Best Practices for Local Recycling Programs

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November 13, 2020

Senator Robert Cowles and
Representative Samantha Kerkman, Co-chairpersons
Joint Legislative Audit Committee
State Capitol
Madison, Wisconsin 53702

Dear Senator Cowles and Representative Kerkman:

As requested by the Joint Legislative Audit Committee, and as authorized by s. 13.94 (8),
Wis. Stats., we have completed a review of best practices that local governments use to operate
their statutorily required recycling programs. Best practices reviews identify and publicize the
successful methods local governments use to reduce costs or deliver services more effectively.
Our accompanying evaluation of state recycling programs is report 20-21.

Statutes require responsible units to implement recycling programs to manage the solid waste
generated within their regions. Statutes define each Wisconsin municipality as a responsible
unit, unless a given municipality's county has designated itself as a responsible unit and the
municipality has not chosen to remain its own responsible unit, or unless a given municipality
has contractually designated another local government to be its responsible unit.

To determine best practices for operating recycling programs, we reviewed Department of
Natural Resources (DNR) documents intended to help responsible units improve their recycling
programs and documents from around the nation. These best practices pertain to outreach and
education, containers, collection, drop-off sites, and program administration and oversight.

To identify examples of these best practices that have been implemented in Wisconsin, we
surveyed all 1,077 responsible units, reviewed all annual reports that responsible units
submitted to DNR for their recycling programs in calendar year 2018, and contacted
25 responsible units to obtain additional information about their recycling programs.

We appreciate the courtesy and cooperation extended to us by the local government officials
who responded to our survey and provided additional information included in this report.

Respectfully submitted,

Joe Chrisman
State Auditor

JC/DS/ss

Report Highlights ∎

Statutes require DNR to annually award recycling grants in amounts that are determined according to provisions that date to 1999.

Most responsible units that responded to our survey indicated that they were satisfied with the recycling program-related assistance that DNR and DATCP provided them.

In report 20-22, we identify best practices that local governments can use to comply with state recycling laws and improve the administration of their recycling programs.

The Department of Natural Resources (DNR) administers two recycling programs that award grants to cover a portion of the recycling program costs of responsible units, which are generally municipalities and counties. In fiscal year (FY) 2019-20, $20.0 million was appropriated to these two programs. DNR also administers the E-Cycle program, which requires manufacturers of certain electronic devices to recycle or pay for the recycling of such devices that had been sold to households and schools.

The Department of Agriculture, Trade and Consumer Protection (DATCP) administers the Clean Sweep program, which awards grants to local governments for collecting and disposing of household hazardous waste, unwanted prescription drugs, and agricultural pesticides. In FY 2019-20, $750,000 was appropriated to this program.

To complete this evaluation of state recycling programs (report 20-21), we:

- assessed how DNR administered its three recycling programs;

- assessed how DATCP administered its Clean Sweep program; and

- surveyed all 1,077 responsible units about their recycling programs.

In report 20-22, we identify best practices that local governments can use to comply with state recycling laws and improve the administration of their recycling programs.

Recycling in Wisconsin

In recent years, foreign purchasers of recyclable materials introduced limits on the extent to which recyclable materials can be contaminated with inappropriate materials. As a result, the amount of recyclable materials available for sale in the U.S. increased considerably, and the market value of many of these materials decreased. In the Midwest, the market prices of seven common recyclable materials typically decreased from 2017 through 2019.

Statutes require each responsible unit to implement a recycling program to manage the solid waste generated within its region in accordance with statutory requirements. Responsible units that responded to our survey indicated that their recycling costs increased in recent years.

DNR's Program Administration

In FY 2018-19, DNR's expenditures for its recycling grant, consolidation grant, and E-Cycle programs totaled $21.8 million, including $20.0 million for grants to responsible units and $1.8 million for program administration.

The amount of time that DNR staff spent administering the three recycling programs declined from 17.1 full-time equivalent (FTE) staff positions in FY 2014-15 to 10.3 FTE staff positions in FY 2018-19. DNR indicated that some staff positions were vacant for periods of time but was unable to provide us with information indicating the extent of these vacancies.

We found a number of concerns with DNR's administration of its recycling programs, including:

- DNR did not comply with statutes because it spent funds appropriated for recycling administration on activities related to recycling but not allowed by statutes;

- DNR reviewed fewer recycling programs than was statutorily required from 2016 through 2018;

- DNR did not analyze the results of its recycling program reviews in order to provide all

responsible units with additional guidance on addressing common concerns;

▪ DNR did not establish written policies for reviewing the statutorily required annual reports of responsible units or document its reviews of these annual reports; and

▪ DNR did not fully comply with its administrative rules pertaining to effective recycling programs, and provisions in these rules are outdated.
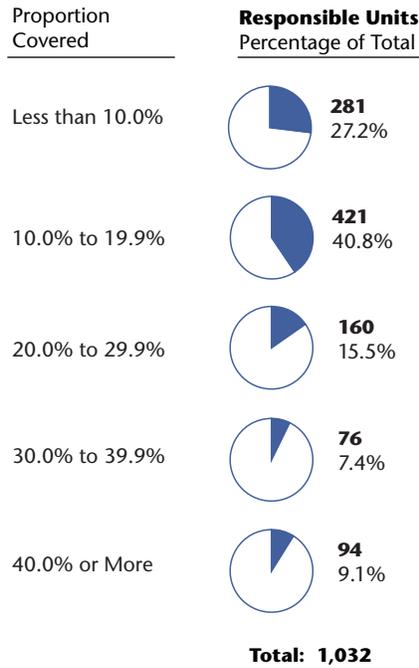
Recycling Grants

Since 2001, statutes have required DNR to annually award recycling grants in amounts that are determined according to provisions established in 1999 Wisconsin Act 9, the 1999-2001 Biennial Budget Act. Grants are to reflect the proportions of total available grant funding that each responsible unit had received in 1999. These proportions were determined, in part, by the population or the eligible expenditures of responsible units in 1999. Eligible expenditures are those incurred to operate an effective recycling program.

