

# 2021 Solid Waste Progress Report

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# Introduction

The 2021 Solid Waste Management Progress Report provides an overview of Dakota County (County) projects and programs developed and continued throughout the year to meet the goals of the 2018 – 2038 Dakota County Solid Waste Master Plan (Master Plan).

The Master Plan, adopted by the Dakota County Board of Commissioners in September 2018, provides a framework for the county, residents, businesses, schools districts, municipalities, the waste industry and others to properly manage municipal solid waste (MSW). Activities focus on expanded use of existing educational, regulatory and financial tools; increased accountability and partnerships; and focused work in new areas such as multi-family dwellings and other large-volume generators.

The Minnesota Pollution Control Agency (MPCA) Policy Plan set waste management objectives for Twin Cities Metropolitan Area counties and establishes a framework for meeting the statutory goal to recycle 75 percent of total solid waste generated by 2030 (includes organics diversion; Minn. Stat. § 115A.551).

#### Policy Plan Objectives for Municipal Solid Waste Management System

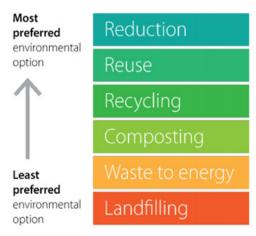
Management Method	2020 Actual	2021 Actual	2020 Goal	2025 Goal	2030 Goal
Source Reduction & Reuse			1.5%	3%	4%
Recycling & Organics	56%	55%	63%	68%	75%
Resource Recovery	4%	2%	35%	31%	24%
Maximum Land Disposal	42%	44%	2%	1%	1%

Due to rounding, totals do not equal 100%

# **Progress Summary**

To manage our resources in an effective and environmentally-sound manner, Dakota County prioritizes municipal solid waste management in accordance with Minnesota's waste hierarchy; county programs and initiatives are designed to reflect this. Many programs are new or continuously adjusted to meet the needs of our community, with some of the benefits not yet realized.

# Minnesota's waste hierarchy



Listed in order of preference, the waste hierarchy directs Minnesotans to manage waste to have the biggest environmental benefits. (Minn. Stat. § 115A.02)

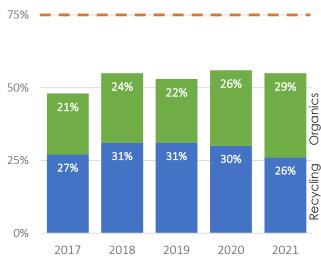
# Progress Towards Goals

A reported 520,955 tons of solid waste – recyclables, organics and trash – was generated in Dakota County in 2021 – a 5 percent increase from the previous year.

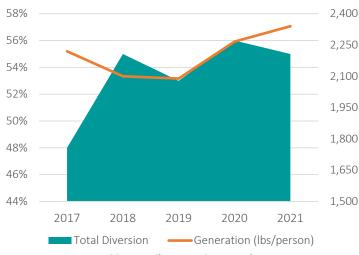
- Combined recycling and organics amounts increased three percent.
- Trash amounts increased by seven percent.
- Recycled or composted 55 percent of waste.
- Two percent of waste was sent for resource recovery.

57% of waste diverted from landfills in 2021



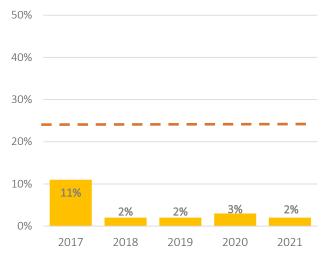


Diversion\* vs. Waste Generation per Person (lbs)

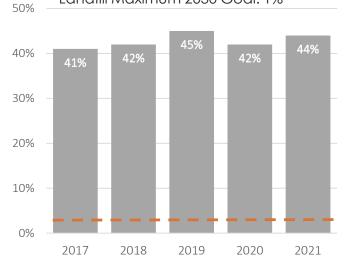


\*Recycling and organics

## Resource Recovery 2030 Goal: 24%



#### Landfill Maximum 2030 Goal: 1%



# Waste Reduction & Reuse

The MPCA has not identified reduction and reuse metrics for reporting purposes. Dakota County uses the per capita generation of municipal solid waste as our waste reduction metric. Overall waste generation in 2021 went up. Waste created per person in the county increased from 2,260 pounds in 2020 to 2,340 pounds in 2021 (four percent increase over the previous year).

# **Community Swaps & Collections**

The Dakota County Community Waste Abatement Program provides resources to cities to organize community-based reuse opportunities. For the first time, city partners held events to promote reuse such as swaps, donation drives and mattress collections.

