Minnesota Pollution Control Agency (MPCA)

Guidebook for City & County Household E-Waste Collectors

Prepared for Minnesota Pollution Control Agency by:

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MPCA Guidebook for City & County Household Collection under the Minnesota Electronics Recycling Act

Executive Summary

Minnesota has an advanced infrastructure for collecting and recycling used electronics from households, with numerous collection locations across the state and laws that both prohibit landfill disposal and mandate that manufacturers must help fund recycling. However, there is still room for improvement with ensuring cost efficiency. For this reason, the Minnesota Pollution Control Agency (MPCA) contracted with a consultant team to develop this *Guidebook* for Minnesota local governments who collect electronic waste (e-waste). [1] MPCA's goal is to ensure that counties and other local governments have the resources to make knowledgeable decisions regarding e-waste collection and can establish programs that lead to the reduction in e-waste recycling costs. This *Guidebook* is intended to provide those helpful resources.

In 2007, Minnesota became the fifth state to pass an electronics recycling law. The state pioneered the approach of requiring manufacturers to meet specific obligations based on pounds sold in that year. Unlike other states, there are no requirements for manufacturers to establish a collection network throughout the state or to submit an overall plan for how obligations will be achieved. To help provide an incentive for additional e-waste recovery in Greater Minnesota, the Electronics Recycling Act provided for the pounds recovered in non-metro counties to be credited at a premium of 50% more than pounds recovered from within the metro area. These characteristics have important impacts on collectors and the recyclers with whom they contract. Overall, the law has led to over 130 million pounds of electronics recycled and numerous collection locations established throughout the state. However, county and other local government collectors have not been able to cover all of their costs, even when working under recycler contracts that are partially funded by the manufacturers.

To address these issues, this *Guidebook* provides key resources for counties and other local governments in Minnesota so that they may decide how their e-waste collection programs can be established or modified. Resources include:

- Overview of sample case studies of local governments in Minnesota and other states
- Explanation of important drivers of costs in e-waste recycling programs
- Checklist of key questions any program should address in initiating or continuing collection programs
- Sample Request for Proposal (RFP) that can be tailored or amended for use

Copies of sample contracts and additional Minnesota County spending profile data referenced in this *Guidebook* are included in the MPCA *Guidebook* web page [2]

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[1] The term "e-waste" is used in this document to match the terminology used in the MPCA Request for Proposals "Contract - Guidance for City and County Household E-Waste Collectors." The authors note, however, that this term is not universally accepted due to being associated with legal definitions of "waste." Other terms such as "used electronics" and "e-scrap" have been with the same meaning as "e-waste" in this document.

[2] http://www.pca.state.mn.us/electronics/guidebook

The *Guidebook* includes a baseline set of best practices for the development of successful RFPs and contracts that city and county e-waste collectors should take steps to incorporate if a determination has been made to start or continue collection programs. This, along with investigating joint contracting with other governments, can lead to lower costs and better service for counties and local governments, as well as consumers.

Introduction

The Minnesota Pollution Control Agency (MPCA) commissioned a consultant team to develop this *Guidebook* for Minnesota local governments who collect electronic waste (e-waste). **Foth Infrastructure & Environment LLC** was selected with two subcontractors: **Resource Recycling, Inc.** and the **National Center for Electronics Recycling (NCER)**. The purpose of the *Guidebook* is to inform collectors, particularly county and other local government collectors, about practices that are designed to lead to greater efficiency and reduced public costs, while encouraging the increased use of environmentally sound management standards.

Many Minnesota counties and other local governments provide e-waste collection services and programs to help implement the state law known as the "Minnesota Electronics Recycling Act." These counties and local governments, along with private collectors, have helped prevent over 130 million pounds of covered electronic devices from entering the Minnesota waste stream since the effective date of the law. Working with manufacturers who have collection obligations under the law, local government entities have helped Minnesota be among the leaders in the country in terms of per capita collection of household electronics. However, some local governments in Minnesota that collect electronic devices still bear higher costs than collectors operating under comparable state laws.

The goals of the *Guidebook* are to provide best practice information in order to allow local government collectors in Minnesota that choose to offer electronics recycling programs to create more cost-effective collection programs that lower the burden on government in Minnesota and to promote environmentally sound management practices. The *Guidebook* suggests potential methods to accomplish these goals, such as:

- Developing well-crafted Request for Proposals (RFPs) and subsequently successful contracts
- Promoting local government collaboration (e.g., multiple counties with one contract) to drive down costs

Minnesota Electronics Recycling Law

Minnesota's [electronics recycling legislation](#)[3] ([M.S. 115A.1310 to 115A.1330](#))[4] was signed into law in May 2007, requiring manufacturers of video display devices (VDD) to share financial responsibility for the collection and recycling of [covered electronic devices (CEDs) from households](#).[5] CEDs include "video display devices" (VDDs), computers, peripherals (includes keyboard, printer, or any other device sold exclusively for external use with a computer that provides input or output into or from a computer), facsimile (FAX) machines, DVD players, and video cassette recorders (VCRs). The statutory definition of video display devices (VDD) is a television or computer monitor, including a laptop computer, greater than 9 inches when measured diagonally[6]. Prior to the enactment of the Minnesota Electronics Recycling Act, the legislature had put into place a disposal ban on CRT-containing devices effective July 1, 2006.

The Minnesota Pollution Control Agency (MPCA) leads the implementation of the law in Minnesota, along with the Department of Revenue. MPCA holds an educational role and also ensures that the program meets the needs and expectation set by the Legislature. The State Department of Revenue collects registration fees from manufacturers, administers manufacturers' reporting of recycling efforts and sales and collects any fees if recycling obligations are not met.

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[3] http://www.pca.state.mn.us/index.php/view-document.html?gid=15511
[4] https://www.revisor.leg.state.mn.us/statutes/?id=115A&view=chapter#stat.115A.1310
[5] http://www.pca.state.mn.us/index.php?option=com_k2&id=2625&lang=us&view=item
[6] Note: this definition of VDD excludes devices such as mobile phones and some tablets that fail to meet the 9" threshold.

The Minnesota law requires manufacturers of VDDs to annually register and pay a fee to the state, collect and recycle CEDs from households in the state, and file a report for each program year. The exact number of CEDs any manufacturer must recycle in any year depends on the number of pounds of VDDs the manufacturer sells into Minnesota. The law requires that 80% of the total household pounds sold by manufacturers into the state must be recycled. Manufacturers face penalties for not achieving their obligation. Manufacturers receive "credits" for the pounds of CEDs collected from households over the amount of their mandatory pounds obligation. Manufacturers receive a 50% premium for collection occurring in Greater Minnesota as a means to promote statewide collection service and not concentrate all collections in the metro area.

The law formally identifies stakeholders and details specific responsibilities and requirements for each, including registration and annual reporting on their activities. Other parties are affected by the law, including retailers and consumers, but play a more limited role. It is important to note that the role of local governments acting as electronics collectors is not mandated by the Electronics Recycling Act. The collection network established by counties and local governments in Minnesota has been developed in response to consumer demand rather than legislative requirements. That being said, since local governments are currently handling the majority of collections across the state and in some cases still funding all or part of the costs, it has been recognized that these local collectors can and should look at different ways to reduce costs, such as through manufacturer funding, or decide that private collectors may provide adequate service for the local community. One strategy to encourage continuous improvements in the cost-effectiveness and reduced government financing of e-waste recycling is to promote increased transparency in the data related to program performance, costs and sources of financing.

See the flow chart in Exhibit A for a more detailed look at the relationship between stakeholders, as well as the flow of recycling monies, showing how recycling of goods is possible.
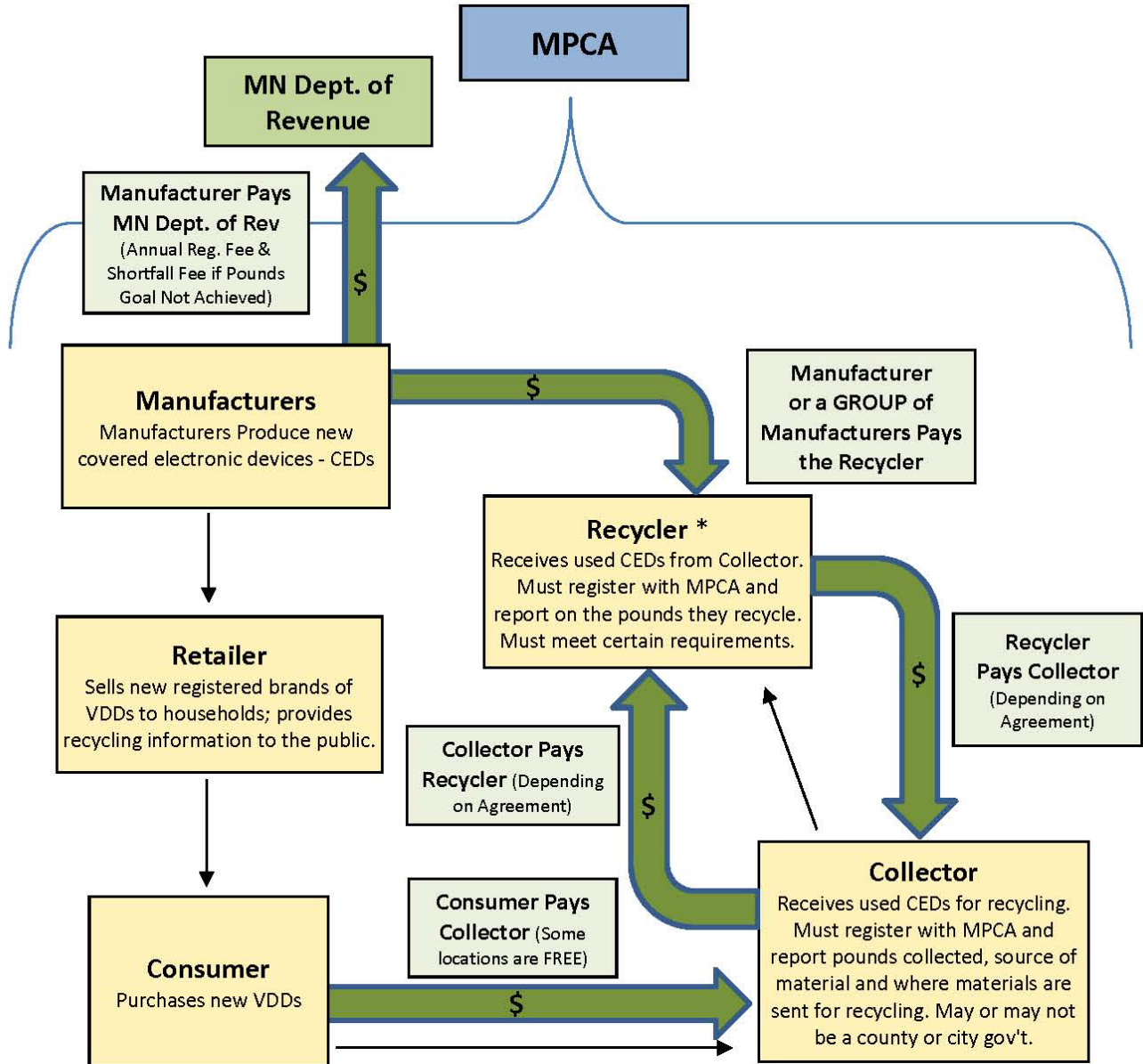
Note: Recycler also receives payments from downstream scrap markets for the value of CED components.
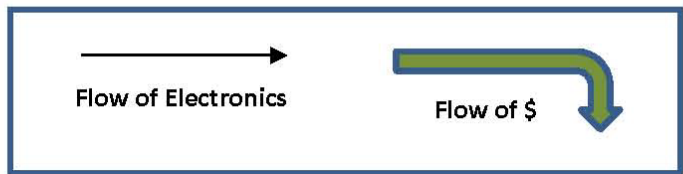
Current Status of Electronics Recycling in Minnesota

The MPCA's most recent report to the Legislature, the 2011 Evaluation Report on the Minnesota Electronics Recycling Act, states that 75% of the pounds of e-waste recycled was handled by **permanent collection sites**. However, residents also have the opportunity to drop off devices through events, pick-up services and mail-back services. See Exhibits B and C for a breakdown of pounds collected by year as well as a tally of how many collectors, manufacturers and recyclers are registered with MPCA and currently operating in the state.

Exhibit B:
Number of Registered Collectors, Collection Sites,
Recyclers and Manufacturers in Minnesota in 2010/2011

Registered Collectors	214
Permanent Collection Sites – 11 county metro area	118
Permanent Collection Sites – Greater Minnesota	157
Registered Recyclers	71
Registered Manufacturers	68

Exhibit C:
Minnesota Pounds Per Capita by Year

Program Year	Pounds recycled	Pounds per capita	Pounds per household
PY4/FY11	33.0 million	6.2	15.8
PY3/FY10	34.7 million	6.5	16.4
PY2/FY09	31.0 million	5.9	14.8
PY1/FY08	33.6 million	6.4	16.1

MPCA staff have maintained data on selected Minnesota counties' e-waste spending and contract prices. A sampling of this data is included in this *Guidebook* in this section. Additional data, including more recent updates, will be made available on the MPCA *Guidebook* web page.[7]

METROPOLITAN MINNESOTA COUNTIES
In PY4, five of the Metropolitan Area counties collected 9.4 million pounds of CEDs from households (or about 28% of the statewide total recycled). According to the PY4 report, most registered counties recovered some costs from recyclers that sold the recycled pounds to electronics manufacturers. The pounds that are sold by recyclers to manufacturers or groups to count towards their pounds obligation can equate to savings for counties. Metropolitan counties covered nearly half of their $1.6 million in costs through pounds sold to manufacturers. Public collection is also subsidized through various fees, such as solid waste tipping fees, environmental charges, other forms of solid waste program revenues, or recycling fees charged to residents using the service. Exhibit D below shows this breakdown.