Recycling and consolidation grants covered 16.4 percent of the eligible recycling expenditures reported by responsible units in 2018. The grants have never covered all eligible expenditures since they were first awarded in 1992. In 1994, they covered 52.7 percent of eligible expenditures, which was the highest proportion covered in any given year. To have covered 30.0 percent of eligible expenditures in 2018 would have required $36.6 million in grants, and to have covered 50.0 percent of eligible expenditures would have required $61.0 million in grants.

The grants covered considerably different proportions among responsible units in 2018. As shown in Figure 1, the grants covered less than 10.0 percent of eligible recycling expenditures for 281 responsible units and 40.0 percent or more for 94 responsible units.

Figure 1

**Proportions of Eligible Recycling Expenditures
Covered by Grants in 2018**[1]

Proportion Covered		Responsible Units Percentage of Total
Less than 10.0%		**281** 27.2%
10.0% to 19.9%		**421** 40.8%
20.0% to 29.9%		**160** 15.5%
30.0% to 39.9%		**76** 7.4%
40.0% or More		**94** 9.1%

Total: 1,032

[1] Includes recycling and consolidation grants.

DATCP's Program Administration

DATCP's expenditures for its Clean Sweep program totaled $791,600 in FY 2018-19, including $744,500 for grants to local governments and $47,100 for program administration.

In 2019, DATCP awarded grants to 57 recipients in amounts that ranged from $800 to $58,200 and averaged $13,200. Total program grants equaled 52.7 percent of the total amount requested by the applicants. All but 3 of the 57 recipients received at least 50.0 percent of the amounts they had requested.

We found that DATCP did not require grant recipients to submit documentation to verify all expenditures for which they request reimbursement.

Opinions of Responsible Units

In January 2020, we surveyed all 1,077 responsible units on their opinions about DNR's recycling grant programs and DATCP's Clean Sweep program. A total of 585 responsible units (54.3 percent) responded, although not all respondents answered each question. Respondents represented 66.8 percent of Wisconsin's population.

Most respondents indicated that they were satisfied with the recycling program-related assistance that DNR and DATCP provided them. Respondents indicated that they were less satisfied with their grant amounts.

Best Practices

In report 20-22, we identify 15 best practices that responsible units can use to comply with state recycling laws and improve the administration of their recycling programs. We grouped these best practices into five categories: outreach and education, containers, collection, drop-off sites, and program administration and oversight.

Recommendations

In report 20-21, we recommend DNR report to the Joint Legislative Audit Committee by April 1, 2021, on improving its administration of its recycling programs through its efforts to:

☑ comply with statutes by spending all funds appropriated through s. 20.370 (4) (hq), Wis. Stats. on administering ch. 287, subchapter II, Wis. Stats. *(p. 19)*;

☑ consistently comply with statutes by annually reviewing the recycling programs of at least 5.0 percent of responsible units that were awarded recycling grants in the previous year *(p. 23)*;

☑ annually analyze the results of its reviews in order to provide guidance to all responsible units on addressing common concerns *(p. 23)*;

☑ establish written policies for reviewing the annual reports submitted by responsible units *(p. 24)*;

☑ document its reviews of the annual reports submitted by responsible units *(p. 24)*; and

☑ update provisions in its administrative rules pertaining to effective recycling programs *(p. 25)*.

We also include a recommendation for DATCP to report to the Joint Legislative Committee by April 1, 2021, on its efforts to require recipients of Clean Sweep program grants to submit documentation to verify all expenditures for which they request reimbursement *(p. 31).*

Issue for Legislative Consideration

The Legislature could consider modifying the statutorily required method for awarding recycling grants to responsible units (*p. 21*).

Introduction ■

Section 13.94 (8), Wis. Stats., requires the Legislative Audit Bureau to periodically conduct best practices reviews, which identify and publicize the successful methods local governments use to reduce costs or deliver services more effectively.

In order to protect public health and the natural environment and to conserve resources and energy, s. 287.05 (1), Wis. Stats., indicates that it is in the best interest of Wisconsin to maximize solid waste reduction, reuse, recycling, composting, and resource recovery. Statutes generally prohibit individuals from discarding certain materials in solid waste disposal facilities, such as landfills and incinerators. These materials include aluminum containers, cardboard, foam packaging, glass containers, magazines, newspapers, office paper, plastic or steel containers, and certain electronic devices such as computers and printers.

Statutes require responsible units to implement recycling programs to manage the solid waste generated within their regions.