- **Outdoor Gear Swap**, Oct. 31 in West St. Paul 27 participants swapped 75 items (428 pounds) of camping gear, hiking equipment and more.
- **Toy Swap**, Oct. 17 for residents of Lilydale, Mendota Heights, South Saint Paul, Sunfish Lake, and West Saint Paul 50 participants exchanged 170 pounds of toys, books and more.
- Winter Clothing Swap, Dec. 10, 19 participants brought in 198.5 pounds of camping gear, hiking equipment and more. (Note: lower turnout due to winter storm)
- Shoe Collection, Nov. 8 12, Dakota Valley Recycling collected 6.67 tons of shoes in the cities of Apple Valley, Burnsville, Eagan and Lakeville for America Recycles Day. A private vendor sorted shoes and donated usable pairs.
- Athletic Gear Donation Drive, Dec. 1-17, a half ton of equipment collected for military families.
- **10 Little Free Libraries** were built by Boy Scouts for use by Mendota Heights residents.



#### **Fix-It Clinics**

Residents receive free guided assistance to repair items at monthly Dakota County Fix-It Clinics. These events help build community and keep household items out of landfills.

Fix-It Clinics evolved to keep residents safe as COVID-19 pandemic response shifted. After four months of virtual clinics (January – April), in-person clinics resumed in August at city park shelters. In October, the monthly events went back to pre-pandemic sites at libraries.

- 35 volunteers gave their time, patience, and knowledge
- 70 residents mended and repaired items
- 732 pounds of items kept from the trash
- 86 percent of the 114 items were repaired on site or the resident was shown how to fix an item later with the right materials.

# **Connecting People with Mattresses**

Dakota County staff brought together Certified Recycling, a Burnsville-based business, and the nonprofit Bridging to collect mattresses and box springs from county residents for reuse and recycling. Certified Recycling offered a reduced-rate pickup from Memorial Day to Labor Day. New for 2021, high-quality mattresses and box springs were separated and donated to Bridging for people in need. *See recycling numbers in Recycling section*.

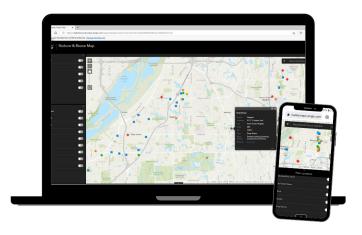
- Four trailer loads of good mattresses, box springs, furniture, and bed frames were donated to Bridging.
- 105 additional mattresses were donated during a special city-hosted collection Dec. 13-17 in Apple Valley, Burnsville, Eagan, Farmington, Hastings and Lakeville.

# Repair video series

To help residents that don't yet feel safe coming to in-person events or for those that want to try fixing their own items, staff worked with volunteer fixers to create a video series on repairing basic things. Communications staff recorded and edited videos about repairing a lamp, vacuum and sewing machine; how to do basic soldering; and, how to find good repair videos online. The videos, available on YouTube, have been seen by 210 viewers.

# New Reduce & Reuse Map

Residents now have an interactive online map to find locations to sell or drop off gently-used goods, rent or repair items, and to donate or buy used pieces. Users select filters for their specific needs and can click through to see location hours and more. Launched in November, the map was used by 1,341 people in 2021.



# Success Story: Waste Reduction at Park Nicollet Burnsville Clinic

Park Nicollet added waste reduction to their recycling initiatives for their Burnsville clinic expansion. Through the Business Recycling Program, staff incorporated reusable dishware for breakrooms in addition to color-coded and labeled containers for all spaces.

The clinic is recycling about 58,200 pounds of material each year and preventing waste by using reusable dishware instead of disposable food service items. Park Nicollet's Sustainability Coordinator noted, "These changes will not only decrease our waste and save us money in the long run, they were also a great way to engage our employees and patients in our sustainability program."



# Reuse at The Recycling Zone

The Reuse Zone at The Recycling Zone was actively used by residents to get free products:

- 287,262 pounds of items were given away.
- \$126,395 saved in avoided disposal costs

## Reuse in county operations

Dakota County auctioned surplus county equipment such as office furniture.

- 27 successful public auctions.
- 9,968 pounds of electronic waste collected for reuse and recycling

# Reducing waste in schools

The School Waste Prevention & Recycling Grant Program provides guidance and funding for waste reduction projects. Through the program, Echo Park Elementary in Burnsville reduced their dependence on disposable products:

- Reusable metal spoons and forks replaced about 107,000 disposable plastic sporks used annually;
- Echo Park's Green Team created a Green Team webpage to share recycling and reuse information, fun videos highlighting what goes where and information for teachers.

# Recycling

Dakota County Master Plan strategies focus on capturing both traditional recyclable materials- like paper, glass, plastic, and metal- and non-traditional recyclable materials like appliances and mattresses from all sectors – public entities, commercial, residential, schools and multifamily dwellings.

