Antifreeze	316	(32%)
Unspecified or Other	559,052	(5%)
Total	2,177,324	+3%

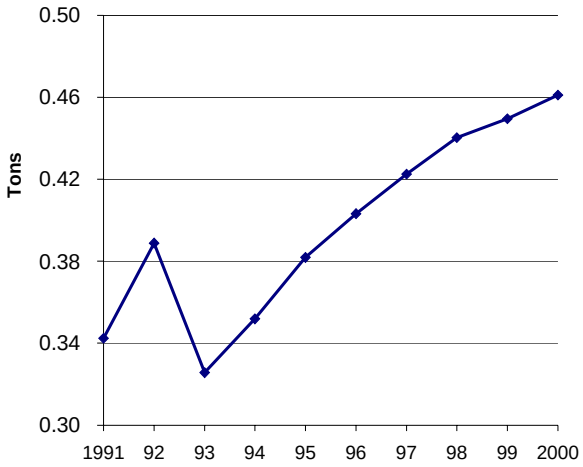
Decreases indicated by parentheses: (x%)

Per capita recycling

Minnesotans recycled 922 pounds (0.46 tons) per person per year in 2000; an increase of 3 percent from 1999.

Tons of material collected for recycling continue to rise each year—over 4 percent between 1999 and 2000. Per capita recycling has increased by 35 percent since 1991 with gains leveling out around 2 percent in 1999 and 2000, matching the trend in overall tons recycled in Minnesota.

Figure 3-5: Per capita recycling



Related research: Recycling trends research study

The Solid Waste Management Coordinating Board (SWMCB) contracted with the Tellus Institute to conduct research on recycling trends in the Metropolitan region. The purpose of the study was to:

- Identify national and regional recycling trends affecting recycling.
- Assess the effectiveness and efficiency of various recycling programs by analyzing information from metropolitan municipal residential recycling programs throughout Minnesota.
- Develop recommendations regarding changes needed to ensure that the region meets its 50 percent recycling goal established in the regional Solid Waste Management Master Plan.

The study had two main recommendations on how to increase recycling, both of which addressed contracting with waste haulers.

- **Non-residential.** Adoption by commercial waste generators of resource management contracting, a method used by some large companies in the country, whereby contracts with haulers provide incentives for recycling and waste reduction instead of disposal.
- **Residential.** Having cities/townships contract for residential recycling. Based on an analysis of survey information for all cities/townships in the region, the ones that contracted for residential recycling had better recovery rates overall than a sizable number of those that did not

For a listing of the complete recommendations and findings, or for a copy of the *Recycling Trends Research Study: Final Report* (August 2001), call the Solid Waste Management Coordinating Board at 651-222-7227.

Minnesota's recycling programs

When the Minnesota Legislature adopted the SCORE legislation, it provided counties with broad discretion in developing programs for recycling and the effective management of solid waste, household hazardous wastes and problem materials.

Minnesota has implemented a goal-driven recycling system, where each individual county is expected to develop appropriate programs that will help its residents meet mandated recycling goals set by the Legislature. Counties determine which materials will be collected for recycling, and are given considerable freedom in targeting waste generators in order to achieve the greatest collection of recyclable materials.

Such flexibility has allowed many counties and cities in the state to develop nationally recognized programs that provide unique opportunities to recycle and achieve high rates of local participation.

Minnesota's recycling goals

The original 1989 SCORE legislation established recycling goals of 25 percent in Greater Minnesota and 35 percent in the Metropolitan Area, which counties were expected to meet or exceed by December 31, 1993.

Amendments to SCORE raised these goals to 35 percent for Greater Minnesota counties and 50 percent for the Metropolitan Area by December 31, 1996.

In measuring county progress toward recycling goals, the OEA focuses on wastes aggregated for collection as MSW, restricting recyclable materials to those that would otherwise be disposed of in MSW. As mentioned in Chapter 2, the OEA excludes wastes that are separated for disposal (such as most nonhazardous industrial wastes), and excludes materials recovered for recycling that are not considered MSW (such as concrete). The OEA also excludes wastes that historically have been managed and recovered separately, such as auto hulks, most scrap metal, and mill scraps.

The recycling goals do include credits for yard waste programs (up to 3-5 percent) and source reduction (up to 3 percent), which are awarded based on county program activities (Minn. Stat. § 115A.551, subd. 2a. (2)).

In 2000, 56 counties met their recycling goals, the same number as in 1999.

- **Greater Minnesota.** Fifty-one (51) counties in Greater Minnesota met their 35 percent recycling goal.
- **Metropolitan Area.** Five of the seven Metro counties met the current 50 percent recycling goal, compared to only 3 in 1999.

For the purposes of SCORE reporting, there are 88 "counties," which includes the Western Lake Superior Sanitary District (WLSSD).

No new recycling goals have been established by the Legislature; the OEA will use the 1996 goals until they are revised in statute. The OEA will continue to work with county solid waste officers—in particular, the 32 counties that did not meet their recycling goals in 2000—to achieve the best recovery rates possible.

Recycling program requirements

While county recycling program coordinators are given great flexibility in developing local programs that will achieve the state's recycling goals, the Legislature did establish some minimum requirements that all counties must meet. These conditions ensure some consistent access to recycling opportunities around the state.

Residential recycling

In 2000, 25 percent of the materials collected for recycling in Minnesota came from residential sources, unchanged from 1999.

By law, Minnesota counties must promote recycling and ensure that all residents, including those in multi-family dwellings, have the following opportunities to recycle (Minn. Stat. § 115A.552):

- At least one recycling center in each county that is convenient for residents to use. This includes being open to the public year-round (at least 12 hours per week), accepting at least four broad types of materials, with posted highway signs identifying the center's location.

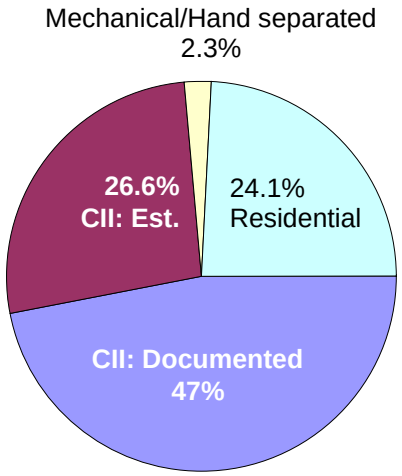
  In 2000, there were 103 material recovery facilities in the state.
- Convenient sites for collecting recyclable materials, with at least one recycling opportunity (drop-off or curbside collection) in cities with populations of more than 5,000.

  In 2000, Minnesota counties sponsored 586 recycling drop-off centers and 726 recycling stations.
- Curbside collection of recyclables in Greater Minnesota cities with populations of more than 20,000 and Metropolitan Area cities with populations of more than 5,000.

  In Minnesota, 765 residential curbside recycling collection programs provided service to more than 3.7 million people, over 75 percent of the state's population.

Many programs at the county and municipal level have additional local recycling requirements or laws. In 2000, 21 counties required residents to participate in recycling programs, and 25 counties required haulers to provide recycling collection services. In addition, 105 cities required residents to recycle, and 149 cities required haulers to provide recycling collection services.

Figure 3-6: Sources of materials collected for recycling, 2000



Residential recyclables are collected through curbside recycling programs, as well as recycling stations and drop-offs.

CII: Documented and Estimated are materials from the commercial/industrial/institutional sector, primarily those recyclables that are generated by businesses and other large generators. Counties generally use totals based on actual receipts, but in some cases estimated figures may be used to supplement documented data as long as the estimates follow the guidelines set by the OEA.

Mechanical/hand-separated recyclables are typically pulled out of solid waste at a materials recovery facility (MRF), an incinerator, or a composting facility.

Commercial recycling

The commercial, industrial and institutional (CII) sector was the source of 75 percent of the recyclable materials collected in Minnesota in 2000—1,669,544 tons. This is an increase of over 40,000 tons from 1999.

State law requires that public buildings that have waste collection must also have collection programs for at least three recyclable materials. This applies to schools and other publicly owned buildings (Minn. Stat. § 115A.151).

Unlike the residential sector, the commercial sector has no statewide "opportunity to recycle" mandate driving the recovery and recycling of materials.

County programs are also expected to target the private sector—owners and managers of private businesses and buildings, as well as collectors of commercial MSW—by encouraging them to provide appropriate services and opportunities to recycle for commercial, industrial and institutional generators of solid waste (Minn. Stat. § 115A.552, subd. 4).

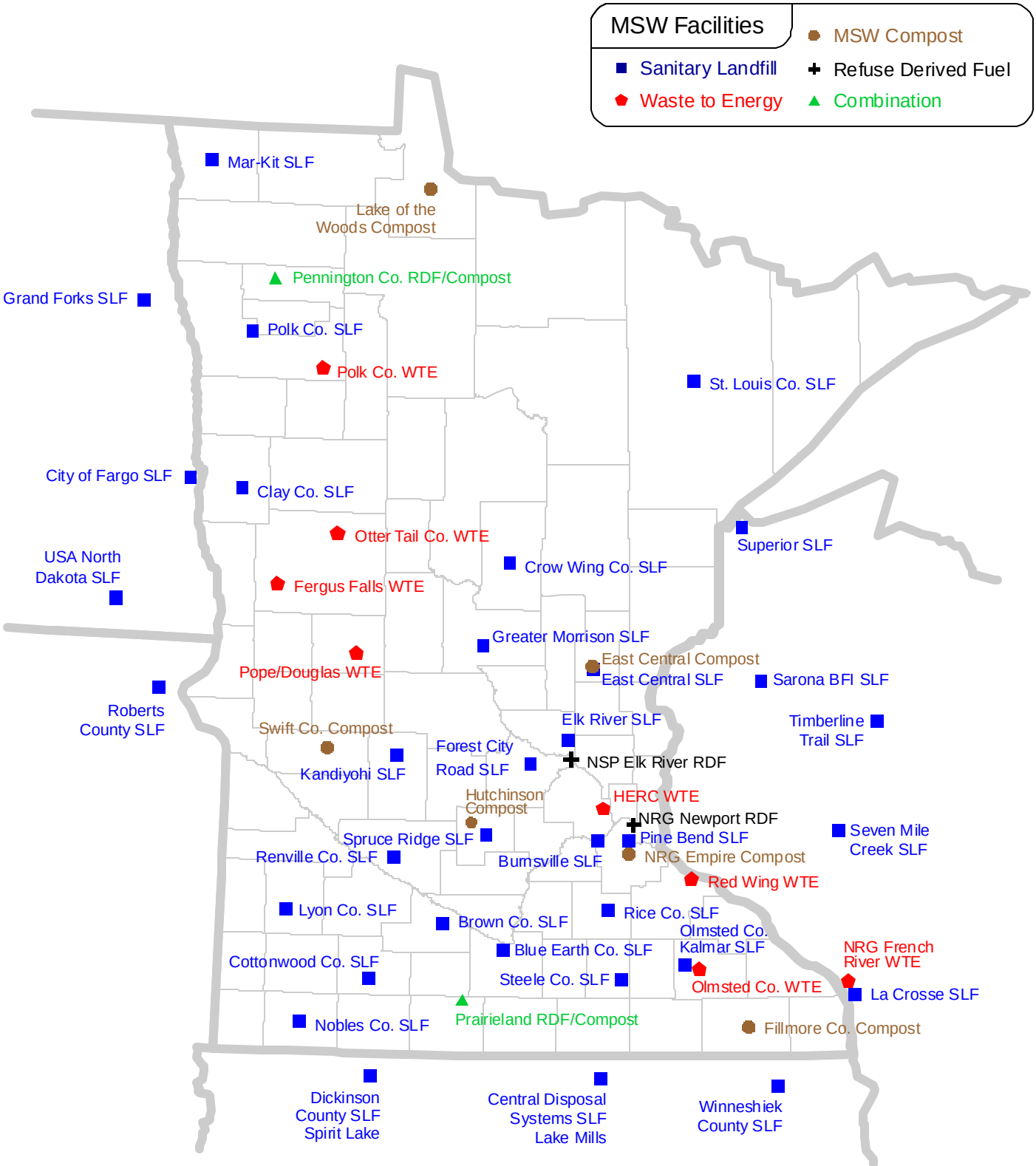
In 2000, counties and cities offered the following:

- 68 counties had specific programs to promote commercial and industrial recycling.
- 20 counties required businesses to recycle.
- 49 cities required businesses to recycle.

The number of counties that have specific commercial, industrial and institutional (CII) recycling programs stayed the same (68) from 1999 to 2000.

For more information concerning current and proposed future efforts to expand commercial recycling opportunities and collection in Minnesota, read the OEA's *2002 Solid Waste Policy Report* at www.moea.state.mn.us/policy/policyreport.cfm.

Figure 4-1: Facilities receiving Minnesota MSW, 2000



Chapter 4

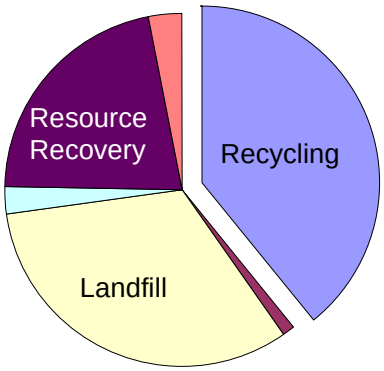
MSW Disposal in Minnesota

In 2000, 5.6 million tons of mixed municipal solid waste were generated in Minnesota in 2000. Of this, nearly 2.3 million tons were recycled. The remainder—approximately 3.3 million tons in 2000—is waste that is not recycled or prevented/reduced and, therefore, must be disposed of.

In Minnesota, waste is managed through three main methods:

- **Landfills** bury unprocessed MSW, as well as rejects and residuals from waste processing facilities. Waste from Minnesota goes to landfills in Minnesota and neighboring states—Iowa, Wisconsin, North Dakota and South Dakota.
- **Waste processing/resource recovery facilities.** Waste-to-energy incinerators and refuse-derived fuel (RDF) facilities process MSW to create energy; MSW composting facilities turn the organic portion of the waste stream into a useable amendment for soil.
- **On-site disposal** refers to MSW that is burned or buried on a resident's property. This typically includes burn barrels or farm dumps, which are still used in many parts of the state.

Figure 4-2: MSW Management in Minnesota, 2000



Recycling	40.3%
Landfills	33.9%
Resource Recovery	21.8%
MSW Compost	0.4%
On-site Disposal	1.7%
Problem Materials not recycled (est.)	2.0%

Landfills

In 2000, over 1.9 million tons of the MSW disposed of were sent to landfills both in- and out-of-state. Landfilled MSW included unprocessed MSW and rejects and residuals from MSW processing facilities. This is 57 percent of waste disposed or processed, and represents about 34 percent of the total MSW generated in Minnesota.

- Over 1.2 million tons went to 23 landfills in Minnesota. Counties in the seven-county Metropolitan Area generated 55 percent of this waste, while 45 percent came from counties in Greater Minnesota.
- Over 691,000 tons were sent to 11 out-of-state landfills in Iowa, Wisconsin, North Dakota and South Dakota. About 52 percent of waste landfilled out-of-state came from the Metropolitan Area counties while the other 48 percent came from Greater Minnesota counties.

Waste processing/resource recovery

In 2000, nearly 1.25 million tons were processed through composting or incineration for energy. This is 37 percent of the MSW disposed or processed, and represents 22 percent of the total MSW generated in Minnesota. This total reflects only those tons that were actually burned for energy or composted. Tons that went to processing facilities but were later landfilled as "bypass" or residual waste are in the landfill total.

- Over 1.24 million tons of MSW generated in the state went to 14 facilities in Minnesota—five compost facilities and nine waste-to-energy facilities.
- In addition, nearly 14,000 tons went to a waste-to-energy facility in La Crosse, Wisconsin.