Statutes require responsible units to implement recycling programs to manage the solid waste generated within their regions. Statutes designate each Wisconsin municipality as a responsible unit. If a given county designates itself as a responsible unit, each municipality in that county becomes part of the county-level responsible unit, unless a given municipality within 90 days adopts a resolution maintaining its status as a responsible unit. Statutes permit any responsible unit to contractually designate another local government to be its responsible unit.

Statutes require the Department of Natural Resources (DNR) to administer two recycling grant programs that cover a portion of the

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costs of effective recycling programs operated by responsible units. Each responsible unit with an effective recycling program approved by DNR must submit to DNR by April 30 an annual report with certain information about its program during the prior calendar year.

In this report, which we distributed to every responsible unit for which DNR had contact information in January 2020, we identify recycling best practices and examples of those best practices. In report 20-21, we analyze how DNR and the Department of Agriculture, Trade and Consumer Protection (DATCP) administered their statutorily required recycling programs in recent years.

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Best Practices for Recycling Programs ∎

Responsible units have implemented a number of recycling best practices, as well as strategies for increasing the effectiveness of their recycling programs and reducing program costs.

Identifying and communicating approaches to recycling that have been implemented successfully allows responsible units to learn from and consider adopting these best practices. To identify best practices, we reviewed DNR documents intended to help responsible units improve their recycling programs. We also reviewed documents from the federal government, other states, and recycling organizations. Appendix 1 lists selected documents that we reviewed. To identify examples of recycling best practices, we reviewed all 1,070 annual reports that responsible units submitted to DNR for their recycling programs in 2018. In January 2020, we surveyed all 1,077 responsible units, 585 of which responded (54.3 percent). We also contacted 25 responsible units, which are listed in Appendix 2, to obtain additional information about their programs. Our review found that responsible units have implemented a number of recycling best practices, as well as strategies for increasing the effectiveness of their recycling programs and reducing program costs.

Table 1 lists the 15 recycling best practices we identified for responsible units. We grouped these best practices into five categories.

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Table 1

Recycling Best Practices for Responsible Units, by Category[1]

Category	Best Practices
Outreach and Education	Using multiple methods to deliver outreach and education, attaching warning tags to recycling containers with inappropriate materials, cooperating with recycling entities to provide outreach and education, and providing outreach and education throughout the year
Containers	Providing larger containers to residences or at drop-off sites, labeling containers with images or words of recyclable materials, placing containers in public places and at public events, and purchasing containers for residents
Collection	Collecting all recyclable materials in one container and using automated collection of containers
Drop-Off Sites	Supervising drop-off sites and strategically locating drop-off sites
Program Administration and Oversight	Requiring hauling firms to identify non-recycling residences, routinely inspecting recycling containers, and rewarding individuals who recycle properly

[1] We identified best practices from DNR documents and documents from around the nation.

Outreach and Education

Statutes require effective recycling programs to educate individuals about the reasons to recycle, local opportunities to recycle materials, and materials that statutes prohibit from being discarded in solid waste treatment facilities.
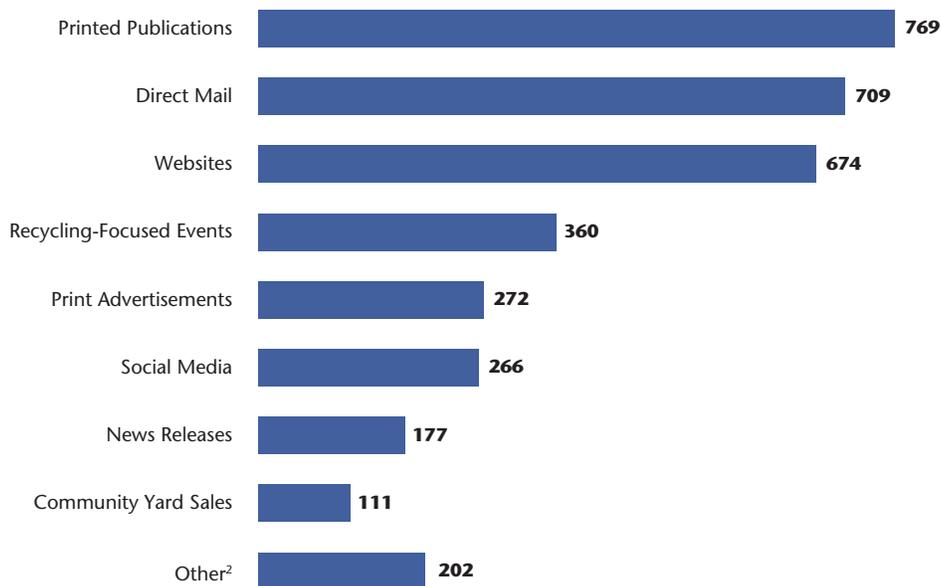
Using multiple methods to deliver outreach and education can help to increase the amount and quality of recycling that occurs.

Using multiple methods to deliver outreach and education can help to increase the amount and quality of recycling that occurs. Social media, websites, and email may be cost-effective methods to deliver outreach and education, but mail-delivered information may be necessary to reach some individuals. When delivering outreach and education, it is important to consider the primary languages spoken by individuals and consider using recycling images that do not require translation.

Responsible units annually report to DNR on the outreach and education they delivered in the prior calendar year. In 2018, more than half of responsible units reported using printed publications (such as flyers and handouts), direct mail (such as information included with property tax bills), and websites with recycling information, as shown in Figure 2.