Of the total materials recycled:

- Paper and cardboard recycling decreased by 20 percent (77,538 tons)
- Glass recycling decreased by 12 percent (13,795 tons)
- Plastic recycling decreased by six percent (4,829 tons)
- Metal recycling increased by 88 percent (16,159 tons)
- Other recyclable materials appliances, tires, carpet, electronics, clothing, mattresses/box springs and batteries

- decreased by 14 percent (14,220 tons)

26% recycling rate for Dakota County businesses and residents

## Collection of non-traditional recyclables

- 29 city drop-off events and seasonal curbside collection efforts that diverted more than 215 tons of residential recyclable or reusable material from landfills\*
- **73 tons of confidential documents\*** dropped off by residents at city events to be shredded and recycled.
- More than 8.7 tons of clothing and shoes\* collected at city-sponsored, seasonal drop-off sites.
- **38 tons of mattresses and box springs** collected from residents- 42 tons from a public-private partnership with Certified Recycling to pick up from homes and 35 tons from city drop-off\* events.
- Nearly three tons of waste tires Dakota County and the Metropolitan Mosquito Control District collected from rural residents. An additional 3.58 tons collected by cities\*.
- **3.92 tons of string lights**\* collected from eight city sites, three county service centers and the Lebanon Hills Park Visitor Center. The bulbs were delivered to The Recycling Zone in Eagan and transported for recycling.
- **5.92 tons of agricultural and boat film plastic** 22 tons of silage bags, bunker covers and bale wraps from on-site farm collection went to Revolution Plastics and nearly 3 tons of boat wrap from a spring collection went to Up North Plastics to be made into new film plastics.
  - \*Projects funded through the Community Waste Abatement Program.







## **Rural Clean-Up Day Event**

Dakota County hosted the first clean-up day event for residents living in 13 townships and the cities of Coates, Hampton, Miesville, New Trier, Randolph and Vermillion. On August 28, 60 residents came by the county's Empire Maintenance Facility in Rosemount to drop off nearly four tons of cardboard boxes, mattresses and box springs, tires as well as on-site confidential documents shredding.

# Public space and event recycling

Based on city-reported data, only 160 of 476 buildings and parks were in compliance with state and county public space recycling rules at the end of 2020. In 2021, cities were allocated staff time and \$78,598 for container purchases through the Community Waste Abatement Grant Program.

On May 6, letters were sent to municipalities along with a summary of city-reported compliance. The letters requested each city submit a plan for achieving compliance but did not prescribe how to do so. The cities took several differing approaches and increased recycling opportunities by placing **328 new recycling containers in 114 municipal parks and public spaces:** 

- The City of Burnsville added new recycling containers or updated old ones in 41 parks. The city also put in new, decorative bins in the Heart of the City, Burnsville's downtown center.
- Inver Grove Heights went beyond parks to add recycling bins in three fire stations, the Veterans Memorial Community Center, and the Public Works Facility.
- Rosemount staff worked with the city hauling contractor, Highland Sanitation, to ensure each trash cart was paired with a recycling cart in all city parks.
- Staff in West St. Paul purchased new recycling containers for the ice arena and much-used disc golf course.
- Instead of adding recycling bins, Eagan removed trash containers in 14 small parks and placed responsibility on visitors to "carry-in, carry-out" their own waste.

## Recycling help at events

City staff helped 55 events provide recycling access to attendees, including many of the larger events:

- Apple Valley: Freedom Days, Nite to Unite, Music in the Park, BVU Cup Soccer Tournament in Apple Valley and Burnsville parks
- Burnsville: Touch-a-Truck, Party on the Plaza, Food Truck Festival, International Fest, Nite to Unite, Halloween Fest, Juneteenth Celebration
- Eagan: Market Fest (June Oct.), Big Rig Rally, Fun Fest, Food Truck Festival, Halloween HodgePodge, Nite to Unite
- Lakeville: Watershed Clean-up Day, Taste of Lakeville, Fire Waffle Breakfast, Pan-o-Prog, Heritage Waffle Breakfast
- Farmington: Dew Days, Farmers Market (June-Oct.)
- Hastings: Rivertown Days (3-day event)
- Inver Grove Heights: Food Truck Day, Food Truck Fest, IGH Days
- Rosemount: Leprechaun Days (some events), Food Truck Fest
- South St. Paul: Kaposia Days, Pancake Breakfast, Nite to Unite, On the Road Again
- West St. Paul: City Hall Open House



# Launch of Self-Service System

Dakota County offers free event recycling containers to residents and community partners throughout the year. In 2020, staff introduced the Pickup Point to city partners and, in 2021, rolled out the resource to the public.

The Pickup Point is a shed at the Western Service Center in Apple Valley where resources can be temporarily stored awaiting pickup and return. Residents or partners reserve materials online and are notified when items are available. The Pickup Point has proven to be more convenient for residents with busy schedules and more accessible by enabling access 24/7 and using a ramp. In 2021, fifty-two resources were checked out.



# **Recycling in county operations**

A robust recycling program in Dakota County buildings collects a large amount of recycling and provides an example to partners and visitors.

- About 269 tons of recyclables were collected at county office facilities based on dumpster audits.
   Weight data is not provided by the county's contracted hauler.
- Trash and recycling containers at the Administration Center and Judicial Center were paired and updated with color-coded labels containing consistent, standardized messaging and images.
- DC Works, the county's intranet, was updated with standardized recycling education to reduce confusion about what can and cannot be recycled or commercially composted. The updates included information on what to recycle/compost, what not to recycle/compost, how to recycle/compost and best management practices.
- Dakota County trained housekeeping staff on recycling procedures, including acceptable materials, best management practices and housekeeping responsibilities.