Solid Waste Processing Facilities Capital Assistance Program (CAP). Minnesota counties continue to build and enhance waste processing capacity in Minnesota. CAP grants are used to help pay for the capital costs of building or improving public MSW processing facilities. The 2000 Legislature appropriated $2.2 million in bond funds for CAP funding. Out of nine applicants, these six projects were funded:

- Dodge County: Compost facility for MSW, yard waste and misc. organics.
- Marshall and Kittson Counties (Mar-Kit): Recycling facility.
- Murray County: Recycling/HHW facility.
- Nobles County: HHW facility.
- WLSSD: Compost facility.
- Wilkin County: Recycling/HHW facility.

Learn more about the CAP grants on the OEA web site: www.moea.state.mn.us/grants/cap.cfm

New developments in waste processing. During the 2001 session, the Legislature created *a Mixed Municipal Solid Waste Processing Payment Program* for counties in the state that process waste—burning mixed municipal solid waste for energy recovery or processing MSW into useable compost or refuse-derived fuel. The program is meant to encourage waste processing.

Counties that certify that their waste is taken to a Minnesota resource recovery facility can receive a $5 per ton credit. All of the money received by a county under this section (Special Session 2001, Chapter 2, section 124) must be used to lower the tipping fee for waste processed in this manner. The first payments went out in fall 2001; $6 million has been appropriated for the rebate program through 2005. For more information about this program, check out the legislation online, www.revisor.leg.state.mn.us/stats/115A/545.html, or contact Sigurd Scheurle <sig.scheurle@moea.state.mn.us> at 651-296-3417.

On-site disposal

"On-site disposal" generally refers to waste disposed of in burn barrels, fire pits, home incinerators or on-site dumps. Counties in Minnesota estimate that residents disposed of 96,000 tons of MSW using on-site disposal methods in 2000. "Problem Materials not recycled" is OEA's estimate of the materials that are banned from disposal as MSW, but were most likely also dumped or burned on-site. This represents an additional 111,000 tons of waste tires, car batteries, appliances, oil and oil filters.

Together these categories account for 6 percent of MSW disposed or processed, nearly 4 percent of the total MSW generated in Minnesota.

Calculating estimates

On-site disposal. County solid waste officers calculate these estimates using population data, the number of residents who use hauling services, and the number of people who "self haul" waste to local facilities or transfer stations. For 2000, the OEA updated the formula used to estimate the tons disposed of on-site, using a revised per capita generation rate of 2.3 pounds/person/day, up from the original rate of just 1.8 pounds.

Problem materials not recycled (PMnotR). Minnesota counties have extensive programs for collecting household hazardous wastes and problem materials such as tires, appliances, car batteries, oil and oil filters. The OEA believes that a portion of these materials generated is not recycled or collected for disposal; they are essentially materials that are illegally disposed of in ditches, wooded areas, and old dumps. The OEA has formulas to help counties estimate local generation of problem materials and calculate how many of these materials are improperly disposed. These estimates are used by most counties, but an increasing number of counties are reporting actual tonnage data each year.

Significance of on-site disposal

On-site disposal of household garbage is generally banned in Minnesota, with the exception of farms and residences where regularly scheduled pickup of waste is not "reasonably available to the resident." (Minn. Stat. §§ 17.135 and 88.171) Some individual county boards have passed "no-burn" resolutions which declare that garbage service is available throughout the county and close this exemption for on-site disposal.

Volume. Many households still use on-site disposal methods for garbage. In a 2000 study of the northeast region conducted for the Western Lake Superior Sanitary District (WLSSD), survey responses showed that 18 percent of Minnesota residents in that area burn their household wastes on-site using a burn barrel or other means. Asked why they burn, convenience was the most-cited reason. By applying national trends to local waste generation rates, the actual tonnage of MSW burned or buried in Minnesota could range as high as 250,000 tons per year.

Pollution. On-site disposal is a significant source of pollution, including heavy metals and the production of VOCs and dioxin. Dioxin is formed when materials such as PVC plastic are burned at low temperatures. It is a very potent carcinogen that can have dramatic impacts on human immune, developmental and reproductive systems. The U.S. EPA research estimates that just one burn barrel (from an average family of four) can produce at least as much dioxin as a full-scale municipal waste incinerator burning 200 tons/day. A study conducted in 2000 for the North American Commission for Environmental Cooperation (NACEC) concluded that burn barrels account for 22 percent of all dioxins produced in North America.

Current OEA efforts to reduce on-site disposal

Locally, the OEA is working with counties and other units of government to develop backyard burning reduction programs, has awarded numerous grants, and has compiled a number of resources to help counties reduce backyard burning and on-site disposal.

The Western Lake Superior Sanitary District (WLSSD) is spearheading an effort to change attitudes toward burn barrels and their use in northeastern Minnesota, involving Koochiching, Itasca, Aitkin, Carlton, St. Louis, Lake and Cook Counties. The group, which began meeting in 1999, also includes Minnesota OEA, MPCA and DNR, along with counties in Wisconsin and the Wisconsin DNR.

In 2000, this group conducted a first-of-its-kind survey that profiles the average garbage burner. Building on this research, WLSSD developed a burn barrel education campaign in 2000. *Bernie the Burn Barrel* targets Minnesotans who burn trash and educates them about the health and environmental problems associated with burn barrels. The multi-media campaign—TV, radio and newspaper public service announcements, posters and fact sheets—officially kicked off in 2001.

Internationally, the OEA is also participating in a dioxin sub-group of the joint Canada-U.S. Binational Toxics Strategy, discussing strategies for reducing the dioxin impact from burn barrels.

The OEA will continue to work to reduce the threat of dioxin from residential garbage burning and plans on partnering with other Minnesota stakeholders such as the DNR and MPCA to further these and other burn barrel reduction efforts.

Bernie the Burn Barrel

Trends in waste disposal

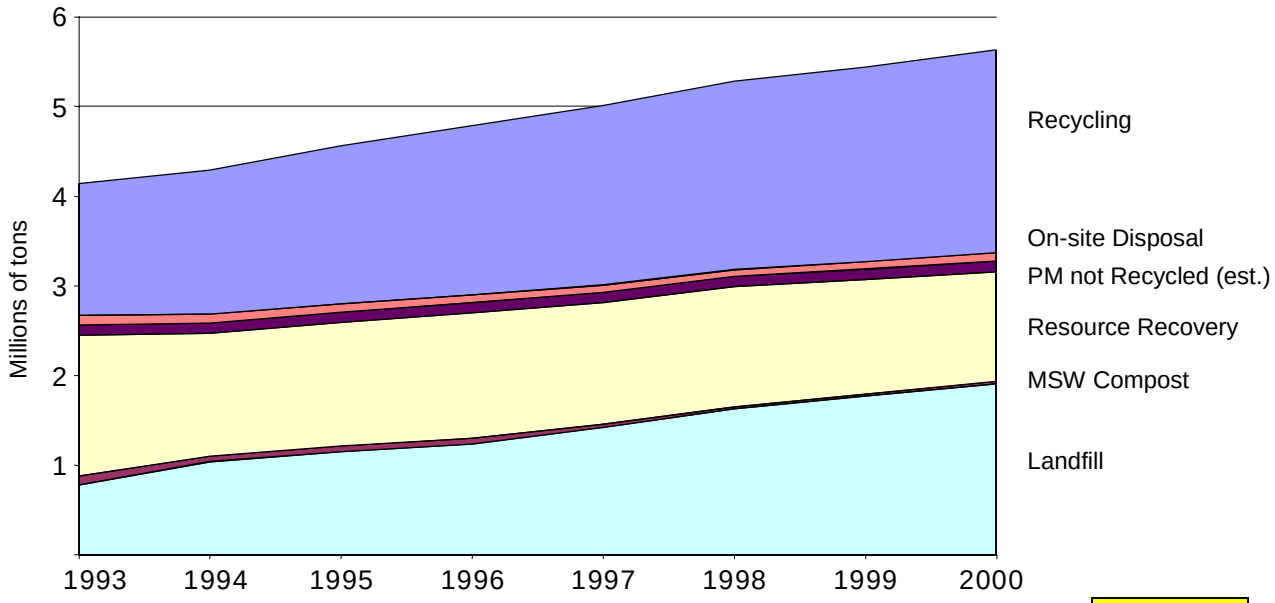
Waste management in Minnesota is guided by a heirarchy that prioritizes waste reduction, recycling/composting and resource recovery. However, during 2000, the amount of waste sent to landfills—the least-preferred disposal option—increased by eight percent (141,000 tons). Based on current trends, the volume landfilled may double by 2014.

Minnesota-generated MSW received by processing facilities in 2000 decreased by nearly 5 percent compared to 1999. This reduction is due to several factors, including reduced processing capacity over the past several years and issues such as vertical integration that make landfilling more economically appealing to hauling companies.

Waste Management Heirarchy

1. Waste reduction and reuse.
2. Waste recycling.
3. Composting of yard waste and food waste.
4. Resource recovery through mixed municipal solid waste composting or incineration.
5. Land disposal.

Figure 4-3: Trends in Minnesota waste disposal, 1993-2000



	1993	1994	1995	1996	1997	1998	1999	2000	Change 1999-2000
Recycling	1.47	1.61	1.77	1.89	2.00	2.11	2.18	2.27	+4.3%
On-site Disposal	0.11	0.10	0.10	0.09	0.08	0.08	0.08	0.10	+20.8%
Problem Materials not Recycled (est.)	0.11	0.11	0.11	0.11	0.12	0.11	0.11	0.11	(1.4%)
Resource Recovery	1.57	1.37	1.38	1.40	1.36	1.34	1.28	1.23	(4.2%)
MSW Compost	0.10	0.06	0.07	0.06	0.04	0.02	0.02	0.02	(5.9%)
Landfill	0.78	1.04	1.15	1.24	1.42	1.63	1.77	1.91	+8.0%
Unknown	0.07	0.08	0.00	0.00	0.00	0.00	0.00	0.00	n/a
Total	4.21	4.37	4.57	4.79	5.01	5.29	5.44	5.63	+3.6%

Increased flow of waste to out-of-state landfills

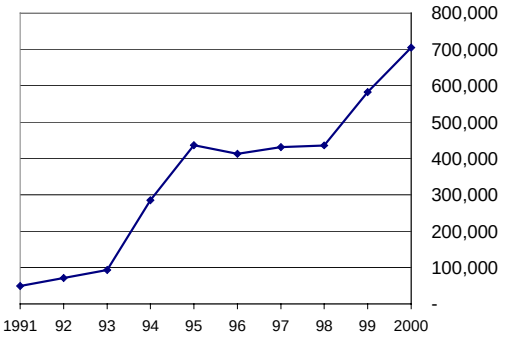
Historically, at least a portion of Minnesota's MSW has beenmanaged at out-of-state facilities. In 1994, a landmark court decision (Carbone) declared flow control an unconstitutional restriction on interstate commerce. As a result, garbage haulers were able to send MSW to less-expensive landfills both in and out of state. In 1994, Minnesota saw its largest increase in MSW landfilled out of state (a 200+ percent increase) with a 53 percent increase the following year.

Shipments of Minnesota MSW to out-of-state landfills have increased to nearly 700,000 tons, 13 times the amount of waste shipped in 1991.

A recent article on regional waste exports summed up the problem nicely: "Minnesota's neighbors have become attractive dumping sites, in part because landfill location, expansion, environmental and insurance requirements in those states aren't nearly as stringent as they are in Minnesota." ("Your trash in their backyard," *St. Paul Pioneer Press*, October 14, 2001.)

Figure 4-4: Minnesota MSW shipped out of state, 1991-2000

The tonnage of Minnesota MSW out of state increased by 19 percent for 1999-2000.



Upper Midwest Solid Waste Management Summit

The OEA began discussions with Iowa and Wisconsin in 2000 about various environmental concerns, including out-of-state waste flow. In December 2000, the three states organized the Upper Midwest Solid Waste Management Summit in Des Moines, Iowa. The summit also included the states of North and South Dakota, Illinois, Indiana, Michigan, Nebraska and Ohio, and representatives from U.S. EPA Region 5.

The group's primary goal was to advance a multi-state, regional approach for managing solid waste issues. Each state outlined its solid waste programs and policy, followed by in-depth discussions of key issues that were common to all. The group identified seven key areas on which to work together:

1. Develop a common vision and policies among the states on issues such as disposal bans, waste toxicity and "bioreactor" landfills.
2. Address the growing amount of waste transported for disposal across state lines.
3. Improve the sharing of data and information among the states, such as developing methods for standardizing information and for tracking waste.
4. Develop recycling markets and implement procurement practices at a regional level.
5. Improve regional awareness of solid waste issues by educating the public and decision-makers.
6. Develop an approach to address the impact of consolidation by the waste management businesses.
7. Work with major manufacturers on product stewardship issues, such as instituting take-back programs.

The group agreed to continue discussion in these priority areas, to share solid waste trend data, and discuss possible partnership opportunities.

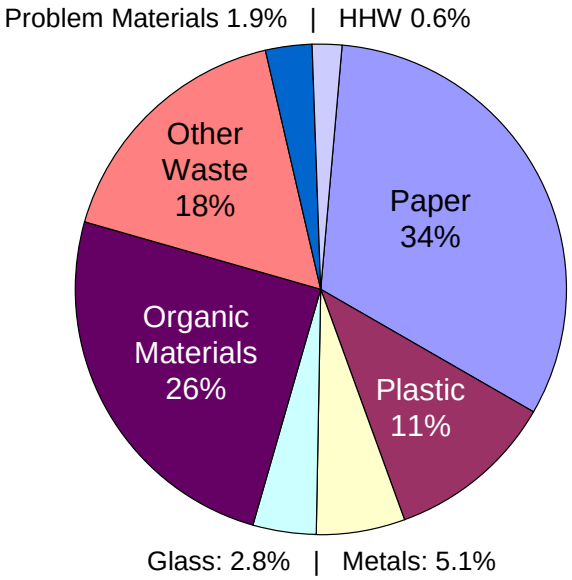
A second meeting was held in Madison, Wis., in December 2001 and a third meeting is scheduled for December 2002 to continue discussions between the states on solid waste management, policy, and planning. For more information, contact Mark Rust <mark.rust@moea.state.mn.us> at 651-296-3417.

Related Research: Waste composition

The Statewide MSW Composition Study (March 2000) is a detailed examination of what Minnesotans throw away as garbage. Based on samples taken from eight locations around the state in 1999, the study offers a comprehensive look at materials that are going to landfills, MSW composting operations and incinerators.

The data and analysis are especially useful for identifying materials in waste that offer opportunities for increased recycling and targets for waste reduction. For example, paper remains the largest category of material in garbage despite widely available paper recycling programs in Minnesota that collected 863,921 tons in 2000. Samples showed that food and yard waste total nearly 15% of Minnesota's trash.

The full report is online at www.moea.state.mn.us/policy/wastesort.cfm, or contact the OEA for a printed copy, 651-296-3417 or 800-657-3843.



For a national perspective, the U.S. Environmental Protection Agency's (EPA) most recent study is *Municipal Solid Waste in the United States: 1999 Facts and Figures.* It features national MSW data and trends, including a snapshot of national waste composition. Download the report from EPA's web site: www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm.

Chapter 5

Efforts to Reduce Waste in Minnesota

Minnesota's efforts are not restricted to managing waste. The state's steady increase in waste generation has environmental impacts, and is a burden on Minnesota's integrated waste system. As a result, state and local efforts are also focused on *reducing* waste. Preventing waste at its source is at the top of the waste management hierarchy because it is the most beneficial waste management strategy, both economically and environmentally.