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[7]http://www.pca.state.mn.us/electronics/guidebook

Exhibit D:
Metropolitan Counties Registered to Collect Electronic Devices
(CED Recycling CY2011)

County	Pounds CED collected (CY2010)	Recycling and transportation cost*	Share of costs recovered, by source		
			Recyclers/ manufacturers	Consumer recycling fees	Not recovered
Carver	513,193	$73,115	40%	39%	21%
Dakota	1,384,407	$301,000	12%	0%	88%
Hennepin	5,867,854	$978,266	68%	0%	32%
Scott	110,425	$21,283	0%	100%	0%
Washington	1,504,255	$230,091	33%	0%	67%
TOTAL	9,380,134	$1,603,755			

*Does not include labor and facilities costs

NON-METRO MINNESOTA COUNTIES

The e-waste recycling landscape in the non-metropolitan area of Minnesota, also known as "Greater Minnesota," is very different for many reasons. Geographically, it has much lower population densities. There are also smaller local units of government and residents must drive further to get to viable recycling options. Crow Wing County and St. Louis County have had recycling agreements that provided them with a fixed amount of "free" pounds recycled per year. Exhibit E shows that county costs in Greater Minnesota are not recovered from recyclers and manufacturers as they are in the Metropolitan Area counties. The savings occur as a result of the low cost (i.e., "free") agreements with their recycling contractor. These low cost or "free" agreements are the result, in part, of the manufacturers purchasing pounds from these recyclers to fulfill their obligations. Most Greater Minnesota counties also charge a consumer fee at the drop-off point, which helps offset costs.

Exhibit E:
Non-Metropolitan Counties Registered to Collect Electronic Devices from Households
(CED Recycling in PY4: July 1, 2010 to June 30, 2011)

County	Pounds CED collected (CY2010)	Recycling and transportation cost	Total CEDs cost*	Share of cost recovered, by source		
				Recyclers/ manufacturers	Consumer recycling fees	Not recovered
Becker	178,000	$26,289	$26,289	0%	55%	45%
Crow Wing	295,980	$15,830	$31,252	0%	94%	6%
St. Louis	565,875	$0	$31,805	0%	26%	**74%
TOTAL	1,039,855	$42,119	$89,346			

*Includes labor and facility costs
**St. Louis County receives free recycling and transportation through their recycler, so this only represents
   costs not recovered for labor and facilities.

Summary of Trends of Electronics Recycling in Minnesota

The cost and sources of funding for e-waste collection programs varies depending upon geography, local government policies (including preference for partnering with industry stakeholders) and the pricing terms of agreements with e-waste recycling service providers. A few case studies help illustrate these differences. In five Metropolitan Area counties, an average of about 47% of transportation and recycling collection costs in calendar year 2010 were paid for through public funding. In two Greater Minnesota counties, the average was only about 30% of comparable costs.

Recyclers working under a contract with a manufacturer, or group of manufacturers, in a state where their recycling obligations are set without convenience goals, such as in Minnesota, may be working under an explicit or implicit pound limitation – in other words, electronics manufacturers will agree to pay a recycler for a certain number of pounds at a set rate per pound. Because the electronics recycling industry bills manufacturers (and other customers) by the pound for residential materials, manufacturers can control costs by limiting the number of pounds they will agree to fund (in addition to negotiating lower per-pound rates from recyclers). The manufacturer may set these limits due to the pressure to minimize costs and the fact that too much over-collection can cause budget overruns. In Minnesota and other states with similar laws, over-collection can turn into "credits" for pounds recycled over their recycling obligation. Manufacturers can claim these credits to use in future years when they over-collect, but they can only use up to 25% per year in credits to meet their annual recycling obligations. Manufacturers have accrued significant amounts of credits from over-collection under the first few years of the program. In PY4, manufacturers used credits from previous years to fulfill 8% of the total collection obligation. However, after PY4, manufacturers held more than 43 million pounds of credits for use in future years. Although the 25% limitation means that manufacturers must still recycle substantial amounts in PY5 and beyond, the effect of this build-up of credits lowers the overall demand for pounds received by collectors.

Another factor lowering demand for pounds collected from local governments and others in Minnesota is the declining weight of new products and the introduction of smaller devices replacing larger ones. Because the Minnesota law sets recycling obligations based on the pounds manufacturer sell each year in the state, lower average product weights will lower the amount that must be recycled each year. Due to consumer demand and pressure to reduce material costs, manufacturers of large screen televisions and other products have significantly reduced the weight of individual products by as much as 50%. This reduces the cumulative recycling obligation for all manufacturers and therefore the amount they are willing to fund through collection efforts. Compounding this is the trend towards new, smaller products that replace heavier products sold previously. In the past 2-3 years, this has been especially dramatic with household sales of tablet computers and light weight laptops replacing desktop computers and computer monitors. Attempts to offset this challenge through legislative changes to add product categories to the recycling obligation have been met with resistance and are so far unsuccessful.

Summary of Lessons Learned from Case Studies

There are a wide variety of e-waste collection programs throughout Minnesota and in other states. Appendices B and C provide details of case studies that help illustrate the various approaches to the services, financing and program monitoring used by numerous local governments in Minnesota, Wisconsin and Illinois. State and local governments have different policies and procurement approaches related to e-waste recycling services. The private sector has quickly responded to the demand for recovery programs and a whole new e-waste recycling industry has emerged to address the needs of manufacturers with compliance obligations, individual consumers and government agencies. Minnesota was one of the first states to prohibit landfill disposal of selected e-waste products and then require manufacturers of covered electronic devices to help finance the collection and recovery operations. This early entry of the State as a policy leader, plus the traditional role of counties and other local governments to plan for the management of overall solid waste and recycling programs, has also prompted many of them to develop their own unique e-waste collection systems.

To help prepare this *Guidebook*, a selection of local government e-waste collection programs were surveyed and reviewed. Information from the MPCA annual reports and other data from MPCA staff were also used to develop these case studies. The case study information presented (see Appendices B and C) is intended to highlight some of the important differences and similarities to help inform future purchasing of e-waste recycling services. The case study data is anecdotal only and is not intended to be statistically representative of all collection programs and recycling contracts throughout Minnesota.

Local governments typically enter into contracts directly with recyclers to provide a minimum level of collection service to residents. Recyclers may then be reimbursed by manufacturers or groups of manufacturers, who pay for recycling costs to fulfill their recycling obligation in the state. The majority of Minnesota communities that have e-waste contracts have agreements with just a few recycling companies.

Exhibit F displays a current list of e-waste recycling contractors and a partial sampling of their local government clients. Local governments and other agencies should contact current contractors and other prospective vendors to verify and update this information. More discussion of the contract terms and conditions is contained in the Appendices of this *Guidebook.*

Local governments have used a variety of methods to procure the e-waste recycling services. In the past, some have selected contractors based on local presence and past working relationships. Recently, more counties have elected to go out with a competitive, request for proposals (RFP) process.

Vendor	Former Name or Subsidiary	Primary Company Web Page	Example Client Agencies Surveyed
Dynamic Recycling		www.DynamicRecycling.com	Carver County, Washington County
MPC	Materials Processing Corporation	http://www.mpc-e.com/	Hennepin County, Cass County consortium, St. Croix County consortium
Sims Recycling Solutions		www.SimsRecycling.com	Solid Waste Agency of Lake County (SWALCO)
Supply Chain Services		www.Supply-ChainServices.com	Solid Waste Agency of Northern Cook County
Universal Recycling Technologies		www.UniversalRecyclers.com	St. Louis County
Vintage Tech Recyclers		www.VintageTechRecyclers.com	Dakota County

In addition to those counties listed in Exhibit F, two Minnesota counties, Olmsted and Scott, elected to purchase their e-waste recycling services through the Minnesota cooperative purchasing venture (CPV) with the State's contractor, Arrow (formerly Asset Recovery). One of the major objectives of these two counties was to attain a higher or easier level of legal assurance through the Minnesota CPV contract that their e-waste materials were being recycled properly and not illegally exported to markets that could not be verified and monitored for environmental compliance.

One group of Minnesota counties has elected to use their own form of cooperative purchasing. The counties of Cass, Crow Wing and Hubbard, together with the Leech Lake Band of Ojibwa, released an RFP in June 2012 and awarded their e-waste recycling contracts to MPC. Each organization executed its own contract with MPC, but the terms, conditions and prices were the same. Individual contracts were required because the there is no formal joint powers agreement between the entities. This is the second generation of this e-waste recycling consortium and was coordinated by a consultant contractor for Cass County.

In Wisconsin, another group of counties, the "Western Wisconsin Recycling Everywhere" consortium, encompasses six Wisconsin counties – Dunn, Eau Claire, Pepin, Pierce, Polk and St. Croix. Led by staff from St. Croix County, the consortium released a single RFP for all six counties, resulting in the selection of MPC as the e-waste recycling contractor. Then, the Dunn County attorney prepared the legal documents. Each county administers its own

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[8] ***Disclaimer:** This list of e-waste recycling vendors is presented in this *Guidebook* for information sharing and educational purposes only. MPCA and the consultant team make no endorsements or implied warranty of services provided by these vendors or any other company mentioned in this *Guidebook*. Local governments and other agencies should contact current contractors and other prospective vendors to verify and update this information. Company names, web pages and client lists change very rapidly.

separate agreement with MPC. Each county continues to plan and manage its individual collection programs, some with collection sites and some without any direct government operations.

Historically, there has been a wide range of contract prices and revenue sharing arrangements. Most contract recyclers are able to cover a portion of their costs from manufacturers under the State-required credits system. As part of information submitted to MPCA, some of the metropolitan counties reported that they were able to cover nearly half of their costs by contracting directly with recyclers with manufacturer contracts. The costs not recovered through the manufacturers' credits are often subsidized by other county solid waste charges and revenue sources. Public collection operations are also often partially funded through fees charged to residents when they drop-off their e-waste materials.

Exhibit G lists the known contract prices for selected Minnesota counties. This list is from anecdotal case studies and information readily available for this *Guidebook* at the time of publication. It is clear that contract prices vary by contractor and type of e-waste. Please note that the table below only includes recycling costs for specific device types and not necessarily other charges (such as transport, event staging fees, or miscellaneous costs). Therefore, the values may not represent a true "apples to apples" comparison but are generally representative of trends in recycler costs for local government clients in Minnesota. More discussion of the contract terms and conditions is contained in Appendix C – Minnesota Case Studies and Appendix D – Case Studies from Other States.

The sample case studies in this *Guidebook* highlight recycling service procurement approaches and financing practices that can lead to greater efficiency, lower costs and the application of environmentally sound materials management standards. Almost half of the collected household CEDs reported to the State of Minnesota comes from local government collection programs. The rest are collected at a mix of private businesses, such as retailer and manufacturer collection programs. These programs employ a variety of methods such as permanent collection sites, special collection events, and curbside collection.

Exhibit G:
Current Contract Prices of Selected Minnesota Counties[9]

2012 Unit Prices in $ per pound					
Paid or (Charged)					
Agency	Current Contractor	Computers	Monitors	TVs	Misc.
Carver County	Dynamic	$0.25	($0.06)	($0.12)	($0.09)
Cass, Crow Wing, + Hubbard Counties	MPC	$0.00	$0.00	$0.00	$0.00
Dakota County	Vintage Tech	$0.20	$0.02	$0.02	$0.02
Hennepin County [(a)]	MPC	($0.18)	($0.18)	($0.18)	($0.20)
Olmsted County	Arrow	$0.15	($0.17)	($0.17)	($0.14)
Washington County	Dynamic	$0.25	($0.06)	($0.12)	($0.09)

This data for Hennepin County reflects the older prices under the County's previous, 2012 Contract terms with MPC. Hennepin County's 2013 MPC contract requires a flat, base recycling fee of ($0.03) per pound (charged) to the County offset by a floating revenue share that floats with monthly scrap prices based on commodity indexes. Plus, the Contractor must share 85% of any manufacturers' credits back to the County. Plus the County pays set transportation fees per trip. (See Hennepin County profile in Appendix C for more details.)

The case studies highlighted in this *Guidebook* indicate some of the benefits to careful pre-planning, procurement and contracting for e-waste recycling services. Also, it is very important to continue to discuss the administrative efficiencies and market leverage advantages in working as a consortium (e.g., a group of multiple counties) to procure e-waste recycling services. Although beyond the scope of this *Guidebook*, there is a need to provide more outreach and assistance to local governments to promote the use of procurement and contracting consortia to take advantage of the benefits described here.

Understanding Recyclers

Recyclers typically want to take in as many pounds as possible to cover the fixed costs of the machinery and environmental compliance systems and to build volumes to sell to downstream markets. When devices have a negative commodity value, such as CRTs, recyclers can introduce limits on funding from manufacturers, or charge the collection site a higher rate for these items. It is important to ask and understand what manufacturer relationships the recycler you select has established. There can be additional expenses or service interruptions borne by the collector if recycler efforts to contract with a manufacturer do not come to fruition, or if limits have been set. It is best to ask these questions up front.

Recyclers work to recover the value from used electronics through a variety of methods. Some refurbish and resell whole devices, while others manually break down equipment into their separate components for resale. Still others have invested in large shredding equipment in order to process larger quantities of electronics more quickly, and sell the resulting commodities (metals, plastics, etc.) into downstream markets. It is important to understand these differences when considering contracting with a recycler.