Figure 2

Methods of Recycling Outreach and Education Used by Responsible Units in 2018[1]
Number of Responsible Units

Method	Number
Printed Publications	769
Direct Mail	709
Websites	674
Recycling-Focused Events	360
Print Advertisements	272
Social Media	266
News Releases	177
Community Yard Sales	111
Other[2]	202

[1] As indicated by responsible units in annual reports to DNR.

[2] Includes display booths, school education programs, and radio announcements.

Our review found examples of this best practice:

- Waupaca County provided outreach and education through publications mailed to individuals, social media, presentations in local schools, and information provided at recycling drop-off sites and public events such as the county fair.

- The City of Green Bay annually provided each residence with a bilingual guide, provided youth with educational materials obtained from DNR, posted recycling information on the city's website, and contacted individuals who repeatedly placed inappropriate materials in their recycling containers.

- The City of Sheboygan contracted with a media company to develop videos and other educational materials to distribute through the city's website, social media, and newsletters to inform individuals

about changes to its recycling program, such as the new recycling containers that were distributed beginning in May 2020.

Attaching warning tags to recycling containers with inappropriate materials can be effective at reducing the amount of such materials placed in the containers, especially if additional follow-up is conducted with the individuals who receive the tags. Warning tags are intended to engage and educate individuals about proper recycling practices, and they can be attached by hauling firms, local government employees, or other authorized individuals. Warning tag programs in states such as Georgia, Massachusetts, Ohio, and Texas have been effective at reducing the amount of inappropriate materials placed in recycling containers, according to an organization that examined these programs.

Responsible units annually report to DNR on the number of warning tags they attached in the prior calendar year. A total of 106 responsible units reported having attached 27,715 warning tags in 2018, compared to 68 responsible units that reported having attached 26,297 warning tags in 2014.

Our review found examples of this best practice:

- The City of Milwaukee assigned one employee along four of its main collection routes to inspect each recycling container, attach tags to containers with inappropriate materials, and return the following collection day to re-inspect the containers. The city indicated that these efforts resulted in a 53.0 percent decrease in the number of tags attached to containers along the four routes.

- The City of Baraboo used color-coded warning tags that correspond to the type of inappropriate material found in recycling containers. The city indicated that these tags reduced the amount of inappropriate materials that it found and that it attached approximately 60.0 percent fewer tags over a five-year period.

- The City of Oshkosh's hauling firms attached pink tags to recycling containers with inappropriate materials, did not collect the materials, and returned the next day to determine if the inappropriate materials had been removed from the containers.

Cooperating with recycling entities to provide recycling outreach and education can be effective at ensuring accurate information is provided to individuals.

Cooperating with recycling entities, such as materials recovery facilities, to provide recycling outreach and education can be effective at ensuring accurate information is provided to individuals. For example, a materials recovery facility may accept only certain types of recyclable materials. Other recycling entities include hauling firms, DNR, other responsible units, and DATCP. Cooperating with such entities can also lower recycling program costs.

Survey respondents indicated whether they had cooperated from January 2017 through January 2020 with various entities to provide recycling outreach and education. As shown in Figure 3, respondents reported cooperating most commonly with hauling firms and DNR.

Figure 3

Entities with which Responsible Units Cooperated to Provide Recycling Outreach and Education from January 2017 through January 2020[1]
Number of Responsible Units
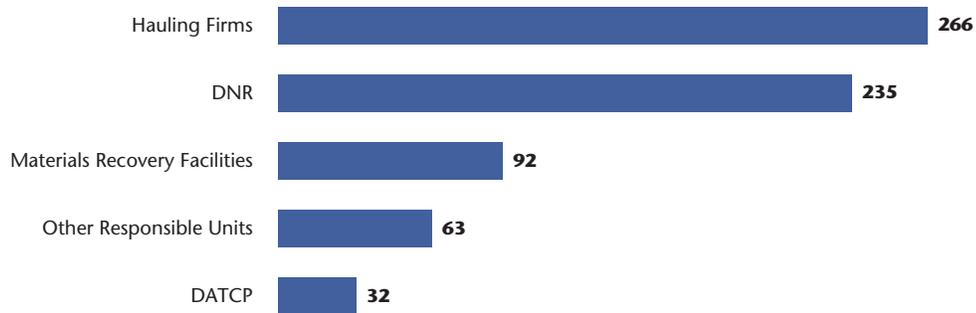
[1] As indicated by 585 survey respondents.

Our review found examples of this best practice:

- The City of Milwaukee cooperated with its materials recovery facility, a national non-profit organization, other responsible units, and hauling firms to develop consistent educational information on the types of recyclable materials that its materials recovery facility will accept and will not accept.

- The Village of Weston cooperated with its materials recovery facility, hauling firms, and DNR to provide a detailed recycling guide to all residences and businesses.

Providing recycling outreach and education throughout the year allows responsible units to communicate relevant information in a timely manner.

Providing recycling outreach and education throughout the year allows responsible units to communicate relevant information, such as programmatic changes, in a timely manner. It can also increase the amount and quality of recycled materials.

Survey respondents indicated the frequency with which they provided recycling outreach and education from January 2017 through January 2020. As shown in Figure 4, most respondents reported having provided outreach and education annually.