Waste that is prevented at its source need not be managed or recycled, which means fewer costs and less pollution from transporting, recycling, processing or landfilling wastes. Waste reduction helps sustain the longevity and economic viability of the state's waste management systems.

Source reduction checklist

The annual SCORE survey includes the source reduction checklist, which helps the OEA assess county efforts to reduce waste at the local level. County programs can earn a credit of up to 3 percent which is added onto their base recycling rate; this helps counties meet the Legislature's recycling goals.

The checklist has grown to include 42 questions, divided into five categories:

- Promotion.
- General education/information.
- Outreach to county departments and local governments.
- Technical assistance.
- Policy initiatives.

The Source Reduction Checklist is Appendix C. The complete 2000 SCORE Survey can be downloaded from the OEA web site: www.moea.state.mn.us/lc/score00.cfm.

Counties across the state are making an effort to bring the message of waste reduction to Minnesota residents and businesses. Some counties have been able to collect data to document specific waste reduction efforts in their area. These efforts, coupled with the checklist, have increased the average source reduction credit in 2000 to 2.7 percent.

Statewide waste reduction campaign

In 2000, the OEA launched an ambitious statewide education campaign dedicated to waste reduction. The ongoing messages of *Reduce Waste: If not you, who?* focus on the opportunities that people have to reduce their everyday production of waste and recyclables. The underlying goal of *If not you, who?* is to make the ideas of reducing and reusing social "norms," changing individual behaviors and attitudes about producing and disposing of waste.

Media campaign

Focus group research showed that while Minnesotans have embraced the concept of recycling, the average Minnesotan did not understand the need to reduce and prevent waste. To increase public awareness of the issue, the first phase of this campaign (January 2000 to March 2000) was targeted at Minnesota families with children. The campaign's outreach included mass media, public relations and grassroots education.

Prior to the campaign's launch, the OEA conducted regional, hands-on workshops around the state with educators to align local efforts supporting the statewide media messages. Ultimately, over half of Minnesota's 87 counties participated in this education effort as well as many other schools, community organizations, business organizations and other local educators.

The OEA paid for six weeks of advertising through mass media, including one spot each for television and radio, newspaper ads, and billboards. People could get additional information and resources by visiting the campaign web site, www.reduce.org, or calling a special toll-free number. The campaign's messages were picked up by the media around the state, and echoed in local education efforts by cities and counties.

Billboards were economical and surprisingly effective in spreading the campaign's messages.

Follow-up market research showed the campaign's impact, including a 14 percent increase in "proven" awareness among parents of the reduce waste messages of the campaign. Surveys also helped the OEA target future topics for their ongoing waste reduction efforts, including a major push on stopping unwanted mail ("junk mail") that took place in 2001.

Continuing efforts

The OEA worked to coordinate many of its outreach efforts in 2000 with the messages of the campaign. The waste reduction campaign is an ongoing effort for the OEA that will continue on into 2002 and beyond. For more information about the waste reduction campaign, visit www.reduce.org or contact Colleen Hetzel <colleen.hetzel@moea.state.mn.us> at 651-296-3417.

OEA grants

The OEA uses its Environmental Assistance Grants program to spur efforts to reduce waste throughout Minnesota. Eligible projects in the grants RFP for fiscal year 2000 included those which minimize toxicity, reduce materials used, or encourage the reuse of materials.

For example, Institute for Agriculture and Trade Policy (Minneapolis) received grant funding for a project to educate Minnesota consumers about the health risks of mercury, particularly in the Hmong, Hispanic and other communities with high rates of subsistence fishing. Brochures and outreach from this project focus on the risks of mercury fever thermometers and appropriate disposal and alternatives.

The OEA has an online database summarizing OEA-funded grant projects. For more information, go to www.moea.state.mn.us/grants/awarded.cfm.

Materials exchange

Materials exchanges are networks that help businesses and organizations find uses for items that would otherwise be thrown away. Exchanges keep usable materials from going to waste. Businesses also save money, both by avoiding costs of disposal and getting materials at little or no cost.

The statewide Minnesota Materials Exchange Alliance went online in 1999 with a database and interactive web site, www.mnexchange.org, used to conduct exchanges, track and measure results, and print the statewide catalog. The statewide program is run by the Minnesota Technical Assistance Program (MnTAP) with OEA funding.

Materials exchanged in 2000 ranged from office supplies and equipment to construction materials and furnishings, as well as transport packaging (pallets and barrels) and industrial chemicals.

Minnesota Materials Exchange

www.mnexchange.org

2000 Statewide Results

Exchanges	985
Tons	655
Savings	$336,808

Totals do not include results from Otter Tail County. Savings include avoided disposal costs and the cost of purchasing similar materials.

The OEA funded five local materials exchange projects in 1999 to help extend the statewide reach of the Minnesota Materials Exchange Alliance. MnTAP is working to integrate these regional programs into the statewide network:

- Becker, Clay and Wilkin Counties
- Cass, Crow Wing and Hubbard Counties | http://mncasscounty.com
- Chisago County | www.co.chisago.mn.us/Chis-Mat-list-bw.htm
- Otter Tail County
- Southwest Regional Solid Waste Commission | www.lyonco.org/sw/mex.html (Cottonwood, Jackson, Lac qui Parle, Lincoln, Lyon, Murray, Nobles, Pipestone, Redwood, Renville, Rock and Yellow Medicine Counties)

CISSR

Counties and Cities Involved in Source Reduction and Recycling (CISRR) is a networking group for local government waste prevention programs that is coordinated by the OEA. The group meets six times a year to discuss and exchange ideas about waste reduction programs and coordinate waste reduction activities throughout Minnesota.

CISRR's quarterly newsletter that provides waste reduction and recycling information to the 215 CISRR members, as well as county solid waste officers. It includes a calendar of events, meeting minutes, articles, and a new feature, Web Links.

In 2000, CISRR focused on the statewide waste reduction campaign launched at the beginning of the year. CISRR members were provided with materials to educate their residents on the benefits of reducing their waste. Over half of the counties in Minnesota participated in the statewide campaign. Many counties had great success with the advertising campaign and put the waste reduction messages on television and radio, in newspapers and public buildings.

2000 CISRR topics

- Materials exchange
- Waste-Free Fridays
- Environmentally preferable purchasing
- Business waste reduction
- Product stewardship
- SCORE reporting
- Paint recycling
- Green building
- Electronics recycling
- Sustainable communities

For more information about CISRR, contact Colleen Hetzel or Jennifer Havens at 651-296-3417.

Environmentally Preferable Purchasing Guide

The *Environmentally Preferable Purchasing Guide (EPPG)* was developed by the Solid Waste Management Coordinating Board (SWMCB), in conjunction with the OEA and the Minnesota Department of Administration, to promote the purchase of environmentally preferable products. The EPPG focuses on government procurement and specifically on purchasing products/services off the state contract. The EPPG helps users:

The purchasing guide is online at www.swmcb.org/EPPG/. *A limited number of printed copies are available from the OEA; contact Mike Liles* <mike.liles@moea.state.mn.us> *at 651-215-0220.*

- Identify ways to reduce waste in the office, shop or facility.
- Write environmental specifications into bid solicitations.
- Locate surplus and reuse programs to obtain low-cost or used equipment and supplies.
- Choose more environmentally preferable products in over 30 categories.
- Tap into web sites and other resources related to environmentally preferable purchasing.

To help purchasers make informed decisions, the description of each product or service includes the following details: general product background; related environmental and health issues; applicable laws and guidelines; history of performance; cost considerations; product vendors; sample specifications; and additional resources.

Product stewardship

Product stewardship means that everyone involved in designing, manufacturing, selling and using products takes responsibility for the environmental impacts at every stage of those products' lives. In particular, product stewardship asks manufacturers to share in the financial and physical responsibility for recovering and recycling products when people are done using them.

When manufacturers share the costs of recycling products, they have an incentive to use recycled materials in new products and design products to be less toxic and easier to recycle, incorporating environmental concerns into the earliest phases of product design.

Minnesota is the first state to develop and implement a product stewardship policy. The OEA's product stewardship policy creates partnerships between government and industry to reduce the environmental impacts of manufactured products throughout their life cycles in an economically efficient and environmentally beneficial manner.

The OEA's product stewardship policy is online:
www.moea.state.mn.us/policy/productstewardship.cfm

Priority products

Initially, the OEA chose three products to be addressed within a product stewardship framework: paint, carpet, and electronic products that contain cathode ray tubes. These products were chosen based on factors such as toxicity, volume being discarded and potential for increased recycling.

Carpet

In February 2000, OEA convened the *Midwestern Workgroup on Carpet Recycling* to explore product stewardship for discarded carpet, which currently accounts for at least 77,000 tons, or 2.4 percent of the wastestream in Minnesota. Originally, the workgroup was spearheaded by the states of Minnesota, Iowa and Wisconsin, and the U.S. EPA. Ultimately, the workgroup grew to include 40 representatives from the carpet industry (manufacturers, carpet retailers and recyclers), federal, state and local governments, and non-governmental environmental groups.

The OEA hosts the resources from the national workgroups on its web site:
www.moea.state.mn.us/carpet/index.cfm

Their work culminated in a nationally recognized memorandum of understanding (MOU) in January 2001 that created a third-party, industry-funded organization that will establish national collection and recycling programs for used carpet. The final agreement had the support of more than 15 state governments.

Current developments. In 2001, Minnesota helped lead a second phase effort that established a ten-year schedule of recovery and recycling goals for carpet. A national agreement was signed in January 2002 that formalizes this schedule, with support of the carpet industry, government, and environmental organizations.

Electronics

Waste electronics are a growing waste challenge for Minnesota. A 1999 study by the National Safety Council estimated that nearly 500 million computers will become obsolete between 1997 and 2006. Few old household electronic products are recycled; most are either in storage or are thrown into landfills. Electronic products with cathode ray tubes (CRTs), such as televisions and computer monitors, contain lead and other heavy metals that are toxic if released into the environment. They also contain valuable glass, metals and plastics that can be used to make new products, rather than wasted.

Electronics with CRTs Task Force. The OEA and the Metro Area Solid Waste Management Coordinating Board (SWMCB) of the Metropolitan Counties convened this task force on electronic products containing CRTs. Members included electronics manufacturers, retailers, recyclers, and representatives from local and state government. The task force met seven times from September 1999 to October 2000 to examine management and financing options, and assess various markets for materials from recovered electronic products.

The final report (July 2000) is online on the SWMCB web site:
www.swmcb.org/studies/CRTtaskForce.htm

The relationships, knowledge and experience gained through Minnesota's CRT Task Force led to a variety of collection and recycling projects with manufacturers, retailers, recyclers and local governments in 2000 and 2001. These projects have provided useful information and experience toward achieving the state's goal of establishing a national program for electronics collection and recycling in partnership with the electronics industry.

Demonstration project: Plug into Recycling. In 1999, in conjunction with the task force, OEA formed a partnership with Sony Electronics, Panasonic, Waste Management's Asset Recovery Group and the American Plastics Council to design and conduct a three-month statewide collection and recycling project for used residential electronics. This project explored the economics and feasibility of collecting and recycling electronic equipment using a shared responsibility and financing model in order to identify how best to capture and recycle used electronics from municipal waste in Minnesota.

The final report of the Plug into Recycling project is available on the OEA's web site:
www.moea.state.mn.us/plugin/report.cfm

Sony take-back program. Building on the success of the demonstration project, in October 2000, Sony Electronics announced a landmark effort with its vendor, Waste Management (WM), to recycle Sony-brand electronics from Minnesota consumers. Through this program, the first program of its kind in the U.S., Minnesota residents can recycle Sony products at no charge by dropping them at designated WM sites. Learn more on the OEA's web site: www.moea.state.mn.us/plugin/sonyevents.cfm.

Current developments: NEPSI. The OEA's partnerships and projects with electronics manufacturers over the last three years laid the groundwork for the National Electronics Product Stewardship Initiative, which began in 2001. NEPSI is a series of six meetings over a one-year period, involving 12 electronics manufacturers, ten states (including Minnesota), the federal government, and national environmental organizations. The purpose of the dialogue is to reach agreement on a national system for collecting, reusing and recycling electronics, and on how that system will be financed. Participants hope to complete negotiations in the summer of 2002.

Paint

Paint is the largest-volume item collected by city and county household hazardous waste (HHW) programs. However, leftover paint is typically still a usable material and can produce cost savings if managed as a recyclable material rather than a hazardous waste.

Task Force on Paint. The Task Force on Paint met six times between April 1999 and February 2000 to examine product stewardship options for discarded paint. Members included a number of local and national paint manufacturers and retailers, recyclers, key trade association members, and state and local government representatives.

The final report of the task force is on the SWMCB web site:
www.swmcb.org/studies/PaintReport9.htm

The task force decided to pursue a consumer-focused education program to encourage more timely disposal of leftover paint. In addition, market development efforts would focus on increasing the purchase of recycled content paint, with priority given to public sector purchasing. The OEA is continuing to examine options to pursue product stewardship initiatives for paint.

Market development. In related efforts, the OEA used its grant program in FY2000 to work with two paint manufacturers in Minnesota to increase paint recycling and create recycled-content latex paints. Amazon Environmental (Roseville) produces reblended paint, *Amazon Select*™, which contains a minimum of 80% post-consumer recycled content material. Hirshfield's Paint Manufacturing (Minneapolis) makes a high-quality reprocessed paint, *RenewWall*™, containing a minimum of 20% post-consumer recycled material.

More about these Minnesota paint manufacturers is online:
www.moea.state.mn.us/lc/purchasing/latexpaint.cfm

Both companies are on the state contract for recycled latex paint (P-861(5)). Their products are less expensive than competing non-recycled brands, and meet rigorous specifications for performance and quality.

Chapter 6

Finance and Administration of SCORE Programs

In addition to enthusiastic support and participation by state residents and businesses, Minnesota's recycling and solid waste programs have succeeded thanks to long-term funding commitments from the Legislature and local governments. In 2000, Minnesota counties spent $41.7 million in state and local funds for SCORE-related programs, an increase of $300,000 from 1999.

Such support demonstrates a strong dedication to the waste management hierarchy and the commitment of counties to solid waste abatement and management in Minnesota.

Funding of SCORE programs

SCORE programs are funded by money from local government and the state.

SCORE block grants

State funding has remained the same since the early years of the SCORE program, while volumes of waste and recyclables have significantly increased. As programs have changed, counties have shouldered the additional costs.

From the inception of SCORE, dedicated state tax revenue has provided a stable funding source for recycling and waste reduction programs. Originally, the state's sales tax was extended to solid waste collection and disposal services. In 1997, this tax was replaced with a Solid Waste Management Tax, which is applied to charges for garbage service for residential, commercial and other wastes. Money from the state is passed on to the county level in the form of annual block grants.

In 2000, the OEA disbursed about $14 million in SCORE block grants to counties that met the following eligibility requirements.

- Maintained funds in a separate general fund account.
- Spent the funds only on eligible activities.
- Had an approved solid waste management plan or master plan that includes a recycling implementation strategy and a household hazardous waste plan.
- Reported annually to the OEA on how the money was spent and on resulting improvements in solid waste management practices.
- Provided evidence to the OEA that local revenues equal to 25 percent of the SCORE block grant received will also be spent on SCORE-related and eligible activities.

The Minnesota Legislature continues to show its commitment to recycling and source reduction efforts through continued funding of the SCORE block grant programs. In 2000, the Legislature dedicated approximately $14 million dollars for each year of the 2000-2001 biennium.