Demanufacturing versus Shredding

There are currently two dominant approaches to recycling used electronic products – demanufacturing and shredding. Shredding involves a minimal amount of sorting and separating certain components from collected electronics before loading them into large pieces of shredding equipment. Demanufacturing involves manually dismantling the electronics in order to market the intact recyclable components/products. The shredding process is geared towards recovering the maximum value from the recyclable metals in used electronics, while the dismantling process yields more components that can be reused in secondary markets. Shredding operations employ fewer workers since most of the work is accomplished by large pieces of equipment. However, there is no strict separation between shredding operations and dismantlers. That is, all shredding operators employ some level of dismantling activity to prepare devices for shredding or refurbish potentially resalable whole devices. And dismantlers by necessity will sell many commodity streams to shredders when the markets are not favorable to sell the whole device.

Demanufacturing

©2007 NCER

Shredding

©SSI Shredding Systems, Inc.

Warning Signs of Bad Management Practices

The MPCA has developed an information fact sheet, *Managing Electronics Waste*, to assist collectors of household CEDs and other e-waste.[10] Collectors can also use other references including the best practices recommended by the Electronics Recycling Coordination Clearinghouse (ERCC) that can be referred to by visiting their website at www.ecycleclearinghouse.org. The document highlights recommended collection practices, including storage of electronics, data and reporting, stacking and wrapping, and downstream practices. Some of the photos below show practices that are **not** recommended when operating a collection site.

The photo on the left shows an up-close shot of the large sign posted beneath the lean-to shed on the right. Residents here are being urged to either leave an electronic item, or take one. These photos were taken at a county site accepting electronics for recycling. It is located in an unsecured area available to the public 24 hours a day. Leaving a computer or laptop with hard drive intact at this location would be "at your own risk". (©2010 National Center for Electronics Recycling)

The photo on the left shows a Gaylord box of mixed electronics. When collecting electronics, it is better to palletize by type, stacking monitors, televisions and computers separately and all mixed electronics such as printers and peripherals in a separate Gaylord. Mixing these makes it harder to determine pounds by product type at the recycler and also encourages breakage. The photo on the right shows a pallet of computers that were stacked too high and not wrapped securely. (©2011 National Center for Electronics Recycling)

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[10] MPCA's fact sheet, *Managing Electronics Waste* (December 2011)*,* can be viewed and downloaded from the MPCA web page: http://www.pca.state.mn.us/index.php/view-document.html?gid=4064

Not only should collectors be following a set of environmental management practices, but recyclers should be following them, too. A first step in deciding whether a recycler is "doing the right thing" is to determine their R2 or e-Steward certification status. You can also ask them some questions prior to developing a contract with them, or even incorporate questions into your Request for Proposal (RFP). If possible, a site visit to the recycler is highly recommended to see the operation and its processes first-hand. Then, review if their written statements match with their facility. Some examples of questions are included on the TIA E-cycling Central website,[11] and highlighted below:

1) **What are your policies and practices for destroying personal data that may still exist on used computers or cell phones?**

   - Data can be wiped from storage media using a magnetic wiping method or using a program to overwrite all sectors of a hard drive. Any method used for data wiping should be done more than once (multi-pass).
   - Storage media can be destroyed by shredding, cutting, incinerating, multiple perforations or crushing.
   - Your recycler should be able to provide written certification that the data was wiped or storage media destroyed, as well as a record of the methods used.

2) **Do you follow any recognized best management practices for electronics recyclers or are you certified to any particular standard (i.e. R2 or e-Stewards)**

   - Recyclers and consolidators should be able to produce evidence that they have the proper facilities, training and equipment to perform the operations they claim by showing you an audited management/operations system, complete with evidence of recent audits.
   - Ask if they have environmental management certification or system in place, such as ISO 14001 environmental management certification, or certifications from R2 or e-Stewards.

3) **Have you had any environmental or safety violations (citations, fines, notice of violation, consent orders, etc.) or filed for any environmental damage insurance claims in the last 5 years? If yes, please explain.**

   - Companies that have a good track record of complying with environmental and safety requirements are preferred.
   - A company that has been in business for several years with only a few minor violations that were quickly resolved may be just as responsible as a company with only a year or two in the business with no violations.
   - Check for major violations such as large quantity waste releases or significant neighborhood complaints.

4) **Do you send used equipment or wastes to other business partners or service providers? If yes, do you know what their export policies are, if they have any environmental or recycling certifications or if they follow recognized best management practices for recycling?**

   - Good recordkeeping is one of the best practices. Look for companies that keep detailed records including where they ship materials, and how much they ship.
   - Although there are several "full service" recyclers in the U.S., it is likely that the recycler will not handle the full processing of your device.
   - Your recycler should have written logs of what processing (such as sorting and/or shredding) is done on site and who receives the materials or products after initial processing.
   - Ask if the recycler's business partners are contractually bound to the same standards or best management practices your recycler holds themselves to.

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[11] http://www.ecyclingcentral.com/faqs.php

- Be wary of recyclers who state that their processes and business partners are "confidential," "proprietary," or "they don't know."
- All exporting must be done in compliance with laws applicable to both the exporting and importing countries.

5) **What %age of the materials you collect is recycled and what %age is disposed (either through land-filling or incineration)?**

- Recyclers should recycle as much of the materials as is economically feasible.
- Look for companies that recycle 90% or more of the materials, sending less than 10% for disposal or incineration.
- Also look for recyclers that avoid land-filling or incinerating items such as mercury lamps, leaded glass and batteries.

6) **Do you have general liability and environmental liability insurance? If so, how much?**

- Insurance requirements vary from state to state and the amount and type of coverage necessary will vary by the size and operations at the facility.
- The amount and coverage will depend on the scope and magnitude of the operations.
- Environmental liability insurance can be very expensive depending on the extent of recycling activities, so this may have the effect of limiting the field of potential responders.

7) **How do you handle mercury lamps in electronic products?**

- If your recycler accepts products that contain mercury lamps, such as LCD monitors, laptop computers and some copiers, they should have and follow written procedures for removing the mercury-containing components prior to processing the device.

A similar checklist of questions to ask a recycler can also be found on the Federal Electronics Challenge (FEC) website.[12]

Environmentally Sound Management (R2 and eStewards)

Counties and municipalities across the country have historically sought contracts with electronics recyclers that would offer them the best price per pound. However, more recently, the news media as well as non-profit watchdog groups have revealed unscrupulous business practices by some recyclers that are profiting largely from the exportation of e-scrap to countries ill-equipped to handle it. These issues have been brought to light and raised the larger issue of environmentally sound practices at all electronics recycling facilities.

Now entities offering electronics recycling programs are becoming more aware of the importance of the practices that the recycler follows. They are beginning to look for and contract with recyclers who are accredited by one of the two EPA-recognized certification programs - Responsible Recycling (R2) Certification program[13] or the e-Stewards Certification program.[14]

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[12] http://www.epa.gov/fec/resources/select.pdf
[13] http://www.r2solutions.org/
[14] http://e-stewards.org/

Both R2 and e-Stewards certification programs utilize the ANSI-ASQ National Accreditation Board[15] (ANAB) as their accreditation body. ANAB works with four certification bodies (CBs) to offer certification for the R2 Practices – AQA International,[16] Orion Registrar, Inc.,[17], Perry Johnson Registrars,[18] and SGS.[19] ANAB works with three CBs to offer certification for the e-Stewards - NSF International Strategic Registrations, Ltd.,[20] Orion Registrar, Inc. and QMI – SAI Global.[21] The certification bodies provide an important layer of distance between the recycler and the auditor. Unlike in self-certification or third-party auditing programs, under an accreditation such as R2 or e-Stewards, the auditor's report to the certification bodies to ensure integrity of the program.

What is the difference between the two standards? Overall, there are many similarities in how the standards require recyclers to establish management systems for best practices and perform due diligence on where materials flow from their facilities. One difference is that the e-Stewards Standard adopts the BAN Amendment to the Basel Convention,[22] which calls for the absolute ban of hazardous materials to developing countries. Unless prevented by contracting rules, one of these certifications should be required of the recycler (most governments allow either, while fewer give a preference for one standard over the other) when developing an RFP as it provides an important baseline for best management practices the recycler will follow, including verification from a third party accreditation. However, the certifications cannot be relied upon fully as a "guarantee" of recycler practices throughout the life of a contract. In particular, insurance requirements, including pollution liability insurance, are not discussed in either standard, which means an RFP will have to set appropriate or desired levels to require.

There is a national and Minnesota trend for companies to be listed by both certification programs. Five companies with locations in Minnesota are certified by one or both of these two programs. Three of these companies are certified by both e-Stewards and R2. One of these companies has five certified locations in Minnesota. A total of nine certified locations were listed in the state at the time this *Guidebook* was written. More Minnesota recyclers are obtaining one or both of these certifications for environmentally-sound management of e-waste. This trend towards increased certification is driven by concerns regarding the final disposition of waste electronics, including the media attention devoted to processing practices overseas, as well as desire for greater oversight on domestic recycling operations.

CRT Recycling

Historically, Cathode Ray Tubes (CRTs), which are the display technology used in older televisions and monitors, have been the most difficult as well as most expensive commodity for electronics recyclers to handle. In Minnesota and in all legislated state programs where CRT televisions and monitors from households are accepted, CRTs comprise the greatest volume of material collected but have the lowest commodity or parts value. According to the *Manual for Municipalities and Counties*[23] created by the Northeast Recycling Council (NERC)' CRTs can have one of four fates:

- **Sent to a lead smelter**
  CRTs are used as a replacement material for flux in the heating process. So, the CRT replaces a virgin material (silica) for the production of lead. Federal requirements pertaining to beneficial reuse may apply.

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[15] http://www.anab.org/
[16] http://www.aqausa.com/
[17] http://www.orion4value.com/
[18] http://www.pjr.com/
[19] http://www.sgs.com/
[20] http://www.nsf.org/business/management_systems_registration/index.asp?program=ManagementSysReg
[21] http://qmi-saiglobal.com/Default.asp?language=english
[22] http://www.basel.int/Implementation/LegalMatters/BanAmendment/tabid/1484/Default.aspx
[23] http://www.nerc.org/documents/survey/index.html

- **Sent to a glass-to-glass recycling facility**
  There are very few facilities making new CRTs around the world and fewer that will accept recycled glass for making new CRTs. One facility in India is the primary destination for leaded glass from U.S. (and other) recyclers with the capability of separating and preparing glass to be used in new CRTs.

- **Reused or resold**
  This generally occurs through charities or vendors who have repair/refurbishing as a business priority. With the prevalence of flat panel display technology and their smaller size, combined with declining cost, it is extremely difficult currently to sell used CRT monitors and televisions domestically.

- **Exported**
  Some of the countries that have historically received large volumes of materials are China, Russia and Mexico. It is believed that the CRTs sent to Russia and Mexico are repaired and reused. What their ultimate disposal fate is remains unclear. Information about what becomes of the CRTs sent to China is difficult to verify. CRTs may be repaired and reused, melted down and used in consumer glassware such as food containers and glasses. Government agencies are not able to vouch for what happens in any of the overseas exports. Local governments should proactively develop their own policies about export vs. domestic markets. Materials that are considered hazardous waste in the United States may be shipped overseas where environmental scrutiny may be less strict. Some vendors only export "certified repairable" monitors and televisions that are bubble-wrapped and individually manifested by make, model, year and condition. They are tested before shipping to ensure reuse potential. This increases the likelihood that the materials are being repaired or reused. It should also be pointed out that there are legitimate export markets for CRTs. Almost every recycler in the United States uses export markets for some of the materials at least some of the time. You should ask potential vendors what they do with their CRTs, or set CRT management requirements in bid specifications. You should also practice due diligence by contacting the export markets that a prospective vendor uses. It is important to ask the ultimate vendor every few months about export business practices, because they can change and vendors are unlikely to inform you on their own of a change in management strategy.

In addition to these traditional methods, at least three firms in the U.S. are in the process of deploying furnaces that are capable of removing the lead from CRT glass domestically. This would leave the lead as a commodity to be resold to markets such as battery manufacturers, and a clean stream of glass for other glass markets besides CRTs. As of early 2013, none of the firms were actively running full scale furnaces to carry out this process, but some have been separating glass and preparing the feedstock to run the furnaces when all permits are ultimately in place.

When developing an RFP, it is very important to be mindful of the expense of CRT glass processing versus the net value of computer and laptop recycling. Regardless of the method described above for managing CRT glass, recyclers will be charged a fee for proper downstream disposition. Computers are a valuable source for secondary raw materials. Many materials, such as a variety of plastics, silicon, aluminum, copper, and gold, are valuable commodities that can be reclaimed in the recycling process. The recycling of computers can offset the negative commodity value in CRT recycling, which is why recyclers are particularly interested in knowing what historical collection levels have been like when considering their response to an RFP. They may also be particularly interested in whether your county/local area accepts electronics from the business sector. Accepting business sector electronics can mean having to handle higher volume in your program, but typically means that you will see higher quality electronics coming in and potentially better prices from a contracted recycler as a result.

The mix of CRTs in the collection program is a key factor in the prices a recycler will offer to any collector. Although many collectors do not have the resources to track the weight of each device type that is dropped off, it is a good idea to keep records of approximate unit counts by type to provide a baseline to prospective recyclers. If a program primarily collects from households and allows for a similar set of devices to be dropped off as the Minnesota CED list, CRTs will undoubtedly comprise the dominant portion. Although the Minnesota law does not require recyclers to report on pound totals by device type, there are other states where these data are provided. The closest approximation to the Minnesota CEDs would be the "Eligible Electronic Devices" (EEDs) collected under the

Wisconsin law. Exhibit H below shows the results from the Wisconsin Department of Natural Resources' most recent report, _E-Cycle Wisconsin 2012 Report_, on collection by device type for Program Year 3.