Figure 4

Frequency with which Responsible Units Provided Recycling Outreach and Education[1]
January 2017 through January 2020

Annually
303 **|** 58.2%

Quarterly
111 **|** 21.3%

Monthly
49 **|** 9.4%

Weekly
34 **|** 6.5%

Never
24 **|** 4.6%
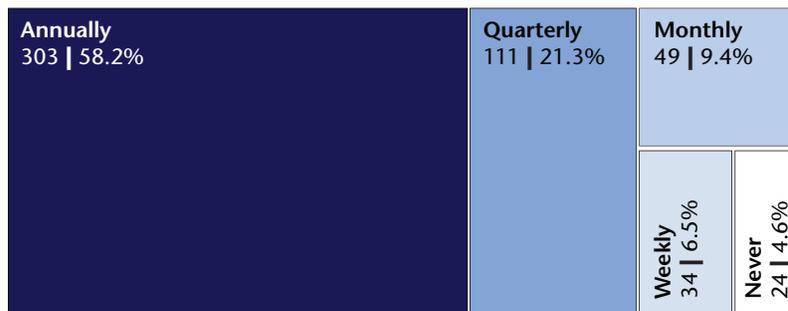
[1] As indicated by 521 survey respondents.

Our review found examples of this best practice:

▪ Dunn County educated individuals about recycling through weekly updates provided by its employees at recycling drop-off sites, as well as through the county's website, Facebook, an annual newsletter, and postcards for special events.

▪ The Town of Round Lake educated individuals about recycling through weekly updates provided by its employees at the recycling drop-off site. For example, employees advised individuals to rinse plastic containers before recycling them.

☑ **Best Practice**

It is a best practice for responsible units to:

- *use multiple methods to deliver recycling outreach and education;*

- *attach warning tags to recycling containers with inappropriate materials;*

- *cooperate with recycling entities to provide recycling outreach and education; and*

- *provide recycling outreach and education throughout the year.*

Containers

Statutes require effective recycling programs to include a system for collecting recyclable materials from single-family residences. Such systems typically involve responsible units providing curbside collection, drop-off sites, or a combination of the two. Recycling containers into which individuals can place recyclable materials for collection is a common feature of such programs.

Providing larger recycling containers to residences or at drop-off sites can increase the amount of materials recycled.

Providing larger recycling containers to residences or at drop-off sites can increase the amount of materials recycled. Individuals are more likely to recycle materials if their recycling containers are not full. Our review found examples of this best practice:

- The Town of New Glarus allowed residences to select the size of their recycling containers. More residences selected larger-sized containers. It indicated that this practice has increased the amount of materials recycled.

- The City of Prairie du Chien has provided larger recycling containers to residences since May 2017. It indicated that many residences have found the larger containers to be more convenient to use than the previous, smaller containers.

- The Town of Ridgeway has provided larger recycling containers to residences since May 2019 and hopes that the larger containers will increase the amount of materials recycled.

Labeling recycling containers with the images or words of recyclable materials can reduce the amount of inappropriate materials placed in the containers.

Labeling recycling containers with the images or words of recyclable materials can reduce the amount of inappropriate materials placed in the containers. Our review found examples of this best practice:

- The City of Racine used different colors to distinguish between trash and recycling containers and labels containers with the images and words of items that should be placed in each type of container. In addition, the containers have radio frequency identification tags that allow the city to assign a container to each residence and identify misplaced containers.

- The City of Milwaukee labeled recycling containers using a hot stamp that indicates the types of materials that can be recycled. The stamp creates an imprint, rather than a sticker that may fade, wear off, or be removed from a container.

- The Northwest Recycling Board used different colors to distinguish between trash and recycling containers, and it labels the containers with imprints indicating their purposes.

Placing recycling containers in public places and at public events can increase the amount of materials recycled.

Placing recycling containers in public places, such as parks, and at public events can increase the amount of materials recycled. Some responsible units also host recycling-specific events to promote recycling. Our review found examples of this best practice:

- The Village of Thiensville placed recycling containers, including temporary containers specifically for collecting cans, in parks and at events such as farmers' markets and festivals.

- The Village of Mukwonago placed recycling containers in all public parks and at events hosted by the village and the chamber of commerce.

Purchasing recycling containers for residences can be cost-effective for responsible units over time.

Purchasing recycling containers for residences can be cost-effective for responsible units over time. Hauling firms typically charge responsible units if the firms provide the containers and may charge ongoing fees even after recouping the actual costs of the containers. Our review found examples of this best practice:

- The City of Thorp purchased recycling containers for residences.

- The Village of Thiensville purchased recycling containers for residences.

As shown in Figure 5, survey respondents indicated whether they performed various best practices related to recycling containers. The most-common best practices that respondents reported performing were providing larger containers and labeling containers with the images or words of recyclable materials.

Figure 5

Best Practices Related to Recycling Containers[1]
Number of Responsible Units

Practice	Number
Provide Larger Containers	248
Label Containers with the Images or Words of Recyclable Materials	214
Provide Containers at Public Events	147
Provide Containers in Public Places	132
Purchase Containers for Residences	124

[1] As indicated by 585 survey respondents.

☑ **Best Practice**

It is a best practice for responsible units to:

- *provide larger recycling containers;*

- *label recycling containers with the images or words of recyclable materials;*

- *place recycling containers in public places and at public events; and*

- *purchase recycling containers for residences.*

Collection

Collecting all recyclable materials in one container can increase the amount of materials recycled and result in lower collection costs.