Figure 6-1: SCORE expenditures, 1993-2000 (millions of dollars)

	1993	1994	1995	1996	1997	1998	1999	2000	Change 1999-2000
Greater Minnesota	18.1	18.5	18.6	19.8	20.4	21.5	23.0	23.1	0.4%
Metropolitan Area	23.1	21.1	16.4	17.1	16.1	16.7	18.4	18.6	1.1%
Total	41.2	39.7	34.9	36.8	36.6	38.1	41.4	41.7	0.7%

The annual SCORE survey includes only county spending. Cities, townships, and other local units of government also fund programs for waste management, reduction and recycling.

County Revenues for SCORE

Each county is required to match SCORE block grants with a local contribution of at least 25 percent. In 2000, counties exceeded this match by 8 times, contributing nearly $28 million toward SCORE-related activities.

Counties use a variety of sources to pay for SCORE-eligible programs.

- **Tip fees** are fees charged at solid waste processing facilities.
- **Service fees,** or service charges, are uniform fees paid by all waste generators or property owners. Service fees generally appear as a separate line item on utility bills, MSW haulers' bills or property tax bills.
- **General revenue** is derived from county general funds.

Counties continue to shift their methods for financing solid waste programs, seeking to provide both waste assurance and reliable funding sources for programs.

County expenditures for SCORE

Within certain guidelines, counties have broad discretion in determining how to spend SCORE block grants and local matching funds. This flexibility allows counties to develop programs that best meet local needs.

In 2000, Minnesota counties spent over $42 million dollars (county revenue plus state grant funds) on a variety of SCORE-related programs. 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, and waste education.

Figure 6-1 shows SCORE expenditures by Greater Minnesota and Metropolitan Area counties for 1993-2000.

The OEA monitors the county use of SCORE grants to ensure they are used to fund SCORE-eligible programs. Minn. Stat. § 115A.55 authorizes counties to spend SCORE block grants and matching funds on programs in the following areas:

- Source reduction
- Recycling
- Market development
- Management of problem materials
- Waste education
- Litter prevention
- Technical assistance to ensure proper solid waste management
- Waste processing

Current developments. During the 2001 Legislative Session, Minn. Stat. 115A.557, subdivision 2, was amended to allow county SCORE dollars to be spent on waste processing efforts. This change was in addition to the $5 per ton credit disbursement to counties that process waste, described in Chapter 4.

Finances: Revenues (part 1)

County	CY1999 revenue carried over	Adjustment to carryover	General revenue	Service fee	Processing facility tip fee	Land disposal facility surcharge
Aitkin	$0	0	$335,919	$0	$0	$0
Anoka	$0	0	$187,676	$266,460	$0	$0
Becker	$0	0	$0	$0	$0	$0
Beltrami	($364,894)	0	$0	$55,215	$0	$0
Benton	$60,915	0	$0	$23,500	$0	$0
Big Stone	($8,142)	0	$13,750	$0	$0	$55,000
Blue Earth	$0	0	$0	$162,994	$0	$0
Brown	($33,523)	0	$0	$293,440	$0	$0
Carlton	($225,222)	0	$0	$4,050	$5,172	$0
Carver	$0	0	$0	$310,534	$0	$0
Cass	$0	0	$0	$507,952	$0	$0
Chippewa	$95	0	$89,712	$0	$0	$0
Chisago	$19,144	0	$0	$298,976	$0	$0
Clay	$21,526	0	$0	$359,514	$0	$0
Clearwater	$0	0	$0	$61,554	$0	$0
Cook	$0	0	$152,706	$0	$0	$0
Cottonwood	$141,352	1,566	$0	$106,951	$0	$0
Crow Wing	$399,275	0	$0	$0	$28,939	$0
Dakota	($3,291)	3,291	$0	$0	$0	$180,597
Dodge	($41,293)	41,293	$97,978	$0	$0	$0
Faribault	$1,940	0	$46,027	$0	$0	$0
Fillmore	$0	0	$29,777	$0	$0	$0
Freeborn	$0	0	$0	$268,336	$0	$0
Goodhue	$0	0	$173,040	$12,028	$0	$0
Grant	$16,041	0	$0	$78,842	$0	$0
Hennepin	$0	0	$0	$4,669,622	$8,056	$0
Houston	$0	0	$145,683	$0	$0	$0
Hubbard	($302,471)	0	$13,750	$400,500	$0	$0
Isanti	$89,289	0	$0	$0	$0	$0
Itasca	$0	0	$379,132	$0	$0	$0
Jackson	$112,420	0	$13,750	$0	$0	$0
Kanabec	$81,996	0	$13,750	$0	$0	$0
Kandiyohi	$0	0	$0	$0	$0	$0
Kittson	$15,790	0	$0	$0	$0	$0
Koochiching	$0	0	$20,000	$117,221	$0	$0
Lac Qui Parle	($50,054)	0	$80,000	$0	$0	$0
Lake	$0	0	$144,606	$0	$0	$0
Lake of the Woods	$0	0	$42,356	$0	$0	$0
Le Sueur	$0	0	$29,826	$0	$0	$0
Lincoln	$115,854	0	$12,750	$0	$0	$0
Lyon	$0	0	$1,953	$113,943	$0	$45,940
Mahnomen	$78,631	0	$0	$13,750	$0	$0
Marshall	$27,537	0	$13,750	$0	$0	$0
Martin	$53,239	0	$103,942	$0	$0	$0
McLeod	$0	0	$0	$0	$0	$720,252
Meeker	$87,812	0	$15,500	$0	$0	$0

Finances: Revenues (part 1)

County	CY1999 revenue carried over	Adjustment to carryover	General revenue	Service fee	Processing facility tip fee	Land disposal facility surcharge
Mille Lacs	$0	0	$86,393	$0	$0	$0
Morrison	$44,523	0	$64,878	$0	$0	$0
Mower	$0	0	$0	$217,044	$0	$0
Murray	$127,696	0	$13,750	$0	$0	$0
Nicollet	$41,045	0	$157,801	$0	$0	$0
Nobles	$210,090	0	$16,422	$178,349	$0	$117,058
Norman	$1,480	0	$8,535	$0	$0	$0
Olmsted	($16,754)	0	$0	$0	$183,574	$0
Otter Tail	$17,700	0	$0	$90,216	$0	$0
Pennington	$18,749	0	$0	$0	$0	$0
Pine	$0	0	$98,338	$0	$0	$0
Pipestone	($38,109)	38,109	$92,445	$0	$0	$0
Polk	($127,347)	-76	$0	$250,076	$0	$0
Pope/Douglas	$56,282	0	$200,000	$0	$0	$0
Ramsey	$0	0	$0	$2,425,118	$0	$0
Red Lake	$0	0	$37,721	$0	$0	$0
Redwood	$73,944	0	$0	$126,104	$0	$0
Renville	$92,684	0	$82,570	$0	$0	$0
Rice	($607,298)	0	$0	$347,406	$0	$0
Rock	($3,373)	0	$49,368	$0	$0	$0
Roseau	($15,250)	0	$0	$0	$0	$0
Saint Louis	$0	0	$0	$598,015	$0	$0
Scott	$529,079	0	$150,000	$0	$0	$299,999
Sherburne	$15,264	0	$0	$0	$0	$82,916
Sibley	$0	0	$87,087	$0	$0	$0
Stearns	$299,271	0	$20,218	$109,963	$0	$0
Steele	$0	0	$0	$280,279	$0	$0
Stevens	$111,346	0	$13,750	$0	$0	$0
Swift	($122,837)	122,837	$42,315	$53,771	$0	$0
Todd	$0	0	$0	$89,383	$0	$0
Traverse	($4,867)	4,867	$13,750	$0	$0	$0
Wabasha	($217,078)	0	$14,223	$0	$0	$0
Wadena	($13,619)	13,619	$28,051	$0	$0	$0
Waseca	$0	0	$0	$18,038	$0	$0
Washington	$0	0	$0	$331,598	$0	$0
Watonwan	$47,520	0	$13,718	$129,618	$0	$0
WLSSD	$431,687	0	$0	$388,000	$0	$0
Wilkin	$0	0	$0	$42,953	$0	$55,000
Winona	$0	0	$0	$538,403	$0	$0
Wright	$856,490	0	$0	$2,794	$0	$72
Yellow Medicine	$0	0	$17,597	$0	$0	$8,390
Metro Area	$525,788	$3,291	$337,676	$8,003,331	$8,056	$480,596
Greater Minn.	$1,576,498	$222,216	$3,128,587	$6,339,179	$217,685	$1,084,628
Minnesota	$2,102,286	$225,507	$3,466,263	$14,342,510	$225,741	$1,565,224

Finances: Revenues (part 2)

County	SCORE pass-through	Grants	HHW funding	Material sales	Other	Total Revenue
Aitkin	$55,000	$0	$3,386	$0	$0	$394,305
Anoka	$801,191	$168,552	$0	$0	$301,006	$1,724,885
Becker	$80,375	$0	$38,151	$0	$375,805	$494,331
Beltrami	$103,635	$0	$8,209	$0	$0	($197,836)
Benton	$94,154	$0	$1,429	$0	$0	$179,998
Big Stone	$0	$0	$2,400	$0	$0	$63,008
Blue Earth	$150,955	$0	$0	$0	$0	$313,949
Brown	$75,809	$0	$2,674	$70	$6,725	$345,195
Carlton	$214,102	$5,334	$8,183	$0	$0	$11,619
Carver	$178,031	$128,820	$0	$0	$39,978	$657,363
Cass	$68,654	$0	$6,787	$0	$0	$583,393
Chippewa	$55,000	$0	$2,400	$0	$0	$147,207
Chisago	$162,225	$22,852	$1,520	$0	$7,155	$511,872
Clay	$144,210	$0	$11,137	$0	$396	$536,783
Clearwater	$55,000	$0	$5,272	$22,633	$550	$145,010
Cook	$0	$0	$968	$78,091	$0	$231,765
Cottonwood	$55,000	$4,000	$0	$801	$8,924	$318,595
Crow Wing	$141,219	$0	$10,112	$0	$770	$580,315
Dakota	$934,292	$0	$0	$0	$52,976	$1,167,865
Dodge	$55,000	$0	$2,364	$71,966	$0	$227,308
Faribault	$0	$55,000	$3,407	$0	$0	$106,374
Fillmore	$0	$1,178	$4,913	$17	$0	$35,885
Freeborn	$87,420	$0	$9,631	$2,440	$764	$368,591
Goodhue	$354,445	$0	$9,869	$213,058	$3,710	$603,652
Grant	$55,000	$0	$0	$0	$200	$150,083
Hennepin	$2,930,111	$458,181	$36,170	$385,756	$62,021	$8,549,917
Houston	$55,000	$0	$3,483	$193,976	$12,500	$410,642
Hubbard	$55,000	$0	$0	$0	$0	$166,779
Isanti	$81,869	$10,000	$11,233	$0	$0	$192,391
Itasca	$118,766	$0	$5,222	$0	$0	$503,120
Jackson	$55,000	$0	$750	$0	$2,643	$184,564
Kanabec	$27,500	$0	$4,587	$0	$0	$196,583
Kandiyohi	$113,363	$0	$7,918	$405,190	$146,118	$672,589
Kittson	$55,000	$0	$4,471	$13,184	$6,426	$94,872
Koochiching	$55,000	$0	$4,319	$19,055	$0	$215,595
Lac Qui Parle	$55,000	$0	$2,400	$0	$0	$87,346
Lake	$55,000	$0	$3,780	$35,285	$0	$238,671
Lake of the Woods	$55,000	$0	$0	$75,043	$315	$172,714
Le Sueur	$68,596	$0	$3,500	$15,711	$4,514	$122,147
Lincoln	$55,000	$0	$750	$454	$750	$185,558
Lyon	$69,040	$18,434	$68,972	$8,476	$4,918	$331,676
Mahnomen	$55,000	$0	$5,388	$0	$0	$152,770
Marshall	$55,000	$0	$4,756	$17,396	$6,697	$125,136
Martin	$61,576	$0	$8,179	$1,820	$250	$229,006
McLeod	$95,109	$0	$12,332	$1,900	$2,935	$832,528
Meeker	$59,360	$0	$4,307	$1,787	$217	$168,983

Finances: Revenues (part 2)

County	SCORE pass-through	Grants	HHW funding	Material sales	Other	Total Revenue
Mille Lacs	$57,307	$0	$0	$0	$0	$143,700
Morrison	$85,642	$0	$5,123	$0	$108,100	$308,266
Mower	$101,775	$0	$11,247	$163,098	$50,525	$543,689
Murray	$55,000	$4,500	$0	$0	$9,802	$210,748
Nicollet	$82,028	$0	$6,102	$18,834	$1,607	$307,417
Nobles	$55,131	$0	$1,000	$0	$1,778	$579,828
Norman	$55,000	$0	$2,400	$1,866	$599	$69,880
Olmsted	$325,609	$2,295	$115,944	$0	$52,806	$663,474
Otter Tail	$148,390	$0	$34,836	$539,931	$37,189	$868,261
Pennington	$55,000	$0	$0	$0	$0	$73,749
Pine	$65,241	$0	$4,406	$0	$0	$167,985
Pipestone	$55,000	$0	$750	$0	$0	$148,195
Polk	$220,028	$0	$5,813	$44,097	$1,264	$393,856
Pope/Douglas	$140,682	$0	$9,807	$0	$1,611	$408,382
Ramsey	$1,339,693	$237,456	$0	$291,616	$149,550	$4,443,433
Red Lake	$55,000	$0	$5,207	$12,557	$0	$110,485
Redwood	$55,000	$0	$1,000	$110,840	$0	$366,888
Renville	$55,000	$0	$2,400	$2,501	$0	$235,155
Rice	$147,568	$0	$28,167	$354,000	$36,756	$306,599
Rock	$55,000	$0	$0	$0	$7,150	$108,145
Roseau	$55,000	$0	$5,029	$20,644	$6,911	$72,334
Saint Louis	$261,791	$0	$11,000	$231,560	$0	$1,102,366
Scott	$215,879	$135,680	$0	$0	$0	$1,330,638
Sherburne	$166,679	$3,252	$85	$0	$0	$268,196
Sibley	$55,000	$0	$3,488	$12,620	$2,945	$161,140
Stearns	$360,097	$0	$4,853	$12,034	$111,817	$918,253
Steele	$88,721	$0	$3,557	$0	$608	$373,165
Stevens	$55,000	$0	$0	$0	$35	$180,131
Swift	$82,500	$0	$2,400	$39,672	$0	$220,658
Todd	$32,698	$0	$4,233	$72,118	$0	$198,432
Traverse	$55,000	$0	$0	$0	$0	$68,750
Wabasha	$56,893	$0	$0	$0	$1,260	($144,702)
Wadena	$55,000	$0	$3,532	$643	$7	$87,233
Waseca	$55,000	$0	$3,653	$126,355	$1,216	$204,262
Washington	$534,366	$309,799	$0	$0	$86,079	$1,261,842
Watonwan	$0	$0	$2,400	$0	$242	$193,498
WLSSD	$277,838	$3,490	$230,007	$0	$129,315	$1,460,337
Wilkin	$0	$0	$0	$15,529	$525	$114,008
Winona	$134,386	$0	$14,053	$0	$9,785	$696,627
Wright	$0	$0	$0	$0	$98,177	$957,533
Yellow Medicine	$55,000	$0	$750	$0	$5,251	$86,988
Metro Area	$6,933,563	$1,438,489	$36,170	$677,372	$691,611	$19,135,943
Greater Minn.	$7,023,386	$130,336	$812,400	$2,957,253	$1,270,562	$24,668,983
Minnesota	$13,956,949	$1,568,824	$848,570	$3,634,625	$1,962,173	$43,804,926