Exhibit H:
Wisconsin Program Year 3 Collection by Device Type[24]

Device Type	% of Total Weight
TVs	62%
Monitors	11%
Computers	9%
Other EEDs (printers, DVD players, computer accessories, etc)	18%

The vast majority of TVs and monitors returned in collection programs today are CRTs (small amounts are LCDs), which means that CRTs comprise between 70% to 75% of the weight collected. This is similar to results in other states with similar covered household products and is a useful baseline if actual data from the collector is unavailable.

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[24] http://dnr.wi.gov/files/PDF/pubs/wa/wa1613.pdf

Planning Your Collection Program

There are many needs that must be addressed to ensure a successful electronics recycling program. The list below includes just a few of the questions to consider before drafting an RFP to secure a recycler.

- **What collection site options are already available in the area?**
  The county or city should research the existing options for residents to recycle their CEDs and other e-waste materials. Check the MPCA web site for registered e-waste recyclers in your region of the State and contact them to learn about their services.[25] These e-waste recyclers may also be able to share with you what they know about regional retail drop-off collection sites.

- **Who/what will support the program financially? What are your financing alternatives?**
  One of the most important questions, *if not THE most important question*, to ask yourself when preparing to write an RFP is: How do you expect to finance your e-cycling program? There are many options to consider, however, your goal should always be running a successful program at the least possible cost to the county or local government. Consider one or more of the following options for financing:

  - **Manufacturer/Manufacturer Group Payments**
    Because of the electronics recycling law in Minnesota that sets obligations for manufacturers to collect pounds, there are individual and groups of manufacturers that need to claim pounds of CEDs collected from Minnesota households. Although rare, some groups of manufacturers choose to contract directly with collectors and may offer a per pound or other rate as part of their agreement. They then direct their contracted recycler to pick up from the collection site upon request. By going this direction, a collector can work directly with the entity that has the final say on costs and volumes rather than a recycler who contracts with the manufacturer. However, manufacturers may be the entity that also decides to limit collection activity and volumes processed if their goals have already been met for the year.

  - **Recycler Payments**
    Working directly with a recycler is the most prevalent way Minnesota counties and other local governments are funding their electronics recycling programs. To secure a recycler, you must draft and distribute an RFP, review and evaluate RFPs, choose a contractor, and execute a contract.

  - **Partnership with a Retailer**
    Some Minnesota retailers, such as Best Buy, Staples and Office Depot, offer electronics recycling drop-offs in-store. (For more information see the *RethinkRecycling.com* campaign web page on e-waste recycling options at retailers.[26]) Local governments can use the tactic of referring their residents to such retail drop-off sites. Others are sometimes open to partnerships with local communities through grants, gift cards for in-store purchases, or even offering their parking lots as visible locations to hold collection events. These local efforts can help offset some minor costs and help with promotion of the site or event.

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[25] MPCA publishes a list of *Registered E-Waste Recyclers* in Minnesota. See the MPCA web page at: http://www.pca.state.mn.us/index.php/topics/preventing-waste-and-pollution/product-stewardship/initiatives-in-minnesota/electronics/minnesota-electronics-recycling-act/registered-stakeholders.html#recyclers

[26] http://www.rethinkrecycling.com/residents/throw-buy/materials-name/electronics-tvs-computers/retailer-options is sponsored by the Solid Waste Management Coordinating Board. See also their web page for more general information on e-waste recycling of Electronics, TVs, and Computers (http://www.rethinkrecycling.com/residents/materials-name/electronics-tvs-computers).

- o **Partnership with a Corporation**
  Many communities around the country are partnering with local businesses. Many corporations are interested in giving back to their communities or in lessening their environmental footprint. Companies such as this can be easy to approach and may help offset some of the costs not covered by manufacturer or recycler payments, or provide other in-kind resources such as promotion and advertising.

- o **Reuse**
  Partnering with a recycler or certified reuse organization may offer an opportunity for collectors to gain revenue from higher value items collected, such as laptops and computers. In order to run a successful reuse program, you have to be mindful of three things – 1) Selling computers for reuse may negatively affect the price you receive from a recycler or manufacturer paying you for your pounds as more valuable items have been diverted, unless this is a specific component of the recycling contract; 2) having a staff trained to identify and separate items for reuse is important and may require additional resources; and 3) reuse programs can contribute a "feel good" element that encourages residents to participate, but assurances need to be made by the reuse partner that hard drive security is in place and that the ultimate recipient of the device has a legitimate use for it. Many reuse organizations, including non-profits, are also obtaining certifications such as R2 or e-Stewards to provide assurances, in addition to participating in programs such as Microsoft's Authorized Refurbisher program. These programs can help collectors ensure that the reuse partner is practicing downstream due diligence and not landfilling undesirable components, but do not provide a guarantee. Therefore, the benefits of these activities must be weighed against potential liabilities.

- o **Consumer Funded**
  Many programs around the country require consumers to pay a recycling fee when they drop off certain items, such as televisions and monitors. The recycling fee can help offset program costs and take the burden off of the collector. Minnesota communities should consider whether or not charging fees to residents discourages participation in collection programs.

- **What are your program goals?**
  - o Is your desire to provide consistent service at no cost to the public? Is your primary objective to add a curbside take-away element to your e-cycling program? Determining your program goals will help you communicate what you hope to accomplish to the contractor you eventually choose.

- **What costs do you anticipate? What are your historical collection numbers?**
  - o Keeping track of pounds (preferably broken down by product type) you have historically collected will enable you to better write your RFP for a recycler. If a recycler can see that over the course of three years your program has seen a typical average annual growth of about 10%, it will help them in drafting their proposal and price points. Providing more information can help in getting better price and service from the recycler. Hennepin County is one good example of how tracking and reporting the types and amounts of CEDs from households and other e-waste has helped them reduce their recycling contract price over time. (See Appendix B – Hennepin County for more information.)

- **What will you collect and from whom?**
  - o Most county and municipal sites are accepting more than just electronics – many are transfer stations and recycling centers that accept a wide range of recyclables. In terms of electronics, you will need to determine what types of electronics the recycler with which you contract will accept. Many will charge for miscellaneous electronics and don't accept large appliances (aka "white goods") such as refrigerators, washers and dryers. At the bare minimum, you need to make sure that your RFP includes all eligible electronic devices under the Minnesota law since those will need to be collected at your site(s).

- Manufacturer credits only apply to household e-waste. Are you collecting from households only, or will you also accept electronics from local businesses? Accepting from businesses may increase administrative costs (due to the need to keep household and non-household electronics separate from one another). However, accepting business products can also result in a higher influx of computers and more valuable equipment. This can help drive up your volume and increase the desirable material the recycler seeks, which typically helps offset the overall net cost to the local government or other collector.

- **Will you choose a permanent drop-off location, a collection event, curbside take-away, or a combination approach? Where/how will these occur?**
  - It should be noted that most Minnesota counties have gone away from the collection event model because of higher cost, unpredictability of participation and types of items collected. Most have adopted permanent collection sites and some supplement those sites by offering two or three yearly collection events to the public. Before drafting an RFP for a recycler, you must determine what kind of collection services you want to offer your residents. It must be clearly outlined in your RFP. Including expected volumes from each collection method is also very helpful.

- **Who will collect the electronics?**
  - What kind of resources can your county or local government provide to support the program? Is there a solid waste manager or operator available to manage the program? Do employees already staff drop-off sites? Will you offer curbside take-away? What costs are involved? Will you offer special collection events as well as a permanent drop-off location? These are all questions you need to have answered prior to drafting an RFP.

- **Will you set item limits?**
  - Item limits are fairly common when running one- or two-day collection events. These help to avoid customers with large truckloads of equipment causing traffic delays. It also helps to drive down overall costs. When collecting electronics at a permanent site, you must decide whether you will also institute an item limit. This must be communicated clearly in the RFP. If an item limit is instituted, will you accept additional electronics at an added cost to the consumer? If so, what will the cost be?

- **Do you have program resources available, such as a fork lift, trucks and storage areas?**
  - Adequately sized, weather-protected, theft-resistant storage areas are key to running an e-cycling program. Do you have program resources available, such as a fork lift, trucks, storage areas, and proper docks for transporters? If space is an issue for you, be sure to discuss with your contractor whether a mobile unit could be provided, or possibly even a trailer dropped on-site to be picked up when full. Supplies needed on-hand will be pallets, Gaylords, and shrink wrap. Will your contractor provide these, or will you? Forklifts and pallet jacks are also equipment necessary to have on-hand to move electronic equipment around. A loading dock isn't an absolute necessity (unless a forklift is not available), but makes transportation easier. These are all things you will want to discuss in your RFP.

Working Across Counties/Municipalities

Another very important strategy to consider when developing an RFP and seeking attractive bids is the option of collaborating with neighboring jurisdictions on an RFP. Some of the case studies examined in the process of writing the *Guidebook* point to successful efforts in collaboration on RFPs, contracts, or both. (For more details see the Cass County consortium case study in Appendix B and the Western Wisconsin Recyclers Everywhere consortium in Appendix C.)

This collaboration strategy can be very advantageous and may lead to lower costs and higher revenues (for the collector) for several reasons. For recyclers responding to the RFP, higher guaranteed or predicted volumes can lead to lower costs being offered. The administrative burden of responding to multiple bids rather than a single one can also factor into price considerations. It is also worth exploring for small communities if joint RFPs and contracting can lead to combined shipments to lower transport costs. That is, neighboring counties with lower population may want to schedule pickup days together to achieve a full truckload for the recycler, which lowers the transport cost for each collector.

According to the *E-Cycle Wisconsin 2012 report*, electronics collection and recycling programs have historically been set up by the local governments and funded primarily by the residents. Several years have passed since the *E-Cycle Wisconsin* program began, and many have been able to reduce their costs, even in light of changing markets for CRT glass. One way they have accomplished this is through partnering with other local governments on recycling contracts in order to negotiate better deals with recyclers. Some local governments have chosen to end their collection programs and instead direct residents to private-sector collectors—an option available to them because of the increase in collection sites following the passage of the electronics recycling law. Local governments still face challenges in dealing with electronics. With the very competitive marketplace that has developed under *E-Cycle Wisconsin*, local governments (as well as other collectors) may not be able to count on long-term contracts or consistent terms with recyclers. Some governments struggle with storing, transporting and finding recyclers for large, expensive items other collectors may not accept, such as large TVs.[27]

Ensuring Sustainable Service Regardless of Volume

As explained above, the Minnesota Electronics Recycling Act requires manufacturers to recycle a set number of pounds per year based on their sales or remit a shortfall fee to the Minnesota Department of Revenue to fulfill their obligation. This helps ensure that covered manufacturers are encouraged to recycle some baseline amount of CEDs. The fees charged by the State if manufacturers do not meet their obligation are significantly higher than the cost of recycling. Therefore, the shortfall fee option for many manufacturers can be a significant added cost. But the structure of the pounds obligation under the Minnesota law, combined with recycling industry practice of billing by the pound, also has the effect of limiting how many pounds a manufacturer is willing to fund through their programs once they have met their obligation and do not desire to accumulate credits for future years.

For collectors, it is important to recognize that the recycler with whom you contract will be facing these pressures of the manufacturer goals. On one hand, the recycler needs to help fulfill the manufacturers' recycling obligations so that the manufacturers do not face an annual shortfall penalty. But on the other hand, it may be less profitable to collect significantly more CEDs than the required minimum amounts if there will be no manufacturer willing to fund the additional costs. Developing estimates of total pounds is a key piece of information that recyclers will need in order to determine if your collection program fits with the manufacturers' recycling obligations.

On the contracting side, it is difficult to completely eliminate the risk that a recycler will cut off service in the middle of the year due to over-collection. However, contracts should include strong cancellation clauses that protect the county from sudden cutoff of services from the recycler and require an appropriate notice period before changes are made.

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[27] http://dnr.wi.gov/files/PDF/pubs/wa/wa1613.pdf

Writing a "Request for Proposal"

How do you weed through the virtual sea of electronics recyclers vying for your business? Do you work with recyclers who will give you the best price? Should you be concerned with a recycler's downstream due diligence? How do certifications factor in? There are significant choices to be made when selecting a recycler. You'll want to determine that the vendor meets the goals and objectives of your program. Checking the Minnesota Pollution Control Agency website for the list of current registered recyclers[28] is a good place to start, and required by the law, to determine who to solicit for a request for proposal.

Elements of a "Request for Proposal (RFP)"

How you structure your RFP will depend partly on the goals of your program. Is it a long-term program, or is it a short-term collection event? Will your program be staffed by volunteers, or paid employees? Do you have adequate storage, or will you need frequent pickups? What type of budget are you dealing with? In any event, there are many elements you'll want to take into consideration when you develop your RFP. Listed below are a few of the most important ones:

- A bid submission date
- A date of award
- A bid address and payment address/details – Bids can either be submitted electronically or via the mail as a "sealed bid", to be opened on a specific date. Many recyclers prefer the ease of electronically submitted bids, but like the confidentiality of sealed bids.
- A detailed program description including: How many pounds have been collected historically; Who the program is targeting; How the program is being funded; What equipment/supplies collector will provide; What equipment/supplies recycler will provide; What scope of electronics products will be accepted; Will all materials be recycled; Will CRTs be landfilled; and Who will be staffing the location.
- Insurance requirements including: Amount of worker's compensation insurance; General liability insurance; Automobile liability insurance; Pollution liability insurance; and Environmental impairment liability insurance. Remember to request that you, as the collector, are to be named as an additional insured at the time of the contract award.
- Proof of R2 or e-Steward Certification– a certificate should be presented. You should also be able to find the recycler on the R2 website at www.r2solutions.org or the e-Steward website at www.e-stewards.org.
- Hours of recycling facility operation and ease of accessibility/availability for inspection.
- Whether or not prison labor is used.
- Where items are going downstream. The list shall include all designated facilities that are involved in the handling and processing of the equipment.
- Adequate financial assurance for closure and clean-up of any recycling operations under the program.
- Performance bond.
- Ability to provide proof of destruction as well as invoice with pounds separated by product type within 30 days of pickup.
- Pricing by net pound, indication of transportation costs, and labor costs.
- References.
- Desired proposal format, including a standardized price worksheet for proposers to fill out.
- Signature form with recycler contact information

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[28] http://www.pca.state.mn.us/index.php/topics/preventing-waste-and-pollution/product-stewardship/initiatives-in-minnesota/electronics/minnesota-electronics-recycling-act/registered-stakeholders.html#recyclers

Estimated Time Frame

The entire RFP process, including internal planning, will take a significant amount of time. One objective of any RFP process should be to get as many qualified, competitive and responsive proposals as possible. Through proper pre-planning, the RFP process can help assure the local government or other collector that the responses are reflective of the current market.