Collecting all recyclable materials in one container, which is referred to as "single-stream" recycling, provides ease and convenience to individuals and can increase the amount of materials recycled. Single-stream recycling can also result in lower collection costs because fewer trucks are needed to collect and transport the materials to materials recovery facilities. Our review found examples of this best practice:

▪ Oconto County indicated that it lowered its costs in 2017 after it changed from collecting all recyclable materials in separate containers to collecting all such materials in one container. In its annual reports to DNR, Oconto County reported collection costs of $278,800 in 2016 and $91,600 in 2017.

▪ The City of Prairie du Chien changed in May 2017 from collecting all recyclable materials in separate containers to collecting all such materials in one container. It indicated that this change increased the amount of recyclable materials collected.

Automated collection of recycling containers can reduce costs.

Automated collection of recycling containers, which involves trucks with mechanical arms, can reduce costs. Because automated collection does not require workers to manually unload containers, it may require fewer workers and can reduce the amount of time needed to unload containers. Automated collection may also allow responsible units to use recycling carts that individuals typically find more convenient to wheel to the end of their driveways, rather than recycling bins that individuals must carry or drag. As a result, carts can increase the amount of materials recycled. Our review found examples of this best practice:

▪ The City of Prairie du Chien in May 2017 changed to automated collection of recyclable materials at the same time that it changed to collecting all such materials in one container. It indicated that automated collection is easier for its hauling firm because it is unnecessary for individuals to manually unload the containers.

▪ The City of Reedsburg in December 2019 changed to automated collection of all recyclable materials in one container, which it indicated did not increase its costs.

Survey respondents indicated whether they performed various best practices related to recycling collection. A total of 338 of 585 respondents (57.8 percent) reported collecting all recyclable materials in one container, and 160 respondents (27.4 percent) reported using automated collection of recycling containers.

☑ **Best Practice**

It is a best practice for responsible units to:

▪ *collect all recyclable materials in one container; and*

▪ *use automated collection of recycling containers.*

Drop-Off Sites

DNR's administrative rules require rural municipalities with recycling drop-off sites to ensure that the sites are adequately sized. The rules typically require drop-off sites to be open at least two days each month, for at least five hours each day.

Supervising recycling drop-off sites can reduce the amount of inappropriate materials discarded at the sites.

Supervising recycling drop-off sites can reduce the amount of inappropriate materials discarded at the sites. Employees at the sites can also provide recycling outreach and education to individuals who use the sites. Our review found examples of this best practice:

▪ Waupaca County has six supervised drop-off sites with locking gates to prevent individuals from inappropriately discarding items when the sites are closed.

▪ The Town of Round Lake has a drop-off site supervised by employees who inform individuals of any concerns with recyclable materials brought to the site and any other programmatic changes.

▪ The Town of Leroy has a supervised drop-off site with locks and cameras to monitor the site when it is closed.

Strategically locating recycling drop-off sites can increase the amount of recyclable materials collected.

Strategically locating recycling drop-off sites provides convenient access to recycling services and can increase the amount of recyclable materials collected. Strategic locations include sites near schools, stores, or along main travel routes. Our review found examples of this best practice:

- Pierce County located drop-off sites on public property, such as old municipal landfills, and private property, such as a hardware store. It has also placed recycling containers in schools.

- The Northwest Recycling Board contracted with a firm to collect recyclable materials at residences and operated a drop-off site that is centrally located in the City of Marshfield and accessible to the six municipalities it serves.

Survey respondents indicated whether they performed various best practices related to recycling drop-off sites. In total, 200 of 585 respondents (34.2 percent) indicated that they supervise drop-off sites, and 83 respondents (14.2 percent) indicated that they strategically locate drop-off sites.

☑ **Best Practice**

It is a best practice for responsible units to:

- *supervise drop-off sites for recyclable materials; and*

- *strategically locate drop-off sites for recyclable materials.*

Program Administration and Oversight

Statutes require effective recycling programs to ensure adequate enforcement of program requirements. As noted, statutes generally prohibit individuals from discarding in solid waste disposal facilities certain materials, such as aluminum containers, cardboard, foam packaging, glass containers, magazines, newspapers, office paper, plastic or steel containers, and certain electronic devices such as computers and printers.

Requiring hauling firms to identify non-recycling residences allows responsible units to identify individuals who may require reminders of recycling requirements and opportunities.

Requiring hauling firms to identify non-recycling residences allows responsible units to identify individuals who may require reminders of recycling requirements and opportunities. Contacting such individuals can increase program participation and the amount and quality of materials recycled. Our review found examples of this best practice:

- The City of Prairie du Chien received reports from its hauling firm on residences that did not follow local recycling requirements, and it then

telephoned such residences to remind them of these requirements. The city indicated that residences typically follow these requirements after one such telephone call.

- The Village of Thiensville received reports from its hauling firm on residences that did not follow local recycling requirements.

Routinely inspecting recycling containers allows responsible units to enforce recycling ordinances.