Finances: Revenue Summary

County	Adjusted CY1999 Revenue (carried over)	CY2000 Revenue	Total Revenue
Aitkin	$0	$394,305	$394,305
Anoka	$0	$1,724,885	$1,724,885
Becker	$0	$494,331	$494,331
Beltrami	($364,894)	$167,058	($197,836)
Benton	$60,915	$119,083	$179,998
Big Stone	($8,142)	$71,150	$63,008
Blue Earth	$0	$313,949	$313,949
Brown	($33,523)	$378,718	$345,195
Carlton	($225,222)	$236,841	$11,619
Carver	$0	$657,363	$657,363
Cass	$0	$583,393	$583,393
Chippewa	$95	$147,112	$147,207
Chisago	$19,144	$492,728	$511,872
Clay	$21,526	$515,257	$536,783
Clearwater	$0	$145,010	$145,010
Cook	$0	$231,765	$231,765
Cottonwood	$142,919	$175,676	$318,595
Crow Wing	$399,275	$181,040	$580,315
Dakota	$0	$1,167,865	$1,167,865
Dodge	$0	$227,308	$227,308
Faribault	$1,940	$104,434	$106,374
Fillmore	$0	$35,885	$35,885
Freeborn	$0	$368,591	$368,591
Goodhue	$0	$603,652	$603,652
Grant	$16,041	$134,042	$150,083
Hennepin	$0	$8,549,917	$8,549,917
Houston	$0	$410,642	$410,642
Hubbard	($302,471)	$469,250	$166,779
Isanti	$89,289	$103,102	$192,391
Itasca	$0	$503,120	$503,120
Jackson	$112,420	$72,143	$184,564
Kanabec	$81,996	$114,587	$196,583
Kandiyohi	$0	$672,589	$672,589
Kittson	$15,790	$79,081	$94,872
Koochiching	$0	$215,595	$215,595
Lac Qui Parle	($50,054)	$137,400	$87,346
Lake	$0	$238,671	$238,671
Lake of the Woods	$0	$172,714	$172,714
Le Sueur	$0	$122,147	$122,147
Lincoln	$115,854	$69,704	$185,558
Lyon	$0	$331,676	$331,676
Mahnomen	$78,631	$74,138	$152,770
Marshall	$27,537	$97,599	$125,136
Martin	$53,239	$175,767	$229,006
McLeod	$0	$832,528	$832,528
Meeker	$87,812	$81,170	$168,983

Finances: Revenue Summary

County	Adjusted CY1999 Revenue (carried over)	CY2000 Revenue	Total Revenue
Mille Lacs	$0	$143,700	$143,700
Morrison	$44,523	$263,743	$308,266
Mower	$0	$543,689	$543,689
Murray	$127,696	$83,052	$210,748
Nicollet	$41,045	$266,372	$307,417
Nobles	$210,090	$369,738	$579,828
Norman	$1,480	$68,400	$69,880
Olmsted	($16,754)	$680,228	$663,474
Otter Tail	$17,700	$850,561	$868,261
Pennington	$18,749	$55,000	$73,749
Pine	$0	$167,985	$167,985
Pipestone	$0	$148,195	$148,195
Polk	($127,422)	$521,278	$393,856
Pope/Douglas	$56,282	$352,100	$408,382
Ramsey	$0	$4,443,433	$4,443,433
Red Lake	$0	$110,485	$110,485
Redwood	$73,944	$292,944	$366,888
Renville	$92,684	$142,471	$235,155
Rice	($607,298)	$913,897	$306,599
Rock	($3,373)	$111,518	$108,145
Roseau	($15,250)	$87,584	$72,334
Saint Louis	$0	$1,102,366	$1,102,366
Scott	$529,079	$801,559	$1,330,638
Sherburne	$15,264	$252,932	$268,196
Sibley	$0	$161,140	$161,140
Stearns	$299,271	$618,982	$918,253
Steele	$0	$373,165	$373,165
Stevens	$111,346	$68,785	$180,131
Swift	$0	$220,658	$220,658
Todd	$0	$198,432	$198,432
Traverse	$0	$68,750	$68,750
Wabasha	($217,078)	$72,376	($144,702)
Wadena	$0	$87,233	$87,233
Waseca	$0	$204,262	$204,262
Washington	$0	$1,261,842	$1,261,842
Watonwan	$47,520	$145,978	$193,498
WLSSD	$431,687	$1,028,650	$1,460,337
Wilkin	$0	$114,008	$114,008
Winona	$0	$696,627	$696,627
Wright	$856,490	$101,043	$957,533
Yellow Medicine	$0	$86,988	$86,988
Metro Area	$529,079	$18,606,864	$19,135,943
Greater Minn.	$1,798,714	$22,870,269	$24,668,983
Minnesota	$2,327,793	$41,477,133	$43,804,926

Finances: Expenditures by program area (part 1)

County	Planning & administration	Recycling	Yard waste	HHW and problem materials	Source reduction
Aitkin	$86,814	$180,571	$0	$12,259	$700
Anoka	$429,599	$25,173	$84,008	$327,003	$32,078
Becker	$84,810	$150,254	$5,358	$159,579	$292
Beltrami	$0	$257,582	$15,000	$26,177	$0
Benton	$41,463	$10,300	$0	$24,088	$10,000
Big Stone	$10,660	$63,675	$0	$2,604	$0
Blue Earth	$2,800	$211,138	$90,000	$0	$0
Brown	$25,630	$310,308	$0	$48,902	$0
Carlton	$56,556	$78,649	$0	$8,339	$0
Carver	$250,809	$114,827	$26,760	$166,359	$0
Cass	$97,133	$394,003	$0	$83,263	$0
Chippewa	$20,626	$123,320	$0	$3,200	$0
Chisago	$98,915	$88,494	$0	$238,569	$811
Clay	$101,873	$274,920	$12,876	$73,719	$0
Clearwater	$20,891	$98,809	$540	$16,237	$0
Cook	$9,430	$192,730	$0	$28,721	$0
Cottonwood	$127,182	$92,837	$0	$3,638	$0
Crow Wing	$107,004	$12,385	$2,723	$134,563	$0
Dakota	$404,446	$23,447	$0	$526,759	$0
Dodge	$24,899	$158,493	$0	$15,668	$0
Faribault	$8,228	$33,682	$0	$16,666	$0
Fillmore	$19,225	$0	$0	$11,320	$0
Freeborn	$74,274	$273,092	$2,492	$14,090	$0
Goodhue	$364,338	$180,485	$0	$46,995	$0
Grant	$0	$105,773	$0	$32,324	$0
Hennepin	$957,611	$721,814	$8,920	$3,435,852	$3,575
Houston	$39,319	$359,049	$0	$10,223	$0
Hubbard	$47,844	$236,728	$7,583	$40,794	$0
Isanti	$41,887	$32,838	$0	$23,715	$0
Itasca	$91,356	$375,687	$0	$31,637	$0
Jackson	$27,697	$0	$0	$7,246	$0
Kanabec	$5,188	$67,354	$0	$8,997	$0
Kandiyohi	$233,128	$358,964	$0	$80,498	$0
Kittson	$32,954	$16,802	$0	$6,299	$0
Koochiching	$121,250	$62,749	$5,763	$15,825	$0
Lac Qui Parle	$49,578	$58,176	$0	$2,231	$0
Lake	$19,982	$164,052	$600	$25,141	$0
Lake of the Woods	$20,273	$138,847	$0	$13,400	$0
Le Sueur	$15,983	$65,115	$0	$25,446	$0
Lincoln	$7,984	$67,404	$0	$3,746	$0
Lyon	$90,553	$183,560	$0	$27,248	$18,434
Mahnomen	$28,450	$25,508	$0	$15,190	$0
Marshall	$18,534	$7,065	$0	$10,456	$0
Martin	$9,172	$158,158	$708	$11,376	$890
McLeod	$244,891	$81,449	$4,830	$261,608	$0
Meeker	$10,007	$47,169	$0	$16,013	$0

Finances: Expenditures by program area (part 1)

County	Planning & administration	Recycling	Yard waste	HHW and problem materials	Source reduction
Mille Lacs	$56,800	$85,800	$0	$0	$200
Morrison	$35,545	$106,784	$10,269	$96,954	$0
Mower	$117,673	$421,173	$0	$14,919	$650
Murray	$36,178	$18,943	$0	$2,556	$0
Nicollet	$36,384	$186,674	$0	$26,426	$0
Nobles	$71,449	$195,582	$0	$31,406	$0
Norman	$15,824	$44,219	$0	$546	$0
Olmsted	$39,200	$203,808	$66,939	$292,282	$46,073
Otter Tail	$458,238	$207,616	$0	$126,703	$6,304
Pennington	$4,613	$41,321	$0	$8,425	$0
Pine	$10,650	$140,909	$0	$15,979	$0
Pipestone	$15,577	$131,241	$0	$2,663	$0
Polk	$24,985	$178,363	$400	$45,607	$0
Pope/Douglas	$142,582	$195,123	$28,078	$10,128	$0
Ramsey	$1,199,280	$324,490	$798,085	$793,848	$35,902
Red Lake	$17,747	$85,629	$0	$6,574	$0
Redwood	$99,862	$137,797	$0	$2,671	$8,000
Renville	$6,090	$126,128	$0	$1,207	$375
Rice	$304,967	$459,264	$38,275	$100,478	$500
Rock	$45,729	$50,409	$2,850	$7,629	$300
Roseau	$22,206	$0	$0	$14,886	$0
Saint Louis	$125,947	$758,225	$0	$172,911	$1,738
Scott	$98,663	$0	$0	$370,709	$0
Sherburne	$4,833	$16,497	$1,500	$620	$0
Sibley	$15,463	$52,305	$0	$19,000	$0
Stearns	$115,383	$124,170	$30,744	$119,902	$9,944
Steele	$75,297	$267,183	$0	$7,826	$0
Stevens	$32,151	$32,782	$950	$2,663	$0
Swift	$157,141	$47,752	$2,830	$6,991	$1,920
Todd	$49,033	$121,084	$2,000	$26,315	$0
Traverse	$44,653	$27,576	$0	$1,518	$0
Wabasha	$37,930	$81,179	$0	$14,379	$0
Wadena	$5,924	$67,841	$3,000	$16,337	$0
Waseca	$52,661	$116,207	$2,455	$30,993	$0
Washington	$193,090	$22,717	$1,012	$386,167	$12,119
Watonwan	$6,305	$140,599	$5,906	$7,877	$0
WLSSD	$329,936	$69,012	$148,982	$258,485	$0
Wilkin	$14,221	$50,944	$8,648	$37,617	$1,430
Winona	$176,105	$480,697	$0	$60,326	$0
Wright	$10,163	$6,247	$0	$45,253	$0
Yellow Medicine	$9,794	$66,887	$0	$8,233	$0
Metro Area	$3,533,499	$1,232,469	$918,784	$6,006,697	$83,674
Greater Minn.	$5,364,020	$11,342,143	$502,299	$3,283,293	$108,561
Minnesota	$8,897,519	$12,574,612	$1,421,083	$9,289,990	$192,235

Finances: Expenditures by program area (part 2)

County	Education	Market development	Litter prevention	County grants to other local units of government
Aitkin	$5,620	$0	$240	$0
Anoka	$103,731	$0	$0	$723,293
Becker	$8,585	$0	$0	$85,453
Beltrami	$18,358	$0	$0	$0
Benton	$5,957	$10,000	$0	$30,615
Big Stone	$1,236	$0	$0	$0
Blue Earth	$10,011	$0	$0	$0
Brown	$3,955	$0	$0	$0
Carlton	$9,063	$0	$0	$6,481
Carver	$26,399	$0	$8,459	$63,750
Cass	$8,994	$0	$0	$0
Chippewa	$18	$0	$0	$0
Chisago	$2,843	$0	$0	$0
Clay	$14,147	$0	$0	$0
Clearwater	$5,821	$0	$2,712	$0
Cook	$884	$0	$0	$0
Cottonwood	$2,735	$0	$0	$0
Crow Wing	$13,089	$0	$3,460	$171,005
Dakota	$200,517	$0	$0	$283,012
Dodge	$28,248	$0	$0	$0
Faribault	$3,570	$0	$0	$46,951
Fillmore	$5,341	$0	$0	$0
Freeborn	$4,643	$0	$0	$0
Goodhue	$11,834	$0	$0	$0
Grant	$0	$0	$0	$0
Hennepin	$309,206	$85,312	$0	$3,027,627
Houston	$2,052	$0	$0	$0
Hubbard	$19,009	$0	$0	$0
Isanti	$2,870	$0	$0	$0
Itasca	$4,416	$0	$24	$0
Jackson	$4,787	$0	$0	$0
Kanabec	$0	$0	$0	$0
Kandiyohi	$0	$0	$0	$0
Kittson	$633	$0	$0	$37,597
Koochiching	$9,007	$0	$1,001	$0
Lac Qui Parle	$4,689	$0	$0	$1,500
Lake	$0	$0	$0	$0
Lake of the Woods	$194	$0	$0	$0
Le Sueur	$15,603	$0	$0	$0
Lincoln	$3,050	$0	$0	$0
Lyon	$11,881	$0	$0	$0
Mahnomen	$911	$0	$0	$0
Marshall	$0	$0	$0	$70,406
Martin	$5,632	$0	$0	$29,191
McLeod	$39,424	$0	$0	$200,327
Meeker	$16,542	$10,000	$0	$3,061

Finances: Expenditures by program area (part 2)

County	Education	Market development	Litter prevention	County grants to other local units of government
Mille Lacs	$900	$0	$0	$0
Morrison	$7,915	$0	$0	$116,650
Mower	$7,590	$0	$0	$0
Murray	$5,366	$0	$0	$0
Nicollet	$16,950	$0	$0	$0
Nobles	$5,066	$0	$0	$0
Norman	$605	$0	$0	$0
Olmsted	$85,996	$0	$0	$0
Otter Tail	$49,625	$0	$2,075	$0
Pennington	$0	$0	$0	$0
Pine	$447	$0	$0	$0
Pipestone	$1,155	$0	$0	$0
Polk	$8,114	$0	$0	$40,000
Pope/Douglas	$14,993	$0	$0	$0
Ramsey	$294,833	$0	$0	$996,995
Red Lake	$536	$0	$0	$0
Redwood	$8,072	$300	$0	$0
Renville	$593	$0	$0	$0
Rice	$14,900	$750	$100	$0
Rock	$2,325	$0	$0	$0
Roseau	$0	$0	$0	$73,567
Saint Louis	$43,545	$0	$0	$0
Scott	$21,755	$0	$0	$0
Sherburne	$47,876	$0	$32,871	$137,983
Sibley	$12,533	$0	$0	$61,839
Stearns	$91,979	$9,944	$9,944	$104,726
Steele	$22,859	$0	$0	$0
Stevens	$4,284	$0	$0	$0
Swift	$4,024	$0	$0	$0
Todd	$0	$0	$0	$0
Traverse	$340	$0	$0	$8,000
Wabasha	$2,439	$0	$0	$0
Wadena	$75	$0	$0	$0
Waseca	$1,945	$0	$0	$0
Washington	$103,862	$0	$0	$542,875
Watonwan	$1,696	$0	$0	$0
WLSSD	$135,000	$0	$0	$74,797
Wilkin	$1,148	$0	$0	$0
Winona	$8,091	$1,300	$0	$0
Wright	$1,143	$0	$0	$212,805
Yellow Medicine	$2,074	$0	$0	$0
Metro Area	$1,060,304	$85,312	$8,459	$5,637,552
Greater Minn.	$917,852	$32,294	$52,427	$1,512,955
Minnesota	$1,978,156	$117,606	$60,886	$7,150,506