Several steps should be anticipated and scheduled as early as possible so that adequate internal resources are allocated and to provide prospective vendors adequate notice and time to respond. The following questions should be answered as early in the process as possible:

- **Does the county/local government want to go out for RFP?**
  If there is already an existing contract, and the services and performance have been satisfactory, does the local agency want to simply extend its contract through negotiations with the incumbent contractor? If the agency decides to negotiate with the incumbent, this should be done as early as possible so that there is still time to go out for RFP if negotiations fail to bring a set of new terms that are satisfactory to the agency.

- **If the county/local government wants to go out for RFP, when does the current contract expire?**
  A transition period should be scheduled between when the new contract is executed and the old contract ends.

- **How much time do you want to give respondents?**
  The RFP process should allow at least four (4) to six (6) weeks for vendors to prepare and submit their responses once the RFP is finalized and released.

- **How much time does the county/local government need to prepare its RFP?**
  The e-waste marketplace and technologies for recovery are changing very rapidly. This constant state of change means that local governments need additional time to plan and prepare their RFPs to consider the latest in best practices.

After all of these steps are considered, the local government should start its initial planning and preparations for a new contract twelve (12) to eighteen (18) months before the current contract expires.

Performance Bond

Local governments often require service contracts to contain a provision for a performance bond in case their contractor fails or otherwise defaults in the middle of the contract period. The amount of the performance bond is set by the policies of the local government but could be set to correspond to the value of the contract in the range of three (3) to six (6) months of service. For example, if the total annual cost of an e-waste contract is $5,000 per month, the performance bond could be set at $15,000 to $30,000.

Below is draft, example language that could be in the RFP and contract:

> *"The local government requires a performance bond in the case of the Contractor's failure to perform contracted services. The performance bond shall be for a minimum of* **[AMOUNT TO BE SPECIFIED BY LOCAL GOVERNMENT]**. *The responsibility for renewal is the responsibility of the Contractor."*

Evaluating Proposals

When evaluating a proposal, it is challenging to get an apples-to-apples comparison because some proposals may offer varying products and services. By clearly identifying the core products and services you desire in the original RFP, you are less likely to have to compare proposals that are vastly different. This is helpful to the vendors, as well, because it clearly outlines the goals of your plan and allows them to put together a more responsive proposal. For example, instead of saying "County is uncertain how many e-waste pickups per month will be needed," you might specify, "County will require at least two e-waste pickups per month, and possibly more depending on volume received."

However, as a part of the evaluation process, there are times you may find it necessary to go back to each respondent for clarifications. For example, you may have decided to rate 'Company A' lower for only offering two persons to staff an electronics recycling event, and 'Company B' higher for indicating they would provide six. While the rating may accurately reflect the proposals, Company A may have been willing to also offer six people with no changes to the fee structure, if it only realized this was the amount desired. Don't be afraid to ask vendors additional questions or to have them provide clarifications, as it may end up benefiting you in the end.

There are several evaluation techniques that can be used to select a recycler, but below is an example of one (a different system may be chosen according to what best fits the needs of the agency):

A common method for evaluating recycling fees (e.g., price per pound) is to award the maximum number of points to the company that offers the lowest overall rate. Which proposal has the lowest overall rate can sometimes be difficult to determine. See NCER's Evaluation Tool in Appendix D of the *Guidebook* for template of an example Excel worksheet to objectively evaluate competing proposals. All other companies would then receive a %age of the available points based on a ratio of the fees proposed to the fees of the lowest bidder.

- Pricing structure **(20 points possible)** *See example of cost normalization below for use in scoring.*
  EXAMPLE:
    - **Bidder 1** – Lowest Bidder (at $20,000) gets maximum of 20 points
    - **Bidder 2** – Next Lowest Bidder (at $25,000) gets 80% of points
      (20,000/25,000 x 20) = 16 points
    - **Bidder 3** – High Bidder (at $32,000) gets 62.5% of points
      (20,000/32,000 x 20) = 12.5 points

- Environmental Certification or Commitment: ISO 14001, ISRI RIOS Certification, e-Stewards Certification, Responsible Recycling (R2) Practices Certification **(20 points possible)**
  (unresponsive to question=0, does not meet criteria=1, meets criteria=15, exceeds criteria=20)

- Responses to "Bid Format" **(20 points possible)**
  (unresponsive to question=0, does not meet criteria=1, meets criteria=15, exceeds criteria=20)

- Proper Insurance Requirements **(10 points possible)**
  (unresponsive to question=0, does not meet criteria=1, meets criteria=5, exceeds criteria=10)

- References **(10 points possible)**
  (unresponsive to question=0, does not meet criteria=1, meets criteria=5, exceeds criteria=10)

- Qualifications and Experience **(15 points possible)**
  (unresponsive to question=0, does not meet criteria=1, meets criteria=10, exceeds criteria=15)

- Minority/Women (M/W) Owned Business **(5 points possible)**
  (unresponsive to question/does not meet criteria=0, meets criteria=5)

  Total Possible Points: 100

Evaluators should take notes during the evaluation process. Items may seem memorable when being scored, but written comments will help the evaluator remember later the reasons that a vendor received a specific ranking. Also, it is worth noting that adding a section on "mandatory requirements" to your RFP can help decrease your pool of qualified recyclers to review. Those that don't meet the mandatory qualifications (i.e. R2 certification or bid receipt date) can be eliminated from the review process from the very beginning. Of course, there are trade-offs to this method – the more an agency requires of the recycler, the less likely they are to bend on prices and services offered.

How Certifications Factor Into Proposal Evaluations

When requiring the R2 and/or eStewards certifications in an RFP, it is important to require documentation of certification. Some recyclers may claim that they follow R2 or e-Stewards practices, or may state that their audit has taken place already. However, unless the certification body has issued a certificate, and the company is listed on the R2 Solutions or e-Stewards websites, the certification should not be considered complete. Most certified companies will include a scanned copy of their certificates along with their proposals, and it is advisable to check the oversight body's site to make sure they are valid. The agency is within their rights to add certifications into their list of mandatory requirements, and to disqualify a recycler without proof of this included in the proposal.

Contract Negotiations

If the county/local government has a certain contract format that they typically use, a sample copy of their contract can be included as a part of the RFP. Once a vendor has been selected, it will be necessary to finalize the contract terms in writing. The recycler or the county/local government can also create the first draft of the service contract using a combination of their standard contractual terms and conditions, the RFP, and the proposal. Both parties should review the draft to make sure that it reflects their desired terms, and any subsequent verbal and written agreements. If the county/local government must have contracts approved through their legal counsel, then be sure to allow ample time for a review period before a program start date.

Summary

Minnesota has an advanced infrastructure for collecting and recycling used electronics from households, with numerous collection locations across the state and a law that guarantees manufacturers will help fund significant volumes. However, there is still room for improvement with ensuring cost efficiency and environmentally sound management. This *Guidebook* is intended to provide helpful resources to further advance local government collection programs. The examples provided in this *Guidebook* show that steps such as including a baseline set of requirements in RFPs and contracts with recyclers, as well as investigating joint contracting, can lead to lower costs and better service for local governments and consumers.

During Minnesota's Program Year 4 (PY4), the amount of electronics collected and recycled in the state remained steady compared to the previous year (6.2 pounds per capita in PY3 versus 6.0 pounds per capita in PY4). Local governments collected nearly half (49%) of the covered electronic devices in PY4. PY4 also saw an increase in the number of collectors and recyclers operating in the state. This alone points to a great opportunity for information sharing and collaboration amongst local governments.

APPENDIX A

Model RFP

The sample Request for Proposal below has facets taken from both the NCER and Dakota County RFPs. We recommend this as a starting point for RFP development by Minnesota counties and local governments.

COMPANY NAME/LOGO

Address / City / State/ Zip

REQUEST FOR PROPOSAL

The purpose of this Request for Proposal (RFP) is to establish a contract that will enable [INSERT NAME HERE] to obtain Electronics Recycling Services.
_____

SUBMIT BIDS ON OR BEFORE: *[INSERT DATE HERE],* 12PM EDT

QUESTIONS: Must be submitted electronically to *[INSERT CONTACT PERSON AND EMAIL ADDRESS]* no later than *[INSERT DATE HERE]*

RESPONSES: Responses to the questions will be posted on the *[INSERT NAME HERE]* website on or before *[INSERT DATE HERE]*

DATE OF AWARD: *[INSERT DATE HERE]*

CONTRACT TERM: *[INSERT DATES HERE]*

BID ADDRESS:

> Address 1
>
> Address 2
>
> City, State, Zip

RFP CONTACT: [*INSERT CONTACT PERSON'S NAME, EMAIL AND PHONE*]

1. **DESCRIPTION OF COUNTY/AREA:**
   This is a good section to summarize the county/area that the program will be serving – what the population is, what counties surround it, what metropolitan cities are in or around it. This is also a good place to reference any kind of Solid Waste Plan the county/area operates under and link to the county's website.

2. **DESCRIPTION OF RECYCLING CENTER/TRANSFER STATION/ETC:**
   This is the section where you would provide information about the location where electronics are being collected and where they would need to be picked up. You should include an address, hours of operation, contact information for manager overseeing the site, and any other pertinent background information, such as what other recyclables may be collected there, whether there is a loading dock and if fees are typically charged.

3. **PROJECT BACKGROUND:**
   ### A. MINNESOTA ELECTRONICS RECYCLING LAW
   Qualified respondents should be familiar with the requirements of Minnesota's Video Display and Electronic Device Collection and Recycling Act found at Minn. Stat. §§115A.1310 to 115A. The Minnesota law requires manufacturers of video display devices (VDD) to share financial responsibility for the collection and recycling of covered electronic devices (CEDs) from households. CEDs include "video display devices" (VDDs), computers, peripherals (includes keyboard, printer, or any other device sold exclusively for external use with a computer that provides input or output into or from a computer), facsimile machines (FAX), DVD players, and video cassette recorders (VCRs). The definition of Video display devices (VDD) is a television or computer monitor greater than 9 inches when measured diagonally.

   ### B. PROJECT DESCRIPTION
   Items to include in this section are:
   1) What types of electronics are being collected - business, or residential only? A sample list of items collected should be included and might look like: answering machines, camcorders, compact disc players, copiers, cell phones, duplicators, DVD players, electronic typewriters, fax machines, gaming consoles, hard drives, laptops, mobile phones, modems, pagers, personal computers (including CPUs, monitors, keyboards, mice and other peripherals), printers, printed circuit boards, radios, remote controls, stereos, tape players, telephones, telephone equipment, televisions, transparency makers, uninterruptible power supplies, VCR's, word processors and other similar electronic items.
   2) Is there an item limit?
   3) What kind of program you'll be running – permanent collection location, collection events, curb-side pickup, or a combination of the above?
   4) What items the successful bidder will need to provide – Gaylord boxes, shrink wrap, pallets, etc.
   5) What is your role as contract administrator? Sample language for this section might be "The County is a registered collector of covered electronic devices in Minnesota. The Act encourages public entities, like us, to work with electronics manufacturers to assist them in meeting their recycling obligations under the law. The County is in search of a qualified electronics recycler to pick up collected electronics at our site on an as-needed basis and according to the guidelines set forth in this document. Successful bidder must provide evidence of the ability to degauss, destroy or otherwise handle sensitive information stored on hard drives of all collected equipment, and provide documentation of the weight of covered electronic devices recycled to manufacturers."
   6) What has been collected historically? What kind of community education plan and/or advertising campaign has been executed in the past? Provide historical collection weights, for information only. These can be provided in grid format, like below, or in paragraph form. When possible, providing a breakdown by product type collected in the past can also be helpful.