# Recycling upgrade at campgrounds

Dakota County has been collecting recyclables from campers at Lebanon Hills, Lake Byllesby and the White-tail Woods camper cabins since 2003. This year the county switched from giving out a camper recycling kit with plastic bags to a paper bag to collect recyclables. The change aligns with the county's Designated List of Recyclables where plastic bags are identified as a contaminant. The paper bags reduce unwanted plastic bags from being thrown into the recycling and act as an educational piece: the bag is printed with what to recycle and what to leave out.

# County Fair back with recycling

After many years of coordinating and implementing, recycling and organics collection opportunities are now expected by fairgoers and requested by food vendors. This year, Dakota County Fair and county staff placed 115 recycling containers next to trash containers for fairgoers to use during the August 9-15 event. Dumpsters were filled to the brim with clean recyclables. Food scraps totals located in Organics section.

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# Multifamily recycling program

**Staff assisted 48 properties through the Multifamily Recycling** Program – a 41 percent increase from the prior year.

- 11 buildings received recycling containers and labels.
- 37 properties only requested county staff to help educate residents.
- Program participants included 17 senior living complexes, 16 townhome developments, 12 apartment buildings, and three condominium associations. Of these, 21 (44%) were low-income housing.

Since the program started in 2017, staff have worked with 339 buildings reaching over 11,513 households and more than 16,000 residents.

County partnerships have led to more participation. City staff from Apple Valley, Burnsville, Eagan and Lakeville are now trained as multifamily recycling specialists and manage their own city-led, county-supported multifamily program. In addition, the county conducted a recycling training for Community Development Agency property managers at an all-staff meeting.

# Success Story: Wakota on Fourth Condominiums

County and South St. Paul staff assisted Wakota on Fourth, a condominium association with 35 units. Through the Multifamily Recycling Program, staff:

- added recycling containers to common areas and labeled all containers;
- gave residents tote bags to carry their recyclables to central collection areas; and
- educated residents with posters and webinars, presented a training video at a board meeting and gave resources to those who missed the other opportunities.

As a result of the project, Wakota on Fourth increased its recycling capacity by 64 percent and significantly reduced contamination in recycling. The property manager reported that the biggest benefit of participating in the program was getting recycling education for the residents and obtaining clear, colorful labels for their bins.



Number of properties by city in the Multifamily Recycling Program (2021)



# **Business recycling support**

The Business Recycling Program allocates up to \$10,000 per location to eligible businesses and non-profits to implement sustainable activities to reduce waste, start or improve recycling, and start organics recovery. Since the start of the program in 2016, 180 businesses have participated and diverted more than 2.57 million pounds of materials from the landfill. In 2021:

- County staff and consultants worked with **49 businesses** across a range of industries.
- **27 businesses received funding** for infrastructure improvements.
- Participating businesses diverted an additional 135.9 tons (271,856 pounds) of material from the landfill – a 64 percent increase over the previous year.
- Businesses ordered nearly 10,500 container labels and educational resources.

According to applicant responses motivations to be in the program have shifted. Businesses said their primary reasons to participate were Commitment to Corporate or Community Sustainability / Environmental Benefit (69 percent) and Compliance with the state's Commercial Recycling Mandate (23 percent). In 2020, applicants citing those same motivations were 88 percent (Environmental Benefit) and 4 percent (Compliance), suggesting that Dakota County's recycling ordinance is increasingly influencing business participation in the program.





#### Success Story: Baymont Inn & Suites

The Business Recycling Program helped Baymont Inn & Suites in Lakeville upgrade their recycling program. Staff coordinated to add recycling containers in the hotel's dining areas, fitness room, guest rooms and at outside entrances and label all bins with the standardized, color-coded signs. The county also provided interactive recycling training to help employees learn what can and cannot be recycled.

The hotel now has more recycling and cleaner recycling with about **4,000** more pounds of recyclables annually that otherwise would have been landfilled. Nehal Patel, owner and manager of the hotel, stated, "With all the changes we've made .. we have less contamination concerns, are happy to see the guest response to the new recycling bins and labels, and have even increased the number of pick-ups for our recycling dumpster."

# **Recycling in schools**

# School Waste Prevention and Recycling Grant Program

All public and private schools located in Dakota County are eligible to receive support including educational resources and grants up to \$10,000 to help start or improve waste management practices and educate students and staff. Of the 175 K-12 schools in Dakota County, 47 percent have participated in the program.