Finances: Balance Sheet

County	Total Revenues	Total Expenditures	CY 2000 Balance
Aitkin	$394,305	$286,204	$108,101
Anoka	$1,724,885	$1,724,885	($0)
Becker	$494,331	$494,331	($0)
Beltrami	($197,836)	$317,117	($514,953)
Benton	$179,998	$132,424	$47,574
Big Stone	$63,008	$78,176	($15,167)
Blue Earth	$313,949	$313,949	$0
Brown	$345,195	$388,795	($43,600)
Carlton	$11,619	$159,089	($147,470)
Carver	$657,363	$657,363	$0
Cass	$583,393	$583,393	$0
Chippewa	$147,207	$147,163	$44
Chisago	$511,872	$429,631	$82,241
Clay	$536,783	$477,535	$59,248
Clearwater	$145,010	$145,010	$0
Cook	$231,765	$231,765	$0
Cottonwood	$318,595	$226,392	$92,203
Crow Wing	$580,315	$444,229	$136,086
Dakota	$1,167,865	$1,438,181	($270,316)
Dodge	$227,308	$227,308	$0
Faribault	$106,374	$109,098	($2,724)
Fillmore	$35,885	$35,885	$0
Freeborn	$368,591	$368,591	$0
Goodhue	$603,652	$603,652	$0
Grant	$150,083	$138,097	$11,986
Hennepin	$8,549,917	$8,549,917	$0
Houston	$410,642	$410,642	$0
Hubbard	$166,779	$351,958	($185,179)
Isanti	$192,391	$101,309	$91,083
Itasca	$503,120	$503,120	$0
Jackson	$184,564	$39,730	$144,833
Kanabec	$196,583	$81,538	$115,045
Kandiyohi	$672,589	$672,589	$0
Kittson	$94,872	$94,285	$586
Koochiching	$215,595	$215,595	$0
Lac Qui Parle	$87,346	$116,174	($28,828)
Lake	$238,671	$209,775	$28,896
Lake of the Woods	$172,714	$172,714	$0
Le Sueur	$122,147	$122,147	$0
Lincoln	$185,558	$82,184	$103,374
Lyon	$331,676	$331,676	$0
Mahnomen	$152,770	$70,059	$82,711
Marshall	$125,136	$106,461	$18,675
Martin	$229,006	$215,127	$13,879
McLeod	$832,528	$832,529	($1)
Meeker	$168,983	$102,792	$66,191

Finances: Balance Sheet

County	Total Revenues	Total Expenditures	CY 2000 Balance
Mille Lacs	$143,700	$143,700	$0
Morrison	$308,266	$374,117	($65,851)
Mower	$543,689	$562,005	($18,316)
Murray	$210,748	$63,042	$147,706
Nicollet	$307,417	$266,434	$40,983
Nobles	$579,828	$303,503	$276,325
Norman	$69,880	$61,194	$8,686
Olmsted	$663,474	$734,298	($70,824)
Otter Tail	$868,261	$850,561	$17,700
Pennington	$73,749	$54,359	$19,389
Pine	$167,985	$167,985	$0
Pipestone	$148,195	$150,636	($2,441)
Polk	$393,856	$297,469	$96,387
Pope/Douglas	$408,382	$390,903	$17,479
Ramsey	$4,443,433	$4,443,433	$0
Red Lake	$110,485	$110,485	$0
Redwood	$366,888	$256,702	$110,186
Renville	$235,155	$134,393	$100,762
Rice	$306,599	$919,234	($612,635)
Rock	$108,145	$109,242	($1,097)
Roseau	$72,334	$110,659	($38,325)
Saint Louis	$1,102,366	$1,102,366	$0
Scott	$1,330,638	$491,128	$839,510
Sherburne	$268,196	$242,179	$26,017
Sibley	$161,140	$161,140	$0
Stearns	$918,253	$616,736	$301,517
Steele	$373,165	$373,165	$0
Stevens	$180,131	$72,829	$107,301
Swift	$220,658	$220,658	$0
Todd	$198,432	$198,432	$0
Traverse	$68,750	$82,087	($13,337)
Wabasha	($144,702)	$135,927	($280,629)
Wadena	$87,233	$93,177	($5,944)
Waseca	$204,262	$204,262	$0
Washington	$1,261,842	$1,261,842	$0
Watonwan	$193,498	$162,384	$31,114
WLSSD	$1,460,337	$1,016,212	$444,125
Wilkin	$114,008	$114,008	$0
Winona	$696,627	$726,519	($29,892)
Wright	$957,533	$275,612	$681,920
Yellow Medicine	$86,988	$86,988	($0)
Metro Area	$19,135,943	$18,566,749	$569,194
Greater Minn.	$24,668,983	$23,115,843	$1,553,140
Minnesota	$43,804,926	$41,682,592	$2,122,334

Paper collected for recycling (tons)

County	Computer paper	Corrugated (OCC)	Magazine/ catalog	Mixed paper	Newsprint (ONP)	Office paper	Other paper	Phone book	Total Paper
Aitkin	0	1,460	81	0	195	37	0	9	1,782
Anoka	26	38,241	569	13,552	14,551	323	10,985	258	78,505
Becker	0	2,452	138	95	565	131	0	25	3,406
Beltrami	0	2,130	171	0	136	0	868	0	3,306
Benton	0	2,365	12,619	1,046	1,179	193	308	10	17,721
Big Stone	0	187	33	0	92	6	0	0	318
Blue Earth	0	9,943	2,035	6,149	6,213	36	635	60	25,071
Brown	0	3,608	0	2,229	942	185	133	0	7,095
Carlton	0	1,568	57	809	857	6	0	0	3,297
Carver	0	7,331	0	4,399	4,222	3,797	0	7	19,756
Cass	0	1,726	46	0	1,543	11	2	8	3,336
Chippewa	0	1,046	63	27	409	5	0	0	1,550
Chisago	0	2,377	0	0	2,372	367	0	50	5,166
Clay	0	1,767	135	200	1,686	80	0	26	3,894
Clearwater	0	182	9	0	43	4	0	2	239
Cook	0	543	109	0	165	33	0	0	850
Cottonwood	0	1,552	15	0	269	66	0	0	1,902
Crow Wing	0	3,831	2,662	2,613	940	28	0	7	10,081
Dakota	0	9,345	1,628	21,982	18,978	2,707	0	637	55,277
Dodge	0	687	49	686	8	5	5	13	1,453
Faribault	20	1,628	0	125	115	38	65	0	1,991
Fillmore	0	381	119	51	765	0	5	1	1,323
Freeborn	0	6,326	283	0	502	0	0	0	7,111
Goodhue	0	3,343	227	0	1,022	64	251	0	4,907
Grant	0	174	3	0	106	29	0	0	311
Hennepin	9	35,687	4,308	34,670	52,786	9,558	1,454	1,108	139,580
Houston	0	297	102	0	333	15	0	0	747
Hubbard	0	1,715	0	101	401	0	0	9	2,226
Isanti	0	1,486	86	0	640	203	0	10	2,425
Itasca	12	4,825	110	1,501	793	141	0	10	7,392
Jackson	0	1,188	35	0	299	0	0	0	1,523
Kanabec	0	310	19	3,124	160	9	0	2	3,624
Kandiyohi	0	3,614	296	211	908	311	166	11	5,519
Kittson	0	66	3	0	137	4	0	1	211
Koochiching	0	765	24	1,945	0	0	0	0	2,734
Lac Qui Parle	0	382	64	0	272	22	0	3	742
Lake	0	880	120	12	293	46	0	12	1,363
Lake of the Woods	0	242	7	0	6	8	0	12	275
Le Sueur	0	647	0	886	149	0	0	0	1,682
Lincoln	0	244	0	0	138	0	0	0	382
Lyon	0	4,693	9	83	1,164	0	0	0	5,950
Mahnomen	0	95	9	55	0	0	0	0	159
Marshall	0	77	1	136	152	8	0	1	376
Martin	0	3,165	399	0	628	365	77	0	4,634
McLeod	0	1,223	0	784	2,211	497	0	0	4,715
Meeker	0	789	7	82	382	65	0	0	1,325

Paper collected for recycling (tons)

County	Computer paper	Corrugated (OCC)	Magazine/ catalog	Mixed paper	Newsprint (ONP)	Office paper	Other paper	Phone book	Total Paper
Mille Lacs	0	3,125	51	0	520	53	0	0	3,749
Morrison	0	14,332	72	1,043	222	2	0	0	15,669
Mower	1,910	7,056	136	0	1,002	345	0	8	10,457
Murray	0	877	35	0	364	17	0	0	1,293
Nicollet	0	2,527	0	4,956	420	287	0	0	8,189
Nobles	0	3,756	181	6	846	441	0	0	5,230
Norman	0	202	7	0	60	0	0	2	270
Olmsted	0	11,590	285	371	5,492	1,477	5,127	23	24,365
Otter Tail	0	2,848	24	0	946	0	212	0	4,030
Pennington	0	655	0	6	127	48	0	0	836
Pine	0	274	135	0	403	154	78	0	1,044
Pipestone	0	469	0	0	453	62	49	0	1,033
Polk	0	1,945	87	0	425	33	0	24	2,513
Pope/Douglas	0	9,817	70	162	1,170	0	0	6	11,225
Ramsey	0	6,404	527	35,564	12,309	90	0	167	55,061
Red Lake	0	134	12	0	120	5	0	1	273
Redwood	0	1,861	189	3	351	133	0	0	2,537
Renville	0	707	64	45	492	0	0	6	1,314
Rice	0	6,361	60	0	1,999	0	0	27	8,447
Rock	0	778	0	26	240	23	0	2	1,069
Roseau	0	1,657	1	0	189	92	0	1	1,940
Saint Louis	0	6,118	14	3,865	422	41	0	0	10,460
Scott	0	33,848	231	13,399	1,669	21	559	4	49,730
Sherburne	0	840	45	814	1,370	108	226	45	3,449
Sibley	0	3,032	0	199	136	0	0	0	3,367
Stearns	22	10,394	6,602	6,195	4,598	1,124	2,910	63	31,908
Steele	0	1,944	0	2,865	271	0	0	0	5,080
Stevens	0	388	10	31	201	20	0	3	653
Swift	40	262	61	0	391	107	0	0	861
Todd	0	1,707	20	114	109	0	13,342	0	15,292
Traverse	0	116	16	0	73	3	0	0	208
Wabasha	0	2,532	29	0	842	45	0	0	3,448
Wadena	0	579	0	231	0	0	6	1	816
Waseca	0	2,335	86	31,219	193	139	1,272	4	35,248
Washington	0	15,629	424	13,784	14,746	11,808	491	342	57,223
Watonwan	0	1,804	0	0	1,023	0	0	0	2,827
WLSSD	0	9,416	486	6,409	3,012	1,145	503	467	21,437
Wilkin	0	165	21	0	133	29	0	0	349
Winona	0	4,939	23	1,221	1,413	369	0	0	7,965
Wright	0	1,474	17	2	3,564	21	0	0	5,077
Yellow Medicine	409	0	19	167	135	20	0	0	749
Metro Area	35	146,485	7,686	137,350	119,260	28,304	13,489	2,523	455,132
Greater Minn.	2,413	194,994	29,002	82,898	62,914	9,362	26,241	964	408,789
Minnesota	2,448	341,479	36,688	220,249	182,174	37,666	39,730	3,487	863,921

Metal collected for recycling (tons)

County	Aluminum	Commingled alum/steel/tin	Other ferrous & non-ferrous	Steel/tin cans	Total Metal
Aitkin	53	0	162	44	259
Anoka	447	317	33,916	916	35,596
Becker	171	0	28	75	274
Beltrami	79	0	337	84	500
Benton	262	67	3,336	158	3,823
Big Stone	18	0	477	20	515
Blue Earth	6,683	3,162	1,500	834	12,179
Brown	367	44	1,798	692	2,901
Carlton	171	0	9	163	343
Carver	936	173	3,500	334	4,943
Cass	157	0	0	194	351
Chippewa	37	47	0	12	96
Chisago	354	0	714	177	1,246
Clay	74	0	38	166	278
Clearwater	37	0	227	7	271
Cook	24	0	405	31	460
Cottonwood	2	457	18	46	523
Crow Wing	329	0	5,059	362	5,751
Dakota	522	9,639	6,165	164	16,490
Dodge	35	23	1,226	37	1,321
Faribault	21	10	1,302	108	1,441
Fillmore	23	0	61	200	284
Freeborn	561	0	0	2,821	3,382
Goodhue	252	0	68	1,373	1,693
Grant	12	0	117	23	152
Hennepin	4,842	2,104	47,495	2,641	57,082
Houston	198	0	544	71	813
Hubbard	153	0	654	66	873
Isanti	334	61	1,191	245	1,831
Itasca	125	10	900	197	1,232
Jackson	81	0	34	124	239
Kanabec	62	23	151	32	267
Kandiyohi	230	0	1	100	331
Kittson	4	66	6	0	75
Koochiching	56	0	1	19	76
Lac Qui Parle	48	32	45	54	178
Lake	30	110	463	41	644
Lake of the Woods	51	0	233	36	320
Le Sueur	706	0	1,963	136	2,806
Lincoln	5	0	0	24	29
Lyon	182	0	98	155	435
Mahnomen	9	0	45	12	66
Marshall	0	78	180	0	258
Martin	113	1,055	1,771	723	3,662
McLeod	68	175	220	254	717
Meeker	152	60	165	231	607

Metal collected for recycling (tons)

County	Aluminum	Commingled alum/steel/tin	Other ferrous & non-ferrous	Steel/tin cans	Total Metal
Mille Lacs	289	0	35	213	537
Morrison	30	0	2,386	30	2,446
Mower	251	0	170	97	518
Murray	57	0	13	41	111
Nicollet	894	0	771	299	1,964
Nobles	124	20	0	124	268
Norman	19	0	440	105	564
Olmsted	358	0	2,917	521	3,796
Otter Tail	224	0	1,520	161	1,905
Pennington	30	12	1,347	0	1,389
Pine	4	40	295	89	428
Pipestone	29	0	89	112	230
Polk	134	0	2,289	62	2,484
Pope/Douglas	104	11	1,013	268	1,396
Ramsey	369	1,309	34,678	455	36,812
Red Lake	13	76	205	14	309
Redwood	538	109	3,373	65	4,086
Renville	151	0	595	87	833
Rice	298	0	1,145	641	2,084
Rock	58	15	1,596	88	1,757
Roseau	15	85	465	0	565
Saint Louis	178	187	38,609	860	39,834
Scott	1,157	586	6,075	2,585	10,402
Sherburne	530	740	3,484	1,113	5,866
Sibley	373	0	134	83	590
Stearns	1,609	1,576	7,499	592	11,276
Steele	149	0	1,423	803	2,374
Stevens	102	3	454	178	737
Swift	98	0	53	73	224
Todd	12	90	91	21	214
Traverse	60	0	104	10	174
Wabasha	87	0	11	405	504
Wadena	258	3	299	60	620
Waseca	114	0	1,744	36	1,894
Washington	1,543	180	4,794	757	7,273
Watonwan	18	0	248	33	299
WLSSD	2,039	0	4,516	322	6,877
Wilkin	24	0	59	20	102
Winona	443	1,227	368	0	2,038
Wright	101	0	153	547	801
Yellow Medicine	84	8	0	82	174
Metro Area	9,815	14,308	136,624	7,852	168,599
Greater Minn.	22,226	9,684	105,458	18,400	155,769
Minnesota	32,041	23,993	242,082	26,252	324,368

Glass collected for recycling (tons)