Year of Collection	Pounds Collected – Site	Pounds Collected - Event	Total
2011	250,000	100,000	350,000
2010	180,000	60,000	240,000
2009	150,000	40,000	190,000

4. SCOPE OF SERVICES:

The contractor shall provide for the pickup, transportation, and recycling of electronic devices collected by *[INSERT NAME HERE]* as part of its household electronics collection program and provide event staffing, management, supplies, transportation, and recycling services for _____ **[INSERT NUMBER OF EVENTS HERE]** community electronics collection events held at the **[INSERT LOCATION(S) HERE].**

5. GENERAL CONTRACT TERMS & CONDITIONS

The term of the contract to be awarded under this RFP will be from [*INSERT DATE HERE*] to [*INSERT DATE HERE*]. [*INSERT NAME HERE*] will prepare a contract with the selected contractor. [*INSERT NAME HERE*] will require the selected contractor to include the contents of this RFP and all representations and commitments in the contractor's proposal as contractual obligations. Other contractual obligations will include, but are not limited to:

A. The contractor must adhere to Minn. Stat. § 115A.1318, Subd. 2.
B. The contractor must be in the business of providing electronic recycling and electronic handling
C. The contractor must be knowledgeable of all applicable laws, rules and regulations
D. The contractor must be registered in the State of Minnesota[29] as a recycler and processor (registration due annually on July 15th).
E. The contractor must maintain records which reflect all revenues, costs incurred, and services provided in the performance of the contract. The contractor agrees that [*INSERT NAME HERE*] or any of their duly authorized representatives shall have access to and the right to examine, audit, excerpt, and transcribe any records and accounting procedures and practices of the contractor which are relevant to the contract. Said records must be maintained for six years after the date of the completion of the contract.
F. Prior to commencement of the contract term, the contractor shall procure and maintain in full force and effect during the term of the contract insurance coverage for injuries to persons or damage to property which may arise from or in connection with the performance of work hereunder by the contractor, its agents, representative, employees or subcontractors. The insurance coverage shall satisfy the requirements set forth in this RFP. Certificates of insurance showing the required coverage above shall be provided to the County prior to the effective date of the contract. All such policies shall provide that they shall not be canceled, materially changed, or not renewed without thirty days prior notice thereof to the County.
G. Contractor shall not enter into any subcontract for performance of any services contemplated under the contract nor assign any interest in the contract without written approval of the County and subject to such conditions and provisions as the County may deem necessary. The contractor shall be responsible for the performance of all subcontractors.
H. The contractor will agree to abide by the Standard Assurances set forth in Appendix D.
I. The contractor shall agree to indemnify and save the County, including its elected officials, officers, employees and agents, harmless from any and all claims, demands, damages, actions or causes of action arising against the County by reason of any act, omission, neglect or misconduct by the contractor.

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[29] http://www.pca.state.mn.us/index.php/topics/preventing-waste-and-pollution/product-stewardship/initiatives-in-minnesota/electronics/minnesota-electronics-recycling-act/registration.html

J.   The contractor must not maintain outdoor piles of dismantled equipment or parts, unless secondary containment is provided to prevent dust or runoff to drains.

K.   The contractor must not use burning or incineration as recycling for the purposes of this contract.

L.   The contractor shall designate where electronic items will go for reuse, demanufacturing, recycling, or disposal. [Note: Only CEDs from households that are recycled can be counted towards "program pounds" as required by the Minnesota law.] The list shall include all designated facilities that are involved in the handling and processing of the equipment. The list shall include each sub-contractor, broker, recycler, processor and transporter used in fulfilling this contract, and for each, shall provide a contact person, phone number, site address, and EPA ID number, if applicable. Bidders unable to provide a list, at the time of bid, of designated facilities will be disqualified.

M.   The contractor must indicate which manufacturer is purchasing the CEDs, if any, will exist during the implementation of this contract.

N.   The contractor will not terminate this contract based upon pound limits.

O.   The contractor must be currently operating out of a commercial facility. The contractor must allow the County or its agent the right to inspect the facility without prior notice during normal business hours. Facilities shall be available between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday (excluding holidays).

P.   Contractors with one or more of the following certifications will score higher in their evaluation:
- Implementation of an ISO 14001-certified Environmental Management System
- BAN e-Stewards Certification[30]
- R2 Certification[31]

Q.   The contractor must not use prison labor to recycle video display devices

R.   The contractor must carry a minimum of the following coverage and be able to name the [INSERT NAME] as Additional Insured at the time of contract award:
1) Workers' compensation insurance;
2) Commercial general liability insurance in the amount of $1,000,000;
3) Automobile liability in the amount of $500,000;
4) Pollution liability (gradual, sudden, or accidental) in the amount of $1,000,000;
5) Environmental impairment liability in the amount of $1,000,000;
6) Must not be defaulted on Unemployment or Worker's Compensation Premiums.

S.   The contractor must assure and demonstrate adequate financial assurance for closure and clean-up of any recycling operations under this program.

T.   The local government requires a performance bond in the case of the Contractor's failure to perform contracted services. The performance bond shall be for a minimum of $30,000. The responsibility for renewal is the responsibility of the Contractor.

U.   The contractor shall provide an invoice/payment, proof of certification and destruction of data, and pounds data (broken out by product type) within 30 days of pickup.

V.   The contractor shall indicate their ability to degauss, destroy or otherwise handle sensitive information stored on cell phones, hard drives, etc. of all collected equipment

W.   Contractor shall comply with all applicable Federal, State, and Local regulations.

6. **PAYMENTS**
[*INSERT NAME HERE*] will administer the contract. The contact person at [*INSERT NAME HERE*] is as follows:
Name
Address 1
Address 2
Phone
Email

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[30] http://www.e-stewards.org/esteward_certification.html
[31] http://www.r2solutions.org/

7. **BID FORMAT**
   The format of all bids must conform to the following arrangement of data on 8-1/2" x 11" paper.
   A. Cover Letter – Including name of firm, address, telephone number, contact person(s),
   B. Company organization – Identify team members and their areas of responsibility
   C. Qualifications and Experience – Indicate how you've previously provided services similar to those required in this RFP. Provide a write-up on the company background, services provided, and explanation of any certifications and environmental management standards held. Include information on the company's electronics recycling process (shredding vs. demanufacturing), and how CRT glass is handled.
   D. Subcontractors - Provide all downstream subcontractor names, addresses, contact persons, and telephone numbers. Describe your previous experience working with each subcontractor. For the purposes of this proposal, prior experience with all subcontractors is required to ensure that no major problems will occur to delay progress of the project. [*INSERT NAME HERE*] reserves the right to reject any subcontractor who does not meet the requirements of this RFP.
   E. Conflict of Interest - The proposer must identify any potential conflict of interest it may have providing the services contained herein.
   F. Electronics Management Plan – A description of the proposed management steps for the [*INSERT NAME HERE*] program. The Management Plan must include the following:
      1) Clearly define the transportation, storage, processing, recycling, reuse, end markets, treatment, and disposal methods proposed for each electronic and component and its process residuals. [INSERT NAME HERE] prefers that recycling techniques be used to the fullest extent possible. Describe company's landfill policy. Incineration shall not be permitted for the purposes of this contract.
      2) Include a description of how the contractor will ensure strict compliance with all applicable local, state, federal and international regulations for electronic waste management including, but not limited to, transportation, safety and environmental regulations.
      3) Include a description of how net weight will be calculated
      4) Include a description of the contractor's employee health and safety program(s)
      5) Include a description of the contractor's data wiping/sanitization process
      6) Include a description of how collection events will be handled – this should discuss labor, stacking, wrapping, loading, and logistics. Please indicate whether company employees will be used, or temporary labor.
      7) Include a sample certificate of destruction and sample report with pounds by product type.
   G. References – See Appendix B
   H. Pricing – The contractor shall provide pricing on Appendix B for all equipment, tools, materials, labor charges, transportation, fuel charges and any other charges anticipated under this contract.
   I. Signature Page – See Appendix D

Submission of bids via e-mail is preferred. If submitting via email, please send all elements of the bid along with a scanned signature form included to [*INSERT EMAIL ADDRESS HERE*]. Bids may be submitted hard copy but must be received at the address on page one of this RFP no later than the closing date of [INSERT DATE HERE]. (If sealed bids are the method preferred, please indicate that here.)

8. **EVALATION/SCORING**
After it has been deemed that the proposal meets all the requirements stated above, the proposals will be evaluated on the following criteria. The points noted is the maximum number of points that can be received for those criteria. The proposal receiving the most total points that meets all the conditions of this RFP will be awarded the contract.
   A) Pricing structure **(20 points)**
   B) Environmental Certification or Commitment: ISO 14000, ISRI RIOS Certification, e-Stewards Certification, Responsible Recycling (R2) Practices Certification **(20 points)**
   C) Responses to "Bid Format" **(20 points)**
   D) Proper Insurance Requirements **(10 points)**

E) References **(10 points)**
F) Qualifications and Experience **(15 points)**
G) Minority/Women (M/W) Owned Business **(5 points)**

9. **CONDITIONS**
   A) [*INSERT NAME HERE*] reserves the right to consider any additional information gathered by [*INSERT NAME HERE*] or submitted by the proposer to evaluate the submitted proposal.
   B) This RFP does not commit [*INSERT NAME HERE*] to contract with any Proposer.
   C) This RFP is not intended and should not be construed to commit [*INSERT NAME HERE*] to procure or to contract for any services.
   D) All costs incurred in connection with responding to this RFP will be borne by the Proposer.
   E) [*INSERT NAME HERE*] reserves the right to reject any and all proposals and any responses and to eliminate any and all Proposers responding to this RFP from further consideration.
   F) Best price will not be the sole determining factor in awarding a contract. [*INSERT NAME HERE*] may award the contract to the proposer whose proposal represents the best value, as determined by the evaluation criteria above.
   G) The NCER reserves the right, without prior notice, to supplement, amend, or otherwise modify this RFP or otherwise require additional information. All updates will be posted at [*INSERT WEB ADDRESS HERE*]
   H) [*INSERT NAME HERE*] reserves the right to limit or expand the services when negotiating the contract for services.
   I) All responses become the property of [*INSERT NAME HERE*] and will not be returned.
   J) All responses will be considered TRADE SECRET and will *not* be made available to the public.

References

BIDDER NAME _____

BIDDER ADDRESS_____

BIDDER CITY, STATE, ZIP_____

BIDDER CONTACT PERSON_____ **BIDDER PHONE**_____

EMAIL_____

List the names and addresses of four (4) customers for whom the bidder is currently or has performed electronics recycling. Include event or contract dates, contact persons and telephone numbers. Should any reference submitted by a bidder be found unsatisfactory, [*INSERT NAME HERE*] may reject that bidder's submission. [*INSERT NAME HERE*] shall be the sole judge in determining a satisfactory/unsatisfactory reference response. **References** must be submitted with bid response.

REFERENCE #1

BIDDER NAME _____

BIDDER ADDRESS_____

BIDDER CITY, STATE, ZIP_____

BIDDER CONTACT PERSON_____ **BIDDER PHONE**_____

EMAIL_____

DATES OF SERVICE_____

REFERENCE #2

BIDDER NAME _____

BIDDER ADDRESS_____

BIDDER CITY, STATE, ZIP_____

BIDDER CONTACT PERSON_____ **BIDDER PHONE**_____

EMAIL_____

DATES OF SERVICE_____

REFERENCE #3

BIDDER NAME _____

BIDDER ADDRESS_____

BIDDER CITY, STATE, ZIP_____

BIDDER CONTACT PERSON_____ **BIDDER PHONE**_____

EMAIL_____

DATES OF SERVICE_____

REFERENCE #4

BIDDER NAME _____

BIDDER ADDRESS_____

BIDDER CITY, STATE, ZIP_____

BIDDER CONTACT PERSON_____ **BIDDER PHONE**_____

EMAIL_____

DATES OF SERVICE_____

Pricing

Recycling:

CRTs (Monitors & TVs) $_____/ net pound

Laptops $_____/net pound

Desktop Computer/CPU $_____/net pound

Non CRT Displays (Flat screen TVs, etc.) $_____/net pound

Other Electronic Equipment* $_____/net pound
*(*Including Answering machines, Camcorders, Compact disc players, Copiers, Duplicators, Electric typewriters, Fax machines, Hard drives, Laptops, Mobile phones, Modems, Pagers, keyboards, mouse, and miscellaneous peripherals, Printers, Printed circuit boards, Radios, Remote controls, Stereos, Tape players, Telephones and telephone equipment, VCR's, Word Processors)*

Please indicate here what miscellaneous items, if any, (such as batteries, air conditioners, microwaves, satellite equipment and white box goods such as refrigerators, washers, etc.) will be accepted by your company, and if so, what fees will be charged for those (you may attach a separate sheet if necessary):

_____

Transportation:
Price per mile to transport goods $_____/mile

Minimum Charge per trip (if applicable) $_____

Other_____ $_____

Please indicate address of the recycling facility to where goods would be transported:

_____

Supplies:
Gaylords, pallets, shrink wrap $_____

Collection Event Pricing:
Collection Event Staffing $_____

Supplies $_____

Equipment $_____

Other $_____

Miscellaneous:
Any other fees, please indicate here $_____ _____

                                                                     $_____ _____

Signature Form

By signing this Bid, the Bidder understands and agrees to the attached Terms, Conditions, and Specifications. Further, by submitting this Bid, the Bidder certifies that his/her firm is not barred from doing business as a result of debarment proceedings.

STATE FIRM'S FULL LEGAL NAME_____

SIGNATURE_____

(Scanned signatures permitted.)

NAME_____

(Please type name of contact person for contract.)

INCORPORATED IN THE STATE OF_____

APPENDIX B

Selected Minnesota Case Studies

The following case study descriptions from Minnesota programs were compiled by the consultant team and MPCA staff from readily available information. Some of the case study descriptions contained in this Appendix are derived from the *"2011 Evaluation Report on the Minnesota Electronics Recycling Act"*[32] as produced and released by MPCA in December 2011.

Carver County

Carver County operates the "*County Environmental Center"* for year-round drop-off in Chaska where county residents can recycle electronics. Residents bringing in televisions and monitors are charged $5, but other e-waste items are accepted at "no charge". For more information on the County's e-waste program and resident recycling services, see the County's web page at the *Carver County Environmental Center*[33].

Carver County has collected about 500,000 pounds per year of e-waste. In 2010, it cost the county approximately $73,000 (or about $0.15 per pound) to pay for the recycling through its contract with *Dynamic Recycling*[34] and the transportation. This cost estimate does not include the additional costs for County staff labor, nor the capital, operating and maintenance costs of the facility. From 2009 to 2010, Dynamic Recycling decreased the amount sold to manufacturers from 100% to 78%. The current County contract with Dynamic calls for the County to receive 85% of the revenue from the sale of any CEDs to manufacturers.