Routinely inspecting recycling containers allows responsible units to enforce recycling ordinances and identify individuals who may require additional outreach and education. Our review found examples of this best practice:

- The City of Oshkosh collected recyclable materials from residences with city-owned trucks equipped with cameras that can inspect the contents of recycling containers. It also annually inspected the recycling containers of every business in the city and all larger residential properties to ensure that these entities comply with recycling program requirements.

- Vernon County operated a recycling processing and transfer facility for all recyclable materials collected at the drop-off sites. Employees monitored and inspected each container and removed inappropriate materials.

- The Town of Upham operated a recycling drop-off site that is supervised by employees who ensured that recyclable materials are placed in the correct containers.

Responsible units may incentivize recycling by rewarding individuals who recycle properly.

Responsible units may incentivize recycling by providing rewards, such as coupons for local businesses, to individuals who recycle properly. Our review found examples of this best practice:

- The Village of Weston biannually and randomly selected a neighborhood in which to check trash and recycling containers. Residences that correctly separated trash and recyclable materials were entered into a drawing for prizes that were paid for by recycling fees charged to property tax bills and DNR recycling grants.

- The City of Thorp worked with its contracted hauling firm each month to select one residence

that recycled properly. This residence was featured as a "recycling star" in the local newspaper and awarded a prize that was paid for by recycling fees charged to property tax bills and DNR recycling grants. The city also worked with the local school district to promote recycling by holding a contest for students to design recycling posters and providing prizes to winners. The city indicated that these efforts increased the amount of recyclable materials collected.

Survey respondents indicated whether they performed various best practices related to recycling program administration and oversight. As shown in Figure 6, respondents indicated that they required hauling firms to identify non-recycling residences and routinely inspected recycling containers more frequently than they indicated that they provided rewards to individuals who recycled properly.

Figure 6

Best Practices Related to Recycling Program Administration and Oversight[1]
Number of Responsible Units
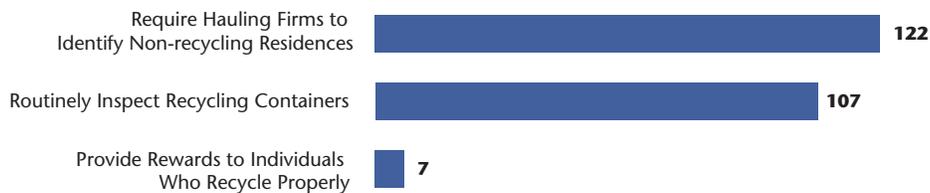
Require Hauling Firms to
Identify Non-recycling Residences — **122**

Routinely Inspect Recycling Containers — **107**

Provide Rewards to Individuals
Who Recycle Properly — **7**

[1] As indicated by 585 survey respondents.

☑ **Best Practice**

It is a best practice for responsible units to:

- *require hauling firms to identify non-recycling residences;*

- *routinely inspect recycling containers; and*

- *provide rewards to individuals who recycle properly.*

Other Strategies

Some survey respondents provided information about other strategies they use to manage their recycling programs and reduce program costs. For example:

▪ The Village of Weston cooperated with a local firm that is developing a web-based application to allow individuals to scan a product to determine if and how the packaging may be recycled. The village helped to test the application and informed the firm about products excluded from the underlying database so that the firm could include these products. The village indicated that because different materials recovery facilities accept different materials, the application will include information specific to given municipalities.

▪ Several responsible units indicated that they hosted special events for recycling certain materials. In each of the past two years, the City of Racine hosted drop-off events on one Saturday in the spring and in the fall. At these events, individuals could drop off tires, electronics, and appliances at no cost. The city indicated that these events reduced the amount of such materials improperly discarded.

▪ The Village of Kekoskee and the Town of Williamstown reduced recycling program costs in 2019 as a result of combining the two municipalities and consolidating their programs. In their separate annual reports to DNR, the two municipalities reported a total of $13,200 in program costs in 2018. The Village of Kekoskee, which now includes the former Town of Williamstown, indicated that its program costs were $10,400 in 2019.

Some survey respondents provided information indicating that they incentivized recycling by charging individuals fees based on the volume of trash they generate, and charging them nothing for the materials they recycle. This method of variable pricing, which is commonly referred to as "pay as you throw," encourages individuals to reduce the amount of trash they generate and not discard recyclable materials in the trash. "Pay as you throw" methods can be implemented by responsible units that provide

drop-off sites or curbside collection. However, responsible units that provide curbside collection and choose to use "pay as you throw" methods should do so in conjunction with inspections to ensure that individuals do not discard trash in recycling containers in order to avoid the fees. For example:

- Waupaca County sold clear trash bags that individuals may bring to drop-off sites, which ensured that its employees could ascertain that no recyclable materials are improperly discarded.

- The City of Menasha provided residences with a standard-sized trash container and allowed individuals to purchase stickers for $1 to affix to each additional bag of trash outside of the container or to obtain a larger container for $1.50 per week.

Some survey respondents indicated that they reduced program costs or avoided large cost increases by renegotiating contracts with hauling or other recycling firms, contracting with different firms, or signing long-term contracts that included small annual increases for inflation. For example:

- Portage County indicated that it renegotiated its contract with the firm that operates its recycling processing facility to pay in 2020 approximately half of what it had paid in 2019. However, the county anticipates its processing costs will increase in 2021.

- The Town of Oakland indicated that it contracted with a different hauling firm and reduced its recycling collection costs by approximately 20.0 percent from 2018 to 2019. As a result, the town indicated that it reduced the annual per-household charge for recycling services from $161 in 2018 to $135 in 2019.