County	Food & beverage	Other glass	Total Glass
Aitkin	122	0	122
Anoka	4,932	445	5,377
Becker	321	0	321
Beltrami	369	0	369
Benton	336	0	336
Big Stone	59	0	59
Blue Earth	532	53	585
Brown	340	0	340
Carlton	681	0	681
Carver	1,076	0	1,076
Cass	516	0	516
Chippewa	104	0	104
Chisago	671	0	671
Clay	251	0	251
Clearwater	18	0	18
Cook	158	0	158
Cottonwood	85	0	85
Crow Wing	444	0	444
Dakota	6,084	0	6,084
Dodge	210	288	498
Faribault	34	0	34
Fillmore	485	0	485
Freeborn	1,026	0	1,026
Goodhue	548	0	548
Grant	68	0	68
Hennepin	19,021	2	19,023
Houston	386	0	386
Hubbard	226	0	226
Isanti	216	0	216
Itasca	709	0	709
Jackson	100	0	100
Kanabec	63	0	63
Kandiyohi	248	0	248
Kittson	124	0	124
Koochiching	81	0	81
Lac Qui Parle	130	0	130
Lake	555	0	555
Lake of the Woods	0	550	550
Le Sueur	354	0	354
Lincoln	55	0	55
Lyon	189	0	189
Mahnomen	36	0	36
Marshall	132	0	132
Martin	423	277	700
McLeod	838	0	838
Meeker	171	0	171

Glass collected for recycling (tons)

County	Food & beverage	Other glass	Total Glass
Mille Lacs	132	0	132
Morrison	229	0	229
Mower	216	0	216
Murray	92	0	92
Nicollet	349	0	349
Nobles	172	0	172
Norman	154	0	154
Olmsted	1,838	80	1,918
Otter Tail	482	0	482
Pennington	0	345	345
Pine	187	0	187
Pipestone	151	0	151
Polk	146	0	146
Pope/Douglas	1,701	0	1,701
Ramsey	6,293	0	6,293
Red Lake	36	0	36
Redwood	257	0	257
Renville	203	0	203
Rice	812	900	1,712
Rock	123	7	130
Roseau	147	4,896	5,043
Saint Louis	1,305	0	1,305
Scott	871	144	1,015
Sherburne	374	0	374
Sibley	259	0	259
Stearns	1,549	0	1,549
Steele	381	28,617	28,997
Stevens	117	0	117
Swift	254	0	254
Todd	106	0	106
Traverse	35	0	35
Wabasha	424	0	424
Wadena	0	0	0
Waseca	147	0	147
Washington	2,914	21	2,935
Watonwan	131	0	131
WLSSD	1,746	0	1,746
Wilkin	41	0	41
Winona	836	0	836
Wright	1,158	0	1,158
Yellow Medicine	139	0	139
Metro Area	41,191	612	41,803
Greater Minn.	28,841	36,013	64,854
Minnesota	70,032	36,625	106,656

Plastic collected for recycling (tons)

County	Film plastic	HDPE	Mixed plastic	Other plastic	PET	Polystyrene (PS)	Total Plastics
Aitkin	0	0	44	0	0	0	44
Anoka	304	54	1,190	361	2	326	2,237
Becker	0	0	0	56	0	0	56
Beltrami	0	11	0	0	0	0	11
Benton	34	0	186	35	0	0	255
Big Stone	0	0	18	0	0	0	18
Blue Earth	5	328	2,231	0	105	78	2,747
Brown	13	0	719	1	0	0	733
Carlton	0	1	155	0	0	0	156
Carver	0	0	39	0	231	124	394
Cass	0	0	92	0	0	0	92
Chippewa	1	0	60	110	0	382	553
Chisago	2	159	0	0	0	0	161
Clay	0	0	114	0	0	0	114
Clearwater	0	0	3	0	0	0	3
Cook	0	0	30	0	0	0	30
Cottonwood	0	0	10	0	44	0	54
Crow Wing	0	0	444	0	0	0	444
Dakota	31	1	3,818	0	0	0	3,850
Dodge	0	0	47	85	0	0	132
Faribault	15	0	49	0	7	0	71
Fillmore	0	0	140	0	0	0	140
Freeborn	0	62	502	0	200	0	764
Goodhue	0	57	5	0	35	0	97
Grant	0	0	24	0	0	0	24
Hennepin	0	0	14,198	26	53	0	14,277
Houston	0	51	0	2	44	0	97
Hubbard	0	0	50	0	0	0	50
Isanti	12	0	54	0	0	0	66
Itasca	0	26	302	0	27	0	355
Jackson	0	2	39	5	0	0	46
Kanabec	1	0	83	0	17	0	100
Kandiyohi	0	76	0	0	41	0	117
Kittson	0	1	18	0	0	0	19
Koochiching	0	5	0	0	5	0	9
Lac Qui Parle	0	0	52	0	0	0	52
Lake	0	0	39	0	0	0	39
Lake of the Woods	0	0	8	0	0	0	8
Le Sueur	0	120	54	0	0	0	174
Lincoln	0	0	37	0	0	0	37
Lyon	0	0	386	0	0	0	386
Mahnomen	0	0	8	0	0	0	8
Marshall	0	0	20	0	0	0	20
Martin	13	4	121	0	0	1	139
McLeod	10	0	4,070	0	0	1,282	5,362
Meeker	0	0	69	0	0	0	69

Plastic collected for recycling (tons)

County	Film plastic	HDPE	Mixed plastic	Other plastic	PET	Polystyrene (PS)	Total Plastics
Mille Lacs	0	0	55	0	0	0	55
Morrison	0	0	74	0	0	0	74
Mower	52	62	0	0	30	0	144
Murray	0	1	43	0	0	0	44
Nicollet	3	0	250	26	0	0	279
Nobles	22	790	0	0	764	0	1,575
Norman	0	0	15	0	0	0	15
Olmsted	11	48	442	359	0	0	860
Otter Tail	0	0	297	2	0	0	299
Pennington	0	8	0	0	7	0	15
Pine	3	0	102	0	0	0	105
Pipestone	0	0	608	0	0	26	633
Polk	0	0	54	0	0	0	54
Pope/Douglas	7	289	125	0	90	0	512
Ramsey	0	0	743	0	0	0	743
Red Lake	0	0	12	2	0	0	14
Redwood	21	0	72	121	0	25	238
Renville	1	0	73	0	0	0	74
Rice	30	32	258	0	5	0	325
Rock	0	42	0	2	40	0	84
Roseau	0	0	29	108	0	0	137
Saint Louis	1	108	38	3	105	0	255
Scott	155	203	262	0	503	0	1,123
Sherburne	21	3	124	0	0	0	148
Sibley	0	0	32	0	0	0	32
Stearns	208	13	590	0	18	365	1,194
Steele	0	0	159	53	0	0	212
Stevens	0	35	0	0	12	0	47
Swift	0	43	0	0	53	0	96
Todd	24	5	9	0	13	0	51
Traverse	0	0	7	0	0	0	7
Wabasha	0	5	95	0	1	0	101
Wadena	0	0	0	3	0	0	3
Waseca	0	30	106	0	10	0	146
Washington	0	1	592	118	43	0	754
Watonwan	0	0	72	0	0	0	72
WLSSD	16	165	219	1	114	0	516
Wilkin	0	1	13	0	0	0	14
Winona	3	263	86	0	130	62	544
Wright	0	0	281	3	0	0	283
Yellow Medicine	0	0	60	0	0	0	60
Metro Area	490	259	20,842	505	832	450	23,376
Greater Minn.	528	2,844	14,679	977	1,917	2,220	23,165
Minnesota	1,017	3,103	35,520	1,481	2,749	2,670	46,542

Organics, textiles and other materials collected for recycling (tons)

County	Food waste	Carpet	Textiles	Pallets	Unspecified or Other	Total
Aitkin	0	0	0	0	0	0
Anoka	10,972	0	1,724	261	463	13,421
Becker	0	0	42	1	552	595
Beltrami	0	0	0	0	0	0
Benton	120	0	0	0	301	421
Big Stone	0	0	4	0	0	4
Blue Earth	0	0	452	9,823	0	10,275
Brown	442	0	0	406	0	848
Carlton	0	0	0	0	0	0
Carver	15,013	0	16	410	75	15,515
Cass	0	0	0	0	2,828	2,828
Chippewa	0	0	0	0	840	840
Chisago	0	0	66	0	0	66
Clay	6,340	0	343	525	0	7,208
Clearwater	0	0	12	0	0	12
Cook	0	0	39	0	0	39
Cottonwood	0	0	39	1,800	0	1,839
Crow Wing	15	0	293	1,899	15,182	17,389
Dakota	18,360	0	6,551	4,678	45,081	74,670
Dodge	0	0	0	30	350	380
Faribault	375	0	7	0	476	858
Fillmore	0	0	5	0	0	5
Freeborn	0	0	8	780	0	788
Goodhue	0	0	21	17	0	38
Grant	0	0	0	0	0	0
Hennepin	28,209	6	0	5,255	311,408	344,878
Houston	0	0	36	0	0	36
Hubbard	0	0	61	35	0	96
Isanti	201	8	12	15	0	237
Itasca	0	0	0	2,707	0	2,707
Jackson	0	0	87	0	320	407
Kanabec	0	0	0	0	0	0
Kandiyohi	156	0	0	0	0	156
Kittson	21	0	0	0	3	24
Koochiching	0	0	6	8	0	14
Lac Qui Parle	0	0	20	0	0	20
Lake	0	0	0	0	1	1
Lake of the Woods	0	0	0	0	0	0
Le Sueur	2,034	0	6	232	0	2,272
Lincoln	0	0	6	0	0	6
Lyon	0	0	341	0	4,090	4,431
Mahnomen	0	0	0	0	0	0
Marshall	0	0	0	0	0	0
Martin	0	0	52	3,063	0	3,115
McLeod	0	0	0	747	0	747
Meeker	0	0	0	500	5	505

Organics, textiles and other materials collected for recycling (tons)

County	Food waste	Carpet	Textiles	Pallets	Unspecified or Other	Total
Mille Lacs	0	0	0	0	0	0
Morrison	0	0	23	621	0	645
Mower	0	0	310	6,014	0	6,324
Murray	0	0	97	0	208	305
Nicollet	0	0	0	120	0	120
Nobles	38	0	249	0	0	287
Norman	0	0	0	0	0	0
Olmsted	1,703	0	459	1,278	1,055	4,495
Otter Tail	38,080	0	500	15	0	38,595
Pennington	0	0	11	0	0	11
Pine	408	0	5	3	26	442
Pipestone	0	0	94	0	0	94
Polk	2,308	0	24	0	1,777	4,108
Pope/Douglas	0	123	8	0	11	142
Ramsey	37,607	0	641	3	159,981	198,232
Red Lake	74	0	0	4	0	78
Redwood	129	0	1,135	404	1,879	3,547
Renville	810	0	45	0	0	855
Rice	19,459	0	62	70	0	19,591
Rock	0	0	0	0	1	1
Roseau	0	0	0	694	0	694
Saint Louis	0	26	0	0	3	29
Scott	0	0	0	0	0	0
Sherburne	200	0	2	30	1,803	2,035
Sibley	1,284	0	0	0	0	1,284
Stearns	546	0	0	6,329	2,683	9,558
Steele	0	0	12	3,657	82	3,751
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	4,730	0	2	2,445	1	7,177
Wadena	0	0	0	0	191	191
Waseca	0	0	212	0	0	212
Washington	5,362	0	192	0	7,055	12,609
Watonwan	0	0	0	0	0	0
WLSSD	403	4	951	1,974	0	3,332
Wilkin	0	0	0	0	0	0
Winona	619	0	196	248	0	1,063
Wright	0	0	0	0	0	0
Yellow Medicine	0	0	0	0	320	320
Metro Area	115,523	6	9,125	10,607	524,063	659,325
Greater Minn.	80,493	161	6,354	46,494	34,989	168,491
Minnesota	196,016	167	15,479	57,101	559,052	827,817

Problem materials (banned) collected for recycling (tons)

County	Anti-freeze	Electronic appliances	Fluorescent & HID lamps	HHW	Latex paint	Major appliances	Used oil	Used oil filters	Vehicle batteries	Waste tires	Total PM
Aitkin	0	0	0	0	0	85	13	7	87	135	327
Anoka	11	60	24	7	47	1,787	238	139	1,828	596	4,736
Becker	0	0	1	13	9	343	24	16	237	103	748
Beltrami	0	0	0	6	3	250	140	18	237	189	843
Benton	1	0	1	8	0	211	28	16	216	70	552
Big Stone	0	0	3	4	1	35	14	5	36	12	108
Blue Earth	0	1	27	56	21	656	45	26	602	1,880	3,314
Brown	0	0	3	132	0	168	69	15	172	56	615
Carlton	1	0	0	6	5	190	25	15	194	63	499
Carver	4	80	4	20	34	397	53	31	406	132	1,162
Cass	0	0	1	5	3	230	21	14	178	270	722
Chippewa	0	0	1	0	0	79	11	6	81	26	203
Chisago	0	0	1	6	0	252	34	20	258	84	655
Clay	13	0	35	7	11	348	405	25	327	270	1,443
Clearwater	0	0	0	2	1	50	7	4	52	30	145
Cook	0	0	0	0	0	28	14	2	28	9	81
Cottonwood	0	0	4	0	1	77	10	6	78	26	202
Crow Wing	1	1	42	4	11	435	42	45	323	105	1,009
Dakota	0	0	13	40	120	2,083	278	162	2,131	694	5,522
Dodge	0	0	0	8	0	105	14	8	107	35	278
Faribault	2	0	3	4	0	98	13	8	100	33	262
Fillmore	0	0	2	0	2	125	17	10	128	42	326
Freeborn	0	0	3	10	8	193	502	15	203	264	1,199
Goodhue	0	13	7	13	12	261	35	20	267	87	715
Grant	0	2	1	3	2	37	5	3	38	12	103
Hennepin	26	888	30	43	356	7,685	871	509	6,684	2,178	19,271
Houston	0	0	2	6	0	242	16	9	120	160	554
Hubbard	0	0	6	4	2	123	27	8	126	175	471
Isanti	5	0	5	12	10	263	25	14	189	62	585
Itasca	2	0	4	30	3	900	37	21	270	88	1,355
Jackson	0	0	5	0	0	70	9	5	71	23	184
Kanabec	0	0	1	0	0	255	119	7	95	64	541
Kandiyohi	0	0	0	36	0	252	34	20	257	84	684
Kittson	0	1	1	0	0	32	4	3	33	11	85
Koochiching	0	0	0	1	0	94	13	7	96	31	243
Lac Qui Parle	0	2	0	1	0	50	24	4	52	17	150
Lake	2	0	1	0	1	64	63	13	66	50	261
Lake of the Woods	0	5	2	0	2	28	4	3	28	89	161
Le Sueur	0	0	2	0	8	153	20	12	156	51	402
Lincoln	0	0	1	1	0	40	5	3	40	13	104
Lyon	0	0	5	0	0	153	20	12	157	51	398
Mahnomen	0	0	0	0	0	39	83	3	34	52	210
Marshall	0	0	1	1	1	62	8	5	64	21	163
Martin	0	356	26	0	7	383	121	11	171	630	1,705
McLeod	1	4	12	0	9	212	28	17	217	71	571
Meeker	0	0	8	33	11	132	18	10	135	44	390

Problem materials (banned) collected for recycling (tons)