The $0.25 per pound credit paid by Dynamic to the County for computers and laptops is the highest price from the selected case studies reported in this *Guidebook,* as with Washington County noted below. Other charges for monitors and TVs are just below the median for these items. See Exhibit G in the *Guidebook* for the details of the County's price schedule with Dynamic.

MPCA staff estimate that in 2010 Carver County recovered about 40% from manufacturers, 39% was recovered from the residents' recycling fees and 21% was not recovered. This % "not recovered" is one measure used by MPCA to estimate the relative share or subsidy by local units of government.

Dakota County

Dakota County's "*Recycling Zone"* is a year-round drop-off in Eagan where county residents can recycle electronics at no charge. For more information on the County's e-waste recycling services to County residents, see their web page at *The Recycling Zone*[35]*.*

In 2010, Dakota County collected 1.4 million pounds. MPCA reports that the County paid approximately $300,000 (or about $0.21 per pound) to pay for the recycling services, plus transportation. This cost estimate does not include the additional costs for County staff labor, other contract labor (e.g., Gopher Resource Corporation), nor the facility costs. The County was able to recover 12% of those costs from the manufacturers with 88% not recovered.

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[32] http://www.pca.state.mn.us/index.php/view-document.html?gid=17092
[33] http://www.co.carver.mn.us/departments/LWS/env-svc/envirocenter.asp
[34] http://dynamicrecycling.com/
[35] http://www.co.dakota.mn.us/Environment/RecyclingZone/Residents/Pages/materials-accepted.aspx

The County recently released an RFP that ultimately resulted in the current contract with *Vintage Tech Recyclers*[36]. (To view and/or download the Dakota County RFP, visit the MPCA website at http://www.pca.state.mn.us/index.php/living-green/living-green-citizen/reduce-reuse-recycle/e-waste-electronic-trash.html. The RFP requested proposals from qualified vendors for e-waste recycling services as collected from the following sources:

- Residential electronics dropped off at *The Recycling Zone;*
- Business electronics dropped off at *The Recycling Zone; and*
- Materials from special event collections.

Dakota County does not own the building at *The Recycling Zone*, but rather contracts with the private company owner, *Gopher Resource Corporation,*[37] for the operations and management of the site in Eagan. Dakota County oversees operations at *The Recycling Zone* and manages the terms of the County's separate e-waste recycling contract with Vintage.

The County gets paid by Vintage $0.02 per pound for monitors and televisions, and $0.20 per pound for Computers by their Contractor. The County must pay the cost of transport at $0.30 per mile. The County also pays $8.50 per Gaylord box and $4 per pallet. See Exhibit G in the *Guidebook* for the details of the County's price schedule with Vintage Tech. The Contractor also charges the County for electronics collected from collection events held by the County. Dakota County's contract term with Vintage Tech is January 1, 2012 to December 31, 2014.

Other notable features of the County's RFP and contract with Vintage include:

- A termination clause allowing the county out of the contract due to lack of funding.
- Sections on "County Rights", "Contract Award" and "Public Records/Confidentiality" that may be particularly useful to other communities drafting RFPs and e-waste contracts.
- Insurance requirements:
  - Worker's compensation insurance at no less than $500,000
  - General liability insurance at $1,500,000 per occurrence.
  - Professional Liability insurance of at least $1,500,000 per occurrence.
  - Automobile liability insurance in the amount of $1,500,000 per accident.
  - The County, its officers, employees, and agents must be listed as "Additional Insureds" in the contractor's insurance policies.

Dakota County's system for evaluation in its RFP did not contain an explicit point or weighting system. Instead, the County reserved the right to pick their recycler based on the information submitted in the proposals, but also through additional information gathered by the county. The County's RFP indicated that lowest cost is not the sole determining factor in the contract award. Rather, the County reserved its rights to award the contract to the vendor whose proposal represented the best value to the County and its residents based on the following evaluation criteria:

- Completeness of cover letter requirements and proposal.
- Vendor qualifications.
- Completeness and acceptability of the proposed "Electronics Management Plan" as required by the specifications in the County's RFP.
- Acceptability of vendors' health and safety program.
- Proposed transportation, management, and disposal practices.
- Proposed waste tracking and reporting.
- Proposed fees and expenses, including any manufacturers' rebates or credits.
- Any other factors deemed relevant by the County.

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[36] http://www.vintagetechrecyclers.com/
[37] http://www.gopherresource.com/recyclingzone.asp

Hennepin County

Hennepin County collects an average of about 5.8 million pounds of household CEDs annually from the following collection methods:

- Two (2), year-round drop-off facilities located at Bloomington and Brooklyn Park.
- Minneapolis curbside collections.
- Other cities' cleanup/recycling days.
- Special event collections.

The consumer electronics program is one component of the County's comprehensive, integrated solid waste system. The overall system is financed in part through solid waste tipping fees at the County's mixed MSW facilities and County-required environmental fees as charged through hauler fees. Residents do not pay additional fees when dropping off consumer electronics at county sites. For more information about e-waste recycling for Hennepin County residents, visit the County's *Electronics*[38] web page within their *A-Z How to Get Rid of It* guide and their *Household Hazardous Waste and Problem Materials Guide*[39] fact sheet.

In 2009 and 2010, MPCA estimates that it cost the County an average of $1 million per year (about $0.17 per pound) to

recycle CEDs, not including hauling, labor and facility costs. Since 2009, Hennepin's recycling contractor, *MPC*,[40] has increased the proportion of pounds sold to manufacturers from 51% to 87% of the total. This means the County's contractor was able to increase the proportion of recycling costs recovered from manufacturers from 36% to 68%. In 2010 the amount of CED processing costs not recovered through the program was 32%.

Hennepin County also collects an average of 725,000 pounds per year of other types of consumer electronics which are not CEDs as defined by the law. The county assumes the full cost of recycling for these other items such as commercial e-waste and other non-CEDs. The County has reported to MPCA that this is an average of $145,000 per year (about $0.20 per pound).

The County recently released an RFP that resulted in a new contract with MPC. (To view and/or download the Hennepin County contract with MPC, visit the MPCA website at: http://www.pca.state.mn.us/index.php/living-green/living-green-citizen/reduce-reuse-recycle/e-waste-electronic-trash.html. MPC (formerly known as Materials Processing Corporation) is located in Mendota Heights, MN. The County's current contract with MPC expires on June 30, 2014.

The e-waste recycling price formula in the County – MPC contract are unique. MPC charges the County a flat based fee of $0.03 per pound plus a revenue sharing fee that floats with the markets for various scrap commodities. If the commodity prices are overall positive, the $0.03 per pound can be reduced or even result in a net payment back to the County depending on the markets for that particular month. However, in practice this rarely happens (two instances since 2008). When scrap markets are low, the County has been charged more than $0.20 per pound. See Exhibit G in the *Guidebook* for the details of the County's price schedule with MPC.

In addition, the County also gets a rebate of 85% of their contractor's credits for CEDs sold by MPC to manufacturers. The manufacturers rebate is now also credited on a monthly basis. (Up through July 2012, the County's manufacturers' credit was applied at the end of each year.)

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[38] http://www.hennepinatoz.org/azguide/item/18;jsessionid=D71C991294B6339648DCDE758318089E
[39] http://www.hennepin.us/files/HennepinUS/Environmental%20Services/HHW/HHW%20information/Household%20Hazardous%20Waste%20Guide-102009.pdf
[40] http://www.mpc-e.com/

The county also pays $185 for roll-off or semi mobilization (round trip) and $370 for tandem roll-off mobilization (round trip).

Other notable features of the County's RFP and contract with MPC include:

- CEDs are NOT separated by type.
- The City of Brooklyn Park was written into the contract as being able to use MPC under the same terms as Hennepin County.

Washington County

Washington County has an *Environmental Center* for year-round drop-off in Woodbury where county residents can recycle electronics at no charge. For more information about electronics recycling for Washington County residents, see the County's *Environmental Center*[41] web page and the County's *Environmental Center*[42] fact sheet.

In 2010, Washington County collected over 1.5 million pounds of e-waste items. The County contracts directly with Dynamic Recycling for its e-waste recycling services.

In 2010, according to reports submitted by the County to MPCA, it cost the County about $230,091 (or about $0.15 per pound) to manage the recycling and transportation of its e-waste. This cost estimate does not including additional costs for neither labor nor the capital, operating and maintenance costs of the *Environmental Center*. In 2010 the amount of CED processing costs not recovered through the program was about 67%.

The $0.25 per pound credit paid by Dynamic to the County for computers and laptops is the highest price from the selected case studies reported in this *Guidebook*. Other charges for monitors and TVs are just below the median for these items. See Exhibit G in the *Guidebook* for the details of the County's price schedule with Dynamic.

Becker County

Becker County has a transfer station just north of Detroit Lakes with a covered container for recycling electronics, therefore reducing the facility costs that many counties have. This site accepts all electronics, but charges $5 for TVs and monitors. For more information, see the Becker County *Transfer Station & Demolition Landfill*[43] web page and the *Environmental Services (Transfer Station disposal fees)*[44] fact sheet

In 2010, Becker County collected 178,000 pounds of e-waste according to reports submitted to MPCA. This was a significant increase compared to 2009. In 2010, MPCA estimated that the County's recycling and transportation costs were $26,289 (or about $0.15 per pound), not including County labor costs. In 2010, the portion of these cost not recovered was about 45%.

Cass, Crow Wing, and Hubbard Counties

Three counties in Greater Minnesota partnered to release a joint RFP[45] under a collaborative purchasing arrangement known as the "Coalition Partners" for purposes of the e-waste RFP project. The Counties of Cass, Crow Wing and Hubbard,

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[41] http://www.co.washington.mn.us/index.aspx?NID=604
[42] http://www.co.washington.mn.us/DocumentCenter/View/626
[43] http://www.co.becker.mn.us/dept/environmental_services/transfer_station.aspx
[44] http://www.co.becker.mn.us/dept/environmental_services/forms/Landfill_Price_Sheet.pdf
[45] http://www.co.cass.mn.us/rfps/rfp_e_waste.pdf

together with the Leech Lake Bank of Ojibwa, released an RFP in June 2012 and awarded their e-waste recycling contracts to MPC. Each organization executed their own individual contracts with MPC, but the terms, conditions and prices were the same. Individual contracts were required because the there is no formal joint powers agreement between the entities. This is the second generation of this e-waste recycling consortium and was coordinated by Cass County. the three Counties and the Leech Lake Band received a grant from MPCA to develop the cooperative e-waste recycling purchasing arrangement. To view and/or download the RFP, visit the MPCA *Guidebook* web page (http://www.pca.state.mn.us/electronics/guidebook).

Each county and the Leech Lake Band have their own e-waste collection system. In Cass County, residents may recycle e-waste items at no charge at three County operated transfer sites: Pine River Transfer Station, Walker-Hackensack, and May Township. Cass County residents may also bring e-waste to the Slagle transfer site for a fee and to the Leech Lake Band of Ojibwe transfer site at Cass Lake, where a fee may be required for non-band members. For more information on e-waste recycling for Cass County residents, see the County Environmental Services Department's *Household Hazardous Waste*[46] web page and the *Solid Waste & Recycling*[47] fact sheet.

Crow Wing County has a year-round storage facility at the County sanitary landfill facility complex. The County charges a flat fee of $5 per e-waste item for recycling services. For more information on e-waste recycling for Crow Wing County residents, see the County Environmental Services Department, Solid Waste Program's *Sanitary Landfill*[48]*, Problem Materials*[49] and *Fee Schedule*[50] web pages.

The goals of the "Coalition Partners" joining forces likely included:

- Saving on administrative costs by doing one RFP instead of four and thereby avoiding duplication of effort.
- Pooling supply of e-waste materials to gain more market leverage and thereby hopefully reducing prices of e-waste recycling services.
- Pooling staff resources to provide a higher quality RFP product and reviews of proposals submitted.

According to reports submitted by Crow Wing County to MPCA, the County collects about 285,000 pounds per year. In 2010 (before the new contract with MPC), the County paid about $31,252 (or about $0.11) to manage the recycling, transportation, labor **and** facility costs. About 94% of this was recovered through the $5 recycling fee and about 6% was not recovered. Also prior to the RFP and the new contract with MPC, in 2011 the County was able to get their previous contractor to take all the TV's and monitors for free which resulted in a significant cost savings to the County.

Hubbard County and the Hubbard County Developmental Achievement Center (DAC) in Park Rapids were operating under a contract for electronic waste recycling through December 31 of 2012. *Minnesota Computer Recycling*[51] an independent web site that lists three sites in Hubbard County: Hubbard Co. North Transfer Station in Laporte; Tri-Star Recycling, Inc. in Laporte, and Hubbard County Recycling & Transfer Station in Park Rapids. The Coalition Partners' RFP stated that the Hubbard County DAC may enter into the agreement and under the same terms, with the Contractor contracted by Cass and Crow Wing Counties.

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[46] http://www.co.cass.mn.us/esd/solid_waste/hazardous_waste.html
[47] http://www.co.cass.mn.us/esd/solid_waste/pdfs/solidwasterecycling.pdf
[48] http://www.co.crow-wing.mn.us/index.aspx?NID=227
[49] http://www.co.crow-wing.mn.us/index.aspx?NID=739
[50] http://www.co.crow-wing.mn.us/index.aspx?NID=727
[51] http://www.minnesotacomputerrecycling.com/hubbard-county

Olmsted County

Olmsted County owns and operates the County *Recycling Center Plus*[52] in Rochester, MN where residents can bring in e-waste for a charge (about $0.30 per pound in 2009). For more information on e-waste recycling for Olmsted County residents, see the County's *Electronics*[53] web page and the County's *Solid Waste Management Fee and Service Charge Schedule*[54] as of (effective May 1, 2009).