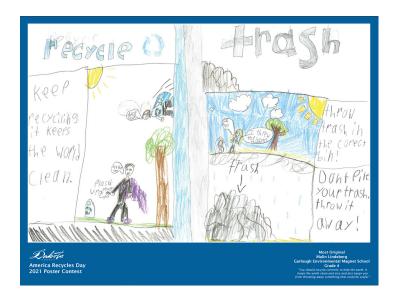
**Dakota County awarded 11 grants to assist 20 schools** in the 2021-2022 grant program including eighteen public schools, one charter school, and one non-public school. Projects include:

- Expanding indoor and outdoor recycling collection with new containers (including stadium and baseball field complexes)
- Enhancing cafeteria waste collection with a stainless-steel sorting table and color-coded containers and signage
- Implementing wasted food prevention best practices using share tables and cafeteria timers
- Replacing single-use items with utensils, baskets and other durable options
- Transitioning to bulk service with a condiment dispenser to replace single-use packets
- Reducing breakfast-in-the classroom waste
- Starting student Green Teams to support ongoing efforts

#### 7th Annual School Recycling Workshop

Dakota County hosted the seventh annual School Recycling Workshop virtually on July 20 from 8:30-11:30 a.m. A record 108 school personnel registered, and 64 registrants attended live, including administrators, buildings and grounds personnel, food service staff, teachers and Green Team leaders.

Presenters shared Green Team experiences, toxicity concerns from single-use products, how to transition to reusable service ware, outdoor recycling best practices and school recycling resources. All attendees found the workshop valuable, and 86 percent of participants plan to change their actions or make improvements as a result of attendance. One participant said, "I like that you come away with ideas and energized to try new things!"



#### Video Contest added to annual America Recycles Day poster contest

Fourth grade Green Teams and students were invited to participate in the 2nd annual recycling poster contest in honor of America Recycles Day. The contest theme was "Recycle Right." **Staff received 34 entries** – more than double the number of entries from the previous year.

- Overall 1st Place: Madison LaChapelle, Pine Bend Elementary, Inver Grove Heights)
- Most Original: Malin Lindeberg, Garlough Environmental Magnet School, West St. Paul

Winners received a professionally printed copy of the poster for their school. Winning posters were on public display at the Galaxie Library in Apple Valley for the month of February before being sent to each school.

New in 2021, students in grades 5-12 were invited to submit a 30-second video supporting the video contest theme "No Plastic Bags in Recycling." Ben and Sam Fisher, 11th graders from Eagan High School, were selected as the overall first place winners.

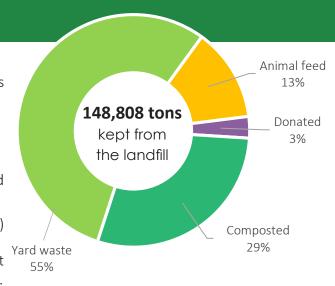


# Organics

Organics - food scraps, compostable materials and yard waste - was diverted from the landfill in a variety of ways:

- 1,865 tons donated to people in need (32 percent increase)
- 19,269 tons made into animal feed (one percent increase)
- 43,349 tons composted at commercial source-separated organics facilities (960 percent increase)
- 4 82,324 tons of yard waste was composted (19 percent decrease)

Overall, Dakota County businesses and residents diverted 29 percent of food scraps and other organic materials from the waste stream.



Total organics increased substantially in 2021. This increase can be attributed to several initiatives:

- Waste Regulation staff implemented a hauler inspection program to holistically approach hauler compliance. This incorporates data collection and reporting and new solid waste abatement requirements with established hauler license requirements.
- Waste Regulation staff continued to apply newly established requirements to commercial generators
- and focused compliance efforts on large generators of organics waste. Through inspection and outreach efforts, staff identified existing organics collection programs that had not previously been reported.
- Continued expansion and growth of the residential organics drop-off program.

# **School Organics Projects**

## Reducing wasted food in schools

The School Waste Prevention and Recycling Grant Program has incorporated best practices to prevent wasted food in school cafeterias.

- Nine schools updated food share tables. Students
  placed packaged food, whole fruit and unopened
  milk cartons on these tables which are put back
  into cafeteria circulation or donated outside the
  school.
- Three schools added flavor stations allowing students to customize their meals making them tastier and preventing wasted food.
- One school added a mini fridge to keep shared food fresh longer to redistribute later.

## Compost delivery for schools

Dakota County piloted free compost delivery to school recycling program participants with an organics collection program. Specialized Environmental Technologies (The Mulch Store) delivered one to five cubic yards of compost to schools. This project helped raise awareness of the benefits of compost.

- **Eight schools requested a total of 38 cubic yards** of compost to be used in vegetable and flower gardens, on-site plantings, potted plants and turf or grass repair.
- Most schools had not previously used compost as a soil amendment for use on school grounds.
- Survey results show that 100 percent of participants found the compost delivery valuable and 88 percent of participants involved students in spreading the compost.

# Organics diversion for residents

Residents are getting familiar with organics. Each city, through the Community Waste Abatement Grant, put an article in their city newsletter promoting the drop-off program.

#### **Organics Drop-off Sites**

- Dakota County partnered with the cities of Mendota Heights, Burnsville and Farmington to open three new organics drop-off locations.
- **7,939 households have registered** for the program with 2,363 households joining the program in 2021.
- Overall, residents dropped off more than 640 tons of food scraps and other compostable materials.