County	Anti-freeze	Electronic appliances	Fluorescent & HID lamps	HHW	Latex paint	Major appliances	Used oil	Used oil filters	Vehicle batteries	Waste tires	Total PM
Mille Lacs	0	0	0	0	0	128	17	10	131	43	329
Morrison	1	0	5	2	7	191	196	15	195	253	864
Mower	7	0	3	0	7	226	30	18	231	75	596
Murray	0	0	1	2	1	57	8	4	59	59	191
Nicollet	0	5	4	0	8	183	24	14	187	61	485
Nobles	13	15	14	6	0	120	16	9	122	40	356
Norman	1	46	0	0	0	46	6	4	47	15	164
Olmsted	10	210	50	78	67	729	97	57	745	243	2,286
Otter Tail	0	0	14	26	19	448	44	26	339	110	1,025
Pennington	0	0	0	1	1	82	11	6	84	129	314
Pine	0	0	8	0	0	147	20	12	150	68	405
Pipestone	0	0	1	2	1	62	8	5	63	21	162
Polk	3	0	1	4	4	192	26	15	196	64	505
Pope/Douglas	0	3	50	12	23	471	34	20	284	93	990
Ramsey	7	43	10	1	119	2,988	398	233	3,056	996	7,850
Red Lake	0	0	1	1	1	26	10	2	27	12	80
Redwood	8	6	3	8	1	103	275	10	256	973	1,643
Renville	0	2	3	0	0	104	14	8	107	35	273
Rice	16	21	2	23	5	329	44	26	337	110	913
Rock	0	0	1	4	0	59	8	5	60	60	197
Roseau	0	18	4	2	1	98	13	8	100	33	277
Saint Louis	30	18	8	49	15	1,631	636	40	521	763	3,711
Scott	87	847	15	39	58	489	1,520	67	691	163	3,976
Sherburne	1	0	3	1	0	532	51	30	392	480	1,490
Sibley	0	0	1	0	4	90	12	7	92	30	236
Stearns	4	10	5	0	0	804	107	63	822	268	2,083
Steele	0	4	16	0	0	198	26	15	202	66	528
Stevens	0	0	2	5	1	63	8	5	65	21	170
Swift	0	0	2	4	1	68	9	5	70	23	182
Todd	0	0	2	0	0	145	19	11	148	103	429
Traverse	0	0	1	0	1	25	3	2	26	8	66
Wabasha	0	0	2	6	0	127	17	10	130	42	333
Wadena	0	0	1	0	1	513	11	6	253	27	811
Waseca	0	0	2	3	0	116	16	9	119	39	304
Washington	11	22	7	179	0	1,192	159	93	1,219	397	3,279
Watonwan	0	0	1	0	0	70	9	5	71	23	180
WLSSD	46	0	11	0	20	685	922	277	701	1,400	4,061
Wilkin	0	0	2	2	2	44	15	10	45	46	166
Winona	2	0	3	12	9	297	40	23	304	219	910
Wright	0	3	1	29	9	527	70	41	539	176	1,395
Yellow Medicine	0	0	0	0	0	69	9	5	71	23	177
Metro Area	146	1,940	103	328	734	16,620	3,517	1,234	16,016	5,157	45,796
Greater Minn.	170	746	443	693	352	17,611	5,048	1,328	14,619	11,843	52,852
Minnesota	316	2,686	546	1,021	1,085	34,231	8,565	2,562	30,635	16,999	98,648

Wastes generated (tons)

County	Estimated MSW not collected	Problem matls not collected	MSW to facilities: disposal/processing	Tons collected for recycling	Total tons generated
Aitkin	420	251	5,670	2,534	8,875
Anoka	0	7,510	160,968	139,872	308,350
Becker	336	647	14,783	5,400	21,166
Beltrami	0	736	19,454	5,029	25,218
Benton	2,850	885	18,232	23,108	45,075
Big Stone	881	136	2,249	1,022	4,288
Blue Earth	1,679	853	43,417	54,170	100,118
Brown	2,267	659	13,970	12,531	29,426
Carlton	2,212	797	12,004	4,976	19,988
Carver	269	1,669	41,558	42,846	86,342
Cass	210	390	14,607	7,845	23,051
Chippewa	1,721	332	7,605	3,346	13,003
Chisago	923	1,060	18,770	7,964	28,717
Clay	833	790	24,777	13,188	39,588
Clearwater	42	199	3,757	689	4,687
Cook	30	106	3,211	1,617	4,963
Cottonwood	1,021	322	5,132	4,604	11,080
Crow Wing	475	1,247	36,345	35,118	73,185
Dakota	0	8,757	214,938	161,893	385,588
Dodge	923	441	8,181	4,062	13,608
Faribault	1,847	412	10,314	4,657	17,230
Fillmore	3,022	527	6,256	2,563	12,368
Freeborn	420	132	20,918	14,270	35,740
Goodhue	453	1,096	21,340	7,998	30,887
Grant	782	155	2,165	658	3,761
Hennepin	0	26,314	939,831	594,111	1,560,256
Houston	504	343	5,882	2,634	9,362
Hubbard	0	255	11,475	3,942	15,672
Isanti	2,980	731	15,661	5,358	24,731
Itasca	466	1,041	18,287	13,750	33,544
Jackson	950	293	3,827	2,498	7,569
Kanabec	1,343	193	7,455	4,595	13,587
Kandiyohi	871	1,056	24,264	7,053	33,245
Kittson	122	136	1,967	538	2,762
Koochiching	1,175	395	7,663	3,158	12,392
Lac Qui Parle	1,679	195	2,063	1,271	5,208
Lake	193	188	4,922	2,863	8,166
Lake of the Woods	21	79	1,940	1,314	3,355
Le Sueur	1,154	643	11,566	7,690	21,053
Lincoln	923	166	2,361	612	4,063
Lyon	1,553	643	16,229	11,788	30,213
Mahnomen	426	0	1,432	479	2,337
Marshall	361	262	4,530	949	6,102
Martin	1,334	243	10,403	13,955	25,935
McLeod	2,269	892	21,024	12,950	37,135
Meeker	1,007	553	6,642	3,066	11,268

Wastes generated (tons)

County	Estimated MSW not collected	Problem matls not collected	MSW to facilities: disposal/processing	Tons collected for recycling	Total tons generated
Mille Lacs	1,679	539	6,403	4,802	13,423
Morrison	881	441	18,954	19,927	40,204
Mower	2,267	948	24,315	18,255	45,785
Murray	993	201	2,468	2,036	5,698
Nicollet	1,049	768	12,923	11,385	26,125
Nobles	1,217	502	13,895	7,888	23,502
Norman	24	192	3,391	1,167	4,774
Olmsted	512	3,063	81,518	37,720	122,813
Otter Tail	982	1,309	28,145	46,337	76,773
Pennington	1,637	241	11,957	2,909	16,745
Pine	4,088	598	15,469	2,611	22,765
Pipestone	1,301	261	4,684	2,303	8,549
Polk	189	807	15,408	9,809	26,213
Pope/Douglas	496	988	26,695	15,965	44,144
Ramsey	0	12,557	443,336	304,990	760,883
Red Lake	38	100	1,405	790	2,334
Redwood	2,486	26	7,452	12,308	22,272
Renville	2,351	439	5,320	3,552	11,662
Rice	1,952	1,383	32,772	33,072	69,180
Rock	630	206	3,381	3,238	7,455
Roseau	685	411	10,474	8,656	20,226
Saint Louis	327	854	47,569	55,594	104,344
Scott	35	775	56,437	66,246	123,492
Sherburne	642	1,161	45,767	13,362	60,933
Sibley	1,794	378	4,389	5,767	12,329
Stearns	9,057	3,379	72,396	57,568	142,399
Steele	1,154	831	30,140	40,942	73,069
Stevens	405	266	4,442	1,724	6,837
Swift	1,119	286	4,507	1,617	7,528
Todd	2,560	555	8,076	16,093	27,285
Traverse	369	106	1,275	490	2,241
Wabasha	614	533	6,808	11,988	19,942
Wadena	420	312	7,057	2,441	10,230
Waseca	78	489	9,832	37,951	48,351
Washington	0	5,009	108,634	84,073	197,716
Watonwan	693	294	7,684	3,508	12,179
WLSSD	3,652	1,128	60,745	37,968	103,492
Wilkin	840	143	2,522	672	4,177
Winona	1,419	1,130	20,090	13,356	35,995
Wright	1,259	2,214	37,050	8,715	49,238
Yellow Medicine	1,220	290	3,245	1,619	6,373
Metro Area	303	62,591	1,965,701	1,394,031	3,422,626
Greater Minn.	95,761	48,250	1,193,373	873,921	2,211,305
Minnesota	96,064	110,841	3,159,074	2,267,952	5,633,932

Recycling rate (tons)

County	Tons collected for recycling	Total MSW generated	MSW collected for recycling	Source reduction credit	Yard waste credit	**Recycling rate with credits**
Aitkin	2,534	8,875	28.6%	2%	5%	**35.6%**
Anoka	139,872	308,350	45.4%	3%	5%	**53.4%**
Becker	5,400	21,166	25.5%	3%	5%	**33.5%**
Beltrami	5,029	25,218	19.9%	2%	5%	**26.9%**
Benton	23,108	45,075	51.3%	3%	5%	**59.3%**
Big Stone	1,022	4,288	23.8%	2%	3%	**28.8%**
Blue Earth	54,170	100,118	54.1%	3%	5%	**62.1%**
Brown	12,531	29,426	42.6%	3%	5%	**50.6%**
Carlton	4,976	19,988	24.9%	3%	5%	**32.9%**
Carver	42,846	86,342	49.6%	3%	5%	**57.6%**
Cass	7,845	23,051	34.0%	3%	5%	**42.0%**
Chippewa	3,346	13,003	25.7%	0%	5%	**30.7%**
Chisago	7,964	28,717	27.7%	2%	5%	**34.7%**
Clay	13,188	39,588	33.3%	3%	5%	**41.3%**
Clearwater	689	4,687	14.7%	3%	5%	**22.7%**
Cook	1,617	4,963	32.6%	2%	0%	**34.6%**
Cottonwood	4,604	11,080	41.6%	3%	5%	**49.6%**
Crow Wing	35,118	73,185	48.0%	8%	5%	**61.0%**
Dakota	161,893	385,588	42.0%	3%	5%	**50.0%**
Dodge	4,062	13,608	29.8%	3%	5%	**37.8%**
Faribault	4,657	17,230	27.0%	0%	5%	**32.0%**
Fillmore	2,563	12,368	20.7%	3%	5%	**28.7%**
Freeborn	14,270	35,740	39.9%	3%	5%	**47.9%**
Goodhue	7,998	30,887	25.9%	1%	5%	**31.9%**
Grant	658	3,761	17.5%	0%	5%	**22.5%**
Hennepin	594,111	1,560,256	38.1%	3%	5%	**46.1%**
Houston	2,634	9,362	28.1%	3%	5%	**36.1%**
Hubbard	3,942	15,672	25.2%	3%	5%	**33.2%**
Isanti	5,358	24,731	21.7%	2%	5%	**28.7%**
Itasca	13,750	33,544	41.0%	3%	5%	**49.0%**
Jackson	2,498	7,569	33.0%	3%	5%	**41.0%**
Kanabec	4,595	13,587	33.8%	1%	5%	**39.8%**
Kandiyohi	7,053	33,245	21.2%	3%	5%	**29.2%**
Kittson	538	2,762	19.5%	3%	5%	**27.5%**
Koochiching	3,158	12,392	25.5%	2%	5%	**32.5%**
Lac Qui Parle	1,271	5,208	24.4%	3%	5%	**32.4%**
Lake	2,863	8,166	35.1%	2%	5%	**42.1%**
Lake of the Woods	1,314	3,355	39.2%	3%	5%	**47.2%**
Le Sueur	7,690	21,053	36.5%	3%	5%	**44.5%**
Lincoln	612	4,063	15.1%	3%	5%	**23.1%**
Lyon	11,788	30,213	39.0%	3%	5%	**47.0%**
Mahnomen	479	2,337	20.5%	3%	5%	**28.5%**
Marshall	949	6,102	15.5%	2%	5%	**22.5%**
Martin	13,955	25,935	53.8%	3%	5%	**61.8%**
McLeod	12,950	37,135	34.9%	3%	5%	**42.9%**
Meeker	3,066	11,268	27.2%	3%	5%	**35.2%**

Recycling rate (tons)

County	Tons collected for recycling	Total MSW generated	MSW collected for recycling	Source reduction credit	Yard waste credit	**Recycling rate with credits**
Mille Lacs	4,802	13,423	35.8%	2%	5%	**42.8%**
Morrison	19,927	40,204	49.6%	3%	5%	**57.6%**
Mower	18,255	45,785	39.9%	3%	5%	**47.9%**
Murray	2,036	5,698	35.7%	3%	5%	**43.7%**
Nicollet	11,385	26,125	43.6%	3%	5%	**51.6%**
Nobles	7,888	23,502	33.6%	3%	5%	**41.6%**
Norman	1,167	4,774	24.4%	1%	5%	**30.4%**
Olmsted	37,720	122,813	30.7%	3%	5%	**38.7%**
Otter Tail	46,337	76,773	60.4%	3%	5%	**68.4%**
Pennington	2,909	16,745	17.4%	3%	5%	**25.4%**
Pine	2,611	22,765	11.5%	2%	5%	**18.5%**
Pipestone	2,303	8,549	26.9%	3%	5%	**34.9%**
Polk	9,809	26,213	37.4%	3%	5%	**45.4%**
Pope/Douglas	15,965	44,144	36.2%	3%	5%	**44.2%**
Ramsey	304,990	760,883	40.1%	3%	5%	**48.1%**
Red Lake	790	2,334	33.9%	3%	5%	**41.9%**
Redwood	12,308	22,272	55.3%	3%	5%	**63.3%**
Renville	3,552	11,662	30.5%	2%	3%	**35.5%**
Rice	33,072	69,180	47.8%	3%	5%	**55.8%**
Rock	3,238	7,455	43.4%	3%	5%	**51.4%**
Roseau	8,656	20,226	42.8%	1%	5%	**48.8%**
Saint Louis	55,594	104,344	53.3%	3%	5%	**61.3%**
Scott	66,246	123,492	53.6%	3%	5%	**61.6%**
Sherburne	13,362	60,933	21.9%	3%	5%	**29.9%**
Sibley	5,767	12,329	46.8%	3%	5%	**54.8%**
Stearns	57,568	142,400	40.4%	3%	5%	**48.4%**
Steele	40,942	73,069	56.0%	3%	5%	**64.0%**
Stevens	1,724	6,837	25.2%	2%	5%	**32.2%**
Swift	1,617	7,528	21.5%	3%	5%	**29.5%**
Todd	16,093	27,285	59.0%	2%	0%	**61.0%**
Traverse	490	2,241	21.9%	2%	5%	**28.9%**
Wabasha	11,988	19,942	60.1%	3%	5%	**68.1%**
Wadena	2,441	10,230	23.9%	3%	5%	**31.9%**
Waseca	37,951	48,351	78.5%	2%	5%	**85.5%**
Washington	84,073	197,716	42.5%	3%	5%	**50.5%**
Watonwan	3,508	12,179	28.8%	2%	5%	**35.8%**
WLSSD	37,968	103,493	36.7%	3%	5%	**44.7%**
Wilkin	672	4,177	16.1%	3%	5%	**24.1%**
Winona	13,356	35,995	37.1%	3%	5%	**45.1%**
Wright	8,715	49,238	17.7%	3%	5%	**25.7%**
Yellow Medicine	1,619	6,373	25.4%	3%	5%	**33.4%**
Metro Area	1,394,031	3,422,627	40.7%	3.0%	5.0%	**48.7%**
Greater Minn.	873,921	2,211,305	39.5%	2.6%	4.8%	**47.0%**
Minnesota	2,267,952	5,633,932	40.3%	2.7%	4.8%	**47.8%**