Olmsted County originally had its own individual contract for e-waste recycling services. More recently, the County elected to go with the State contract via the State Cooperative Purchasing Venture (CPV) program. The County felt that the State contract provided additional scrutiny of potential contractors and additional protection from legal liability for any improper management of e-waste collected by the County. For example, the County did not want their electronic scrap ending up being exported or otherwise mishandled.

St. Louis County

St. Louis County has ten collection sites for waste electronics. The County's Electronic Waste web page states that selected brands of electronics (Toshiba, Panasonic, Vizio, Mitsubishi and Sharp) are accepted free of charge. For other brands, the County charges $1 per item for small CRTs (screens up to 19 inches) and $2 for larger CRTs. For more information about e-waste recycling for St. Louis County residents, see the County *Electronic Waste*[55] web page.

According to reports submitted by St. Louis County to MPCA, the County collects almost 600,000 pounds per year of e-waste. In 2010 it cost the county $31,805 (or about $0.05 per pound) to manage the labor and facility costs. In 2011, St. Louis County contracted with an e-waste recycling vendor, *Universal Recycling Technologies*[56]. MPCA reported that there is no recycling or transportation cost to the County.

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[52] http://www.co.olmsted.mn.us/environmentalresources/garbagerecycling/Pages/RecyclingCenterPlus.aspx
[53] http://www.co.olmsted.mn.us/environmentalresources/garbagerecycling/disposaloptions/Pages/Electronics.aspx
[54] http://www.co.olmsted.mn.us/environmentalresources/garbagerecycling/disposaloptions/Documents/SW_Fee_Schedule_Current.pdf
[55] http://www.stlouiscountymn.gov/LANDPROPERTY/GarbageRecycling/EWastes.aspx
[56] http://www.universalrecyclers.com/

APPENDIX C

Case Studies from Other States

The following case study descriptions from other nearby states were compiled by the consultant team from readily available information and interviews.

Summary of E-Waste Recycling in Wisconsin

Before the Wisconsin electronics recycling law passed in 2009, many local governments had already set up residential e-waste collection programs. While many of these programs charged consumers a fee for taking the electronics, most of them were primarily funded by taxpayers. Three years into the State's new e-waste recycling program known as *E-Cycle Wisconsin*,[57] local governments are still a critical part of the collection infrastructure, especially in rural areas. However, many have been able to reduce their costs substantially or hold them steady despite a dramatic increase in the amount and types of electronics they are collecting. They have been able to accomplish this through collaboration efforts. Several groups of local governments have partnered on recycling contracts to negotiate better deals with recyclers.

Western Wisconsin Recycles Everywhere Consortium (Wisconsin)

The Western Wisconsin Recycles Everywhere e-waste consortium encompasses six Wisconsin counties – Dunn, Eau Claire, Pepin, Pierce, Polk and St. Croix. This program was initially coordinated by St. Croix and Dunn County staff and resulted in an enabling e-waste recycling contract with MPC, but is operated as six independent programs. There are multiple e-waste collection sites throughout the five counties and each county has authority to use the MPC contract as needed for their individual situation. Each of the collection programs is unique as described below.

In Dunn County, as of January 1, 2011, all electronics from households and K-12 public schools can be recycled for free with the Dunn County Solid Waste Division. However, there are fees charged for businesses, non-profits and other organizations. For persons required to pay a fee for the recycling of electronics, it is preferred that the items be brought to the Dunn County Transfer Station in Menomonie. There are a total of eight drop-off sites that residents can use for e-waste:

- Dunn County Transfer Station in Menomonie, WI,
- Elk Mound Area Collection Station in Elk Mound, WI,
- Boyceville Area Collection Station in Boyceville, WI,
- Ridgeland Area Collection Station in Ridgeland, WI,
- Colfax Area Collection Station in Colfax, WI,
- Rock Creek Area Collection Station in Rock Creek, WI,
- Downsville Area Collection Station in Downsville, WI and
- Connorsville Area Collection Station in Connorsville, WI.

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[57] http://dnr.wi.gov/topic/Ecycle/wisconsin.html

For more information about e-waste recycling for Dunn County residents, see the county's *Electronic Recycling*[58] and *County Area Collection Locations*[59] web pages. For e-waste recycling rates for business see the *Electronics Recycling: Fees for Businesses, Non-Profits and Other Organizations*[60] fact sheet.

Eau Claire County does not collect e-waste from residents nor does it sponsor collection events. The County encourages residents to take electronics to a private e-waste recycling company. The County's webpage, How & Where to Recycle Specific Materials / Computers, Televisions, and Other Electronic Devices [61], has recycling options listed there.

Pepin County has two collections sites at:

- Town of Waubeek Site in Durand, WI; and
- Town of Pepin Collection Site in Pepin, WI.

Pepin County offers electronics recycling at no charge. For more information, see the County's *Recycling/Solid Waste Program*[62] web page and the *Pepin County Recycling / Solid Waste Program*[63] fact sheet (including the county's list of e-waste items collected).

Pierce County offers e-waste recycling services at the County Solid Waste Department/Recycling Center[64] in Ellsworth, WI. For more information, see their web page.

Polk County offers e-waste recycling services for a charge for most larger items at the County Recycling Center in St. Croix Falls, WI. For more information, see the *Polk County Recycling: Items and Fees*[65] web page.

St. Croix County offers a series of private e-waste recycling opportunities to residents. The county's web page, *Electronic Recycling in St. Croix County*,[66] states:

"In January 2010, a new state law took effect requiring manufacturers assume primary responsibility for the collection and recycling of most electronics from Wisconsin households and schools. As a result, six local businesses will offer permanent, year-round e-waste collections and special one-day collections in and around St. Croix County for a fee. This increase in alternative collection options makes county-sponsored electronics collections unnecessary. These permanent e-waste collection sites include:

- *Habitat for Humanity ReStore in New Richmond, WI …..*
- *St Croix Electric Co-op*[67] *in Hammond, WI …..*
- *Best Buy*[68] *in Woodbury, MN …..*

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[58] http://www.dunncountywi.govoffice2.com/index.asp?Type=B_BASIC&SEC=%7bC9BD00A6-48C8-483F-A08F-2ACE685D0117%7d&DE=%7b4C1AB196-2081-4776-AC82-4D589C7A8FCF%7d

[59] http://www.dunncountywi.govoffice2.com/index.asp?Type=B_BASIC&SEC=%7bC9BD00A6-48C8-483F-A08F-2ACE685D0117%7d&DE=%7bCE2A9F88-F8F9-49C4-BA7D-11BE6304D439%7d

[60] http://www.dunncountywi.govoffice2.com/vertical/Sites/%7B8D65D186-760D-414B-890C-7C4376A23107%7D/uploads/Electronic_Recycling_Fees_for_2012.pdf

[61] http://www.co.eau-claire.wi.us/health_and_environment/Recycle/computers_televisions_other_electronic_scrap.htm

[62] http://www.co.pepin.wi.us/cogovt/recycle.php

[63] http://www.co.pepin.wi.us/PDF/recycleataglance.pdf

[64] http://www.co.pierce.wi.us/Solid%20Waste/Solid_Waste_Main.html

[65] http://www.co.polk.wi.us/recycling/itemsandfees.asp

[66] http://www.co.saint-croix.wi.us/index.asp?Type=B_BASIC&SEC=%7B80993CC4-10EE-41D4-B69D-C1E65F4C2B54%7D

[67] http://scecnet.net/pdfs/enviro-clean.pdf

[68] http://www.bestbuy.com/site/null/Recycling-Electronics/pcmcat149900050025.c?id=pcmcat149900050025&DCMP=rdr0001422

- *Veolia Transfer Station in Roberts, WI …..*
- *JR's Advanced Recyclers[69] in Inver Grove Heights, MN …..*
- *E-cycling St Croix Valley[70] in Hudson, WI …..*

"Do not throw these items in the trash. TV and computer monitors contain toxic materials – such as lead, cadmium, bromide flame-retardants and mercury – that may leach into water supplies."

The St. Croix County purchasing agent helped craft the RFP for all six counties, and the Dunn County attorney prepared both the legal documents and template contract with MPC. Each county executed and administered their own recycling agreement. These agreements had 2-year terms with the option to renew for two 1-year periods.

It is of interest that MPC temporarily cancelled the terms of its original contract with the St. Croix County consortium. MPC stated they could not afford to pay the original prices and did not have adequate contracts for sale of the electronic devices. Each county continues to operate their programs with informal recycling service agreements with MPC.

The RFP system for evaluation of proposals was a points-based system as follows (RFP Section 1.10 "Proposal Evaluation"; Page 7):

"Proposals will be evaluated in accordance with the criteria listed below. Award will be made to the responsive, responsible Respondent who complies with the requirements and scores the highest total on the evaluation criteria as it pertains to the overall needs of the Counties."

Criteria	Possible Points
Understanding of RFP and Firm Information (Technical Response I and II)	15
Scope of Services – Work Plan Approach (Technical Response III)	40
R2 Certification	10
E-Steward	5
Transfer Station/Material Recovery Facility, Collection Sites, and Non County Collection Price Schedule	20
One Day Event Price Schedule	10

Additional notable aspects of the consortium RFP and six-county e-waste programs include:

- The program worked well to accommodate individual county needs by allowing each county to use the open contract with MPC or to develop an alternative recycling contract on their own. Private businesses were also allowed to use the open contract. The RFP language was very specific and well-thought out in regards to this open contract provision.
- The counties have noticed a notable drop in payments from manufacturers.
- The RFP only asks for a fixed price period of 120 days.

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[69] http://www.jrsadvancedrecyclers.com/
[70] http://www.ecyclingscv.com/

Summary of E-cycling in Illinois

Many Illinois communities and solid waste agencies have had electronics recycling programs for many years. But when the *Illinois Electronic Products Recycling and Reuse Act*[71] took effect on January 1, 2012, certain electronic devices were no longer allowed in the regular trash.

Solid Waste Agency of Lake County, IL (SWALCO)

The Solid Waste Agency of Lake County (SWALCO) managed an e-waste collection, recycling and management program since 2000. Approximately thirty-two (32) host collection locations are established through Inter-Governmental Agreements with SWALCO. Collection frequencies vary from single day events to recurring, on-going collection events. For more information about SWALCO's e-waste recycling program, see their *Electronic Collection Events*[72] web page.

On April 12, 2012, *Sims Recycling Solutions*[73] (SRS) submitted a proposal to SWALCO for a "no cost" contract to transport, process and recycle residential e-waste. The e-waste recycling contract was subsequently executed and was in effect from May 21, 2012 and runs through December 31, 2014, with 3, one-year extension options. The amount of e-waste from SWALCO is estimated at 2.5 million pounds per year. The contract specifies that no electronic items will be accepted from non-residential sources.

SRS is required by the contract to make every effort to dismantle, reuse, and recycle the items collected utilizing its own facility, equipment and staff. All materials managed under this bid shall be processed, used, reused, reclaimed or disposed of only in Canada, Mexico, Europe or the United States, unless otherwise specifically permitted by SWALCO. All fixed hard drives or other data storage devices must be removed and destroyed. The contract explicitly prohibits any whole unit export of collected electronics by the Contractor or any of its down-stream vendors.

Solid Waste Agency of Northern Cook County, IL (SWANCC)

The Solid Waste Agency of Northern Cook County (SWANCC), IL has had e-waste recycling programs and services for its residents and member communities for many years. SWANCC has two drop-off locations: Glenview Transfer Station, in Des Plaines, IL and Winnetka Public Works in Winnetka, IL. For more information on SWANCC's current e-waste program, see their *Electronics Recycling*[74] and *Electronics Recycling/Contractors*[75] web pages.

Traditionally SWANCC has contracted with *Supply-Chain Services, Inc.*[76] (SSI) for recycling services. Their most recent contract term became effective January 1, 2012. SSI provides at home collection services to SWANCC's members/residents as well as permanent site collection services and one-day event site collection services. The contract states that SWANCC, in general, shall not pay any form of compensation to SSI for providing the "Permanent Site Collection Services" or the "One-Day Event Collection Services." SWANCC shall pay SSI for transportation costs associated with the "At-Home Collection Services." SSI sends SWANCC a monthly invoice detailing such costs by the 15th day of each month for the "At-Home Collection Services" for the previous month. SSI pays to SWANCC a revenue sharing credit of $0.04 per pound "Accepted Items" collected as part of the "Permanent Site Collection Services" and "$0.02 per pound for "Accepted Items" collected as part of the "One-Day

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[71] http://www.epa.state.il.us/land/electronic-waste-recycling/index.html
[72] http://www.swalco.org/Electronics/ElectronicsCollectionEvents
[73] http://www.simsrecycling.com/
[74] http://www.swancc.org/index.php/programs/electronics-recycling
[75] http://www.swancc.org/resources/recycling-and-reuse-directory/electronics-recyclingcontractors
[76] http://www.supply-chainservices.com/

Event Collection Services."   The county pays SSI $0.145 per pound for unacceptable items and $7 per monitor, $0.18 per pound for TVs, and $0.145 per lb. for all other when in excess. Compensation to the SSI for at home collection services is reflected in Exhibit J below.

Exhibit A:
SWANCC Fee Schedule with SSI

Level	# of pickups per collection day	Compensation per collection day
1	5 or less	$420
2	6 to 8	$510
3	9 to 11	$590
4	12 to 14	$670
5	15 to 18	$760
Overtime	More than 18 or unforeseeable transportation conditions causing delay outside of reasonable control	$95 per hour

APPENDIX D

RFP Evaluation Tool

**Template Example Excel Worksheet
for Evaluating Proposal Prices and Overall Rates**

[Attached as a separate Excel file]