#### Participant education

Staff hosted a Facebook Live event in March with Dakota County Parks at the Thompson County Park organics site that was watched by at least 3,500 viewers and shared 22 times on Facebook. Master Recycler volunteers were interviewed during the segment to tell what they liked about the program.



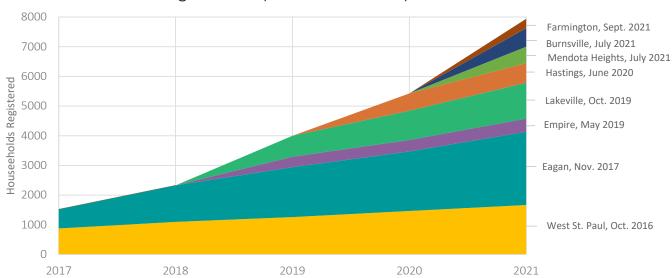
Kick-off events and information sessions were held for each new site in Mendota Heights, Burnsville, and Farmington to welcome new residents.

- 137 participants joined one of the six in-person or virtual information sessions
- About 100 people stopped by to check-out the new drop-sites and ask questions at kick-off events.

#### Annual compost bin sale

Through the Recycling Association of Minnesota spring sale, residents purchased 126 backyard composting bins – a 20 percent increase over the prior year. Dakota County promoted the event and provided residents with a 30 percent discount.

## Residential Organics Drop Site Total Participation



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## Food scrap collection at events

Collecting food scraps at large gatherings happened across the county in 2021. While weights of food were not always recorded, city and county staff gave resources and guidance for 10 large events:

- Burnsville: Party on the Plaza (food vendors only), Food Truck Festival (food vendors only), two large employee meetings
- Eagan: Food Truck Festival (food vendors only)
- Lakeville: Fire Waffle Breakfast, Heritage Waffle Breakfast (food vendors only), Taste of Lakeville
- West St. Paul: Nite to Unite luncheon, West St. Paul Open House

#### **Dakota County Fair**

After many years of coordinating and implementing, organics collection opportunities are now expected by food vendors. In addition to recycling resources, all 61 food vendors were offered a green bucket and compostable bags to collect food scraps in their booth. Ninety percent of food vendors chose to participate – the highest participation to date.



## Success Story: The Open Door Mobile Food Pantry

The Open Door Mobile Food Pantry recieves food that can't be given away and must be tossed. The county's Business Recycling Program helped the non-profit set up organics collection to capture this food waste.

With county staff guidance, Open Door staff set up a color-coded and labeled collection system and created a custom bag cutter to more efficiently open and empty bags of food (e.g., bagged salad and produce) into organics bins. In addition, the county helped educate staff and volunteers on proper sorting of recycling and organics.

Food scraps – about 15 barrels each week – are now sent to a hog feed operation, resulting in diversion of 61,790 pounds of food waste from the landfill annually.

Jason Viana, The Open Door Executive Director, said, "Throughout the pandemic, The Open Door has doubled the number of people served county-wide last year. Much of this demand is for our mobile programs, which travel to 28 sites from our distribution center in Apple Valley. The project helps us dispose of excess items unsuitable for our clients while avoiding food waste and helping farmers. Thank you!"

# Resource Recovery & Disposal

## **Resource Recovery**

Two percent of waste generated in Dakota County (10,013 tons) was converted into energy at a resource recovery facility through these facilities – 28 percent less than the previous year:

Facility	Tons Sent
City of Red Wing Resource & Recovery Facility	9,829
Olmsted County Waste-to-Energy Facility	181
Hennepin Energy Recovery Center	3

#### Continued partnership for waste-to-energy

State law requires public entities in the Twin Cities Metropolitan Area to use resource recovery facilities with capacity prior to land disposal.

Over the last few years, resource recovery facilities in the Metro Area have closed or reached capacity. Limited Dakota County waste was delivered to the Olmsted County Waste-to-Energy Facility in Rochester and the Hennepin Energy Recovery Center in Minneapolis. The City of Red Wing Resource & Recovery Facility was the only relatively close facility with capacity to accept and process a more significant amount of waste from Dakota County.

The cities of Hastings and Farmington in Dakota County provided waste pickup services for their residents and delivered trash to the Red Wing Resource & Recovery Facility. In 2021, Dakota County provided financial support to both cities to ensure that the Red Wing Solid Waste Campus operated at full capacity. This allowed the state to determine long-term landfilling needs.

## **Land Disposal**

Forty-four percent of the municipal solid waste (MSW) generated in the county was landfilled (226,809 tons; 10 percent increase over previous year).

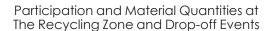
The county continues to face obstacles in meeting the Policy Plan objective to send a maximum of two percent of MSW to landfills. Privately-owned and operated landfills in Dakota County are conveniently located for waste haulers.