- The Town of Polk indicated that it contracted with a different hauling firm in November 2019 and reduced the monthly recycling collection costs for its drop-off site from approximately $2,000 to approximately $730. The town indicated that the five-year contract allows for inflationary increases.

Appendix 3 lists additional resources we identified that responsible units can use to develop recycling campaigns and educational outreach, contract with hauling firms and materials recovery facilities, and obtain grants to support their recycling programs.

▪ ▪ ▪ ▪

Appendices ■

Appendix 1

Selected Documents Related to Recycling Best Practices
Organized by the Types of Entities that Developed the Documents

Department of Natural Resources

Tips for Responsible Units: Reducing Recycling Costs and Strengthening Your Program
https://dnr.wi.gov/files/PDF/pubs/wa/WA1603.pdf

Collector Best Management Practices: Electronic Waste
https://dnr.wi.gov/files/pdf/pubs/wa/wa1735.pdf

Other States and Organizations

Minnesota Pollution Control Agency
City Recycling Best Management Practice Options
https://www.pca.state.mn.us/sites/default/files/w-sw1-11.pdf

Northeast Michigan Council of Governments
Recycling in Michigan: Successful Recycling Programs, Best Practices, and Diversion Potential
https://www.michigan.gov/documents/deq/480235-14_NEMCOG_FINAL_RECYCLING_REPORT_521916_7.PDF

Illinois Recycling Association and Northeast Recycling Council, Inc.
Best Operational Practices for Recycling Drop-off Operations
https://nerc.org/documents/recycling/BOP_Illinios%20Drop%20Off%20Man_FIN%2011.28.16.pdf

U.S. Environmental Protection Agency
National Framework for Advancing the U.S. Recycling System
https://www.epa.gov/sites/production/files/2019-11/documents/national_framework.pdf

The Recycling Partnership
2020 State of Curbside Recycling
https://recyclingpartnership.org/wp-content/uploads/dlm_uploads/2020/02/2020-State-of-Curbside-Recycling.pdf

Appendix 2

Responsible Units We Contacted

Responsible Unit	Title of Individual or Department	Telephone Number
Dunn County	Department of Solid Waste and Recycling/Director	715-231-6543
Oconto County	Department of Solid Waste	920-834-6827
Pierce County	Department of Solid Waste	715-273-6867
Portage County	Department of Solid Waste	715-345-5970
Vernon County	Department of Solid Waste and Recycling	608-634-2900
Waupaca County	Department of Solid Waste and Recycling/Recycling Coordinator	715-258-6254
City of Baraboo	Department of Public Works/Street Superintendent	608-355-7383
City of Green Bay	Department of Public Works	920-492-3738
City of Menasha	Department of Public Works/Director	920-967-3600
City of Milwaukee	Department of Public Works-Operations Division-Sanitation Section/Resource Recovery Program Manager	414-286-2334
City of Oshkosh	Department of Public Works	920-236-5065
City of Prairie du Chien	Wastewater Department/Utility Director	608-326-6406
City of Racine	Department of Public Works	262-636-9121
City of Reedsburg	Department of Public Works	608-524-6404
City of Sheboygan	Department of Public Works	920-459-3440
City of Thorp	Deputy Clerk	715-669-5371
Village of Kekoskee	Clerk	920-387-4251
Village of Mukwonago	Department of Public Works	262-363-6447
Village of Thiensville	Administrator	262-242-3720
Village of Weston	Department of Public Works	715-241-2607
Town of New Glarus	Clerk	608-527-2390
Town of Oakland	Clerk/Treasurer	608-423-9635
Town of Polk	Clerk	262-677-2123
Town of Round Lake	Chairperson	715-462-4049
Northwest Recycling Board	Chairperson	715-387-4222

DNR maintains a website with contact information for each responsible unit: *https://dnr.wi.gov/wastemgmt/wm/wmexternal/ShellReportViewer.aspx?RID=30.*

Additional Resources for Responsible Units

Recycling Campaigns and Educational Outreach

The Recycling Partnership customizable education campaign materials builder
https://recyclingpartnership.org/pdf-builder-login/

The Recycling Partnership Anti-Contamination Kit
https://recyclingpartnership.org/fight-contamination/

University of Wisconsin-Green Bay Wisconsin Recycling Markets Directory
https://www.uwgb.edu/solid-hazardous-waste-education-center/

Recycle Across America Labels for Recycling Bins and Carts
https://www.recycleacrossamerica.org/labels

Contracts with Hauling Firms and Materials Recovery Facilities

Wisconsin Department of Natural Resources Guidance
https://dnr.wi.gov/topic/Recycling/documents/yourwastehauler.pdf

Minnesota Pollution Control Agency Agreement Template
https://www.pca.state.mn.us/sites/default/files/w-sw1-14.pdf

Solid Waste Association of North America and National Waste & Recycling Association
https://cdn.ymaws.com/wasterecycling.org/resource/resmgr/docs/resource_library/SWANA-NWRA_Best_Contracting_.pdf

Recycling Grants

Resource Recycling Grant Watch
https://resource-recycling.com/recycling/grant-watch/

Clean River Recycling Solutions
https://cleanriver.com/blog/recycling-grants/