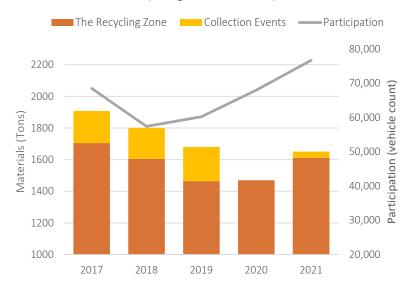
# <u>Hazardous</u> Waste

# **Recycling Zone updates**

The Dakota County Recycling Zone provides a year-round, convenient location for residents to bring household hazardous waste and recycling. Last year, a record 75,538 cars used the facility designed to serve only 15,000 vehicles per year. The continued increase in participation reinforces the need for an additional household hazardous waste collection and recycling facility to serve Dakota County residents.

For convenience, residents can drop off materials at any of the metro hazardous waste facilities. The metro counties pay each other back for their residents visiting other county hazardous waste facilities at \$35 per participant fee per visit. Under this agreement, metro area counties paid Dakota County \$183,435 to cover 5,241 of their residents visiting The Recycling Zone last year. These funds are applied towards program expenses.







Residents and businesses with small amounts of waste used The Recycling Zone to get rid of hazardous waste, electronics and other items.

- **75,538 households** visited The Recycling Zone (11 percent increase from the prior year).
- 1,612 tons of materials were managed (10 percent increase) including 1.9 million pounds of hazardous waste, 1.3 million pounds of electronics, 1.7 million pounds of recycling and 12,460 pounds of tires.
- 1,139 households participated in a collection event held in Burnsville delivering 15.9 tons of chemical and paint, 740 gallons of motor oil and flammable liquids, and 1,600 fluorescent bulbs.
- 267 businesses and municipalities brought 57 tons of hazardous waste through the Very Small Quantity Generator program.

# Outreach & Education

Outreach and education do not have specific measurement goals in the Policy Plan, but strategies were included in the Master Plan to address public education requirements in Minn. Stat. §§ 115.552 and 115A.96.

Dakota County staff and municipal partners used a variety of promotional outlets and in-person tactics to educate residents on recycling.

- **246,400 impressions** Cities conducted indirect education through social media, newsletters, emails and other outlets.
- **4,276 residents** directly educated by City partners through in-person events.
- **37 percent decrease in pageviews** for the residential recycling page over the previous year; **18 percent decrease** for The Recycling Zone page.
- **253 social media posts** about recycling, organics, The Recycling Zone or waste reduction.

The Dakota County e-news service provides waste and recycling education tailored to each audience:

E-news Audience	Number Sent	Sub- scribers	Annual increase in subscribers	Open Rate
Residents	12	2,241	+ 19.5%	45%
Businesses	6	405	+ 11.3%	32%
Schools	4	546	+ 12.1%	35%
Organics Drop Site Participants	11	6,469	+ 51.1%	59%
Master Recyclers	8	308	+ 12.4%	53%
Fix-It Clinic Reminders	4	286	unknown	54%
<i>NEW</i> Haulers	4	104	n/a	n/a

<sup>\*</sup>Fix-It Clinics reminders were sent by contractor prior to September 2021 and data was not available.

## New recycling resources

New materials and tools were created to help increase recycling knowledge:

- What Goes Where booklet sent to new residents
- Business compliance handout focusing on collection rules
- Event recycling documents: planning guide, signs, event container instructions, sample vendor contract language, vendor recycling guide, and resource guide
- The Recycling Zone brochure with new information about how to drop off
- A door hanger for the Multifamily Recycling Program used when door-knocking
- Campground paper bags replaced plastic bag kit

# **Recycling Guide directory**

The Recycling Guide continued to grow in 2021:

- 23 percent increase in use from the previous year (2021 user sessions: 65,334)
- 127,310 material searches 60 percent increase
- 57,779 first-time users 40 percent increase
- 1,709 waste sort games played 14 percent increase

# Recycling Guide Top 5 Searched Items

- 1. Mattresses & box springs
- 2. Furniture
- 3. Microwave
- 4. Plastic bags & stretchy film
- 5. Carpet & padding

# Master Recycler/Composter Program

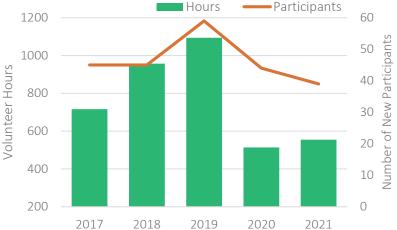
The Dakota County Master Recycler/Composter program completed its seventh year with 39 new participants—bringing the total number of volunteers to 373. This year:

- Six additional graduates completed their obligatory 30 hours of volunteering
- Volunteers gave 554.5 hours to the program
- Master Recyclers engaged with 2,969 people at various events

Participants fill out a pre- and post-class test to see if they gained basic recycling knowledge.

- The spring class went from 71 percent correct answers to 81 percent
- The fall class went from 73 percent correct answers to 81 percent







# Keep It Loose Campaign

Plastic bags are one of the biggest headaches and safety issues for recycling facilities because the bags tangle around sorting equipment and must be cut out by staff using power tools. Environmental Resources and Communications staff visited the Recycle Minnesota facility in Lakeville, operated by Dick's Sanitation and Waste Connections, to document the mess that plastic bags cause.

The images and footage were used in the county's Keep It Loose campaign that ran from July through December. Residents were urged — and are required — to keep plastic bags out of the recycling and throw bottles, cans and paper into the recycling cart loose. Residents saw the campaign through videos, social media, print ads, a direct mailer and more — resulting in 8,512,885 impressions. More than 13,100 residents were directly educated based on presentations, clicks on online ads and reactions to social media posts.

# Regulatory Initiatives

Solid Waste Management Ordinance (Ordinance 110) revisions were adopted in 2019 to implement the regulatory strategies in the Master Plan and support managing waste in accordance with the waste management hierarchy. Requirements phase-in through 2025.

Ordinance 110 changes included new recycling and waste management requirements for residents, commercial entities and waste industry. Requirements are designed to standardize recycling and organics collection to:

- Reduce waste going to landfills by universally mandating source separation of recyclable materials;
- Improve the quality of materials recycled and organics collected with designated lists for recyclables, organics and contaminants; and
- Make progress toward the state's goal to recycle 75 percent of waste by 2030 with established best management practices.

# **Regulatory Compliance**

County staff developed a strategic, multi-year ordinance implementation plan that prioritizes and focuses compliance outreach with entities that have the highest opportunities to help the county make progress towards the 75 percent recycling rate goal (e.g., businesses that generate high amounts of organics and waste haulers).

New regulations that went into effect in 2021 are listed below, and the county regulatory initiatives that went into effect in 2021 to support compliance.

**Commercial Generators -** businesses, schools, multifamily properties, governments

**Requirement**: All commercial generators must collect the designated list of recyclables and follow best management practices, including:

- Keep the designated list of contaminants out of recycling;
- Label containers in accordance with commercial generator label standards;
- Ensure sufficient collection schedules and capacities for all indoor and outdoor container locations, public spaces, and communal spaces;
- Ensure each trash container (or trash chute) is co-located within 10 feet from a recycling container (or recycling chute), ensuring equal access;

- Ensure trash, recycling and organics (if collected) is delivered to the appropriate permitted facility;
- Provide standardized waste abatement messaging in accordance with commercial education standards; and
- Annually report compliance on county forms.

**Regulatory support:** County solid waste inspectors started to conduct education and compliance inspections, prioritizing inspections at food manufacturers, wholesalers, and distributors. Staff used newly-created brochures for multifamily properties and businesses to explain new requirements. County regulatory inspectors worked to get inspected businesses into compliance. County resources were offered to help with improvements, including grant funding, technical assistance, container labels, and employee education guides. In addition, recycling compliance education was incorporated into business hazardous waste inspections.

The county provided municipal governments with an interactive online tool for them to monitor and self-report the status of recycling compliance at each of their properties and grounds such as city halls and parks. The tool provided real-time information to help municipalities prioritize which municipal properties still need improvements.

#### **Residential Generators –** households

**Requirement**: All residential generators must collect the designated list of recyclables and keep the designated list of contaminants out of the recycling.

**Regulatory support**: The county promoted recycling using standardized messages throughout the year using various communications channels (e.g., county newsletter, social media, e-news, website, MRC classes, resident programs, campaign videos and direct mail). Cities also used standardized messages in their communications channels.

# Municipal Requirements for a Solid Waste Abatement Program

**Requirement**: All of Dakota County's cities with populations over 10,000 adopted recycling requirements for multi-unit residential properties and large events to mirror county Ordinance 110 requirements. City codes that incorporated these requirements were adopted by: Apple Valley, Burnsville, Eagan, Farmington, Hastings, Inver Grove Heights, Lakeville, Rosemount, South St. Paul and West St. Paul.

Regulatory support: To help municipalities enforce their new requirements, the county assisted cities with compliance and enforcement questions and established reoccurring county/city coordination meetings to share compliance and enforcement procedures and successes for new city multi-unit residential building and event requirements. In addition, the county developed resources and tools (e.g., code inspection form, multifamily requirement brochure, model language to update mechanisms such as rental agreements) and shared with cities to help them implement their new codes.

#### Waste haulers

**Regulatory support**: No new requirements for waste haulers went into effect in 2021; however, the county continued to work with them to incorporate standardizing customer education messages into mailed recycling information. County staff developed standardized templates and shared with the waste haulers to help them more easily comply with customer education requirements. In addition, the county continued to offer design files and free self-adhesive recycling and organics container labels for their dumpsters and carts. Dakota County provided over 52,000 standardized labels to interested haulers. The county also worked with haulers to prepare for requirements that will go into effect in early 2022 that affect them and their customers, including weekly residential recycling collection and commercial back-of-house organics collection at food wholesalers, distributers and manufacturers, and grocery stores.

In an effort to better communicate with hauling partners, county staff created a new e-news to send seasonal reminders and suggested content to share with their customers.