Recycling Access for Citizens with Disabilities















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This publication outlines actions, steps and resources that organizations, municipalities and businesses can use to make their recycling program and resources more accessible to citizens and employees with disabilities.

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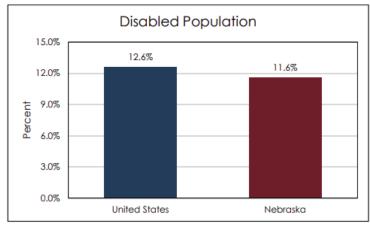
Introduction

According to the <u>Center for Disease Control in 2024</u>, more than 1 in 4 (28.7%) adults in the United States have some type of disability. For the purposes of this document, we want to define both disability and access. According to the <u>Americans with Disabilities Act of 1990</u>, a person with a disability is someone who 1) has a physical or mental impairment that substantially limits one or more major life activities (such as blindness, deafness or missing limb), 2) has a history or record of such an impairment (such as cancer in remission, or 3) is perceived by others as having such an impairment (such as a person who has scars from a severe burn). We recognize that we cannot address all disabilities in this document and therefore it is not exhaustive, but hopefully it will highlight some accessibility considerations and accommodations for individuals with disabilities, regarding recycling services.

We define access as "the conditions that shape people's opportunity and ability to recycle." The conditions related to access influence each person's recycling behavior. Therefore, improving access conditions so that every person has the opportunity to recycle is vital. The more citizens we can provide services to, the more material will be recycled, increasing environmental, social and economic benefits to the community. Improving recycling access also strengthens community involvement and inclusion, according to The Recycling Partnership's Impact Report 2022.

Disability Demographics in Nebraska

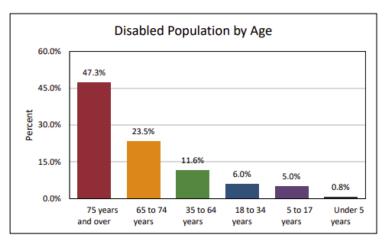
According to the Department of Health and Human Services, Disability in Nebraska: Demographics and Selected Outcomes Report (2021), the percentage of Nebraskans with a disability is 11.6%, which is slightly lower than the national average of 12.6%.



Source: 2019 American Community Survey, 5-Year Estimates

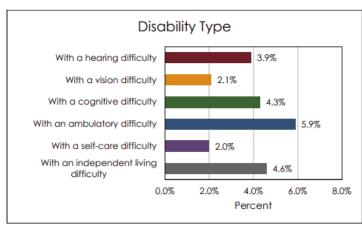
| Disability Population | Estimates | Percentage |
|-----------------------|------------|------------|
| United States | 40,335,099 | 12.6% |
| Nebraska | 218,839 | 11.6% |

Of those Nebraskans who have a disability, 47.5% are 75 years and over, 23.5% are 65-74 years old and 11.6% are 35-64 years old.



Source: 2019 American Community Survey, 5-Year Estimates

| Age Group | Estimates | Percentage |
|-------------------|-----------|------------|
| 75 years and over | 55,935 | 47.3% |
| 65 to 74 years | 38,469 | 23.5% |
| 35 to 64 years | 80,208 | 11.6% |
| 18 to 34 years | 26,170 | 6.0% |
| 5 to 17 years | 17,048 | 5.0% |
| Under 5 years | 1,009 | 0.8% |



Source: 2019 American Community Survey, 5-Year Estimates

| Disability Type | Estimates | Percentage |
|---------------------------------------|-----------|------------|
| With an independent living difficulty | 64,264 | 4.6% |
| With a self-care difficulty | 34,198 | 2.0% |
| With an ambulatory difficulty | 102,677 | 5.9% |
| With a cognitive difficulty | 76,071 | 4.3% |
| With a vision difficulty | 38,662 | 2.1% |
| With a hearing difficulty | 73,772 | 3.9% |

2.1% of Nebraskans have a vision disability, 3.9% have a hearing disability and 5.9% have an ambulatory disability.

Specific disabilities can impact a citizen's ability to recycle and/or receive information about a recycling program in their area.

The Inaccessibility Cycle

The Inaccessibility Cycle was developed by a disability advocate @pacingpixie who is a

wheelchair user living in the UK. This cycle clearly demonstrates the issues encountered during research and exploration of the recycling access issue. If disabled people are not visible in public, they may be seen as an outlier or rarity, and if that's the case, people may think that there's little/no need to consider them, with regards to recycling services. This thought process leads to inaccessibility and therefore, disabled people are unable to participate. Through the work of this initiative, we hope to break the inaccessibility cycle.



Accessibility considerations for recycling programs

Depending on disability type, different accessibility considerations may be applicable for citizens to recycle materials or acquire information about your recycling program. This section will explore various suggestions for both the act of recycling as well as obtaining information about a community program.

Physical Access

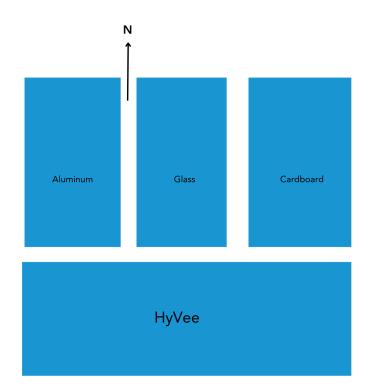
Some communities offer disability accommodation for curbside service, where citizens can sign up for non-curbside collection services, if they are physically unable to place their collection carts at the curb or alley for regular collection. Both the cities of Des Moines, Iowa and Omaha, Nebraska provide this option.

Regarding public recycling drop-off locations, there's a few items to keep in mind:

The height of roll-off container openings may make it difficult for wheelchair users to place materials inside, due to the height as well as the weight of materials they have to lift. In addition you'll want to make sure there's ample space between roll-off containers

to allow wheelchair users to access both containers as well as space for the materials they will carry to the container. Based on current ADA regulations, we would recommend a 60 inch distance between roll-off containers, walls, fences or similar structures (ADA regulation 403.5 and 403.5.3) and recycling container openings no higher than 48 inches off the ground (ADA regulation 308.2.1, 308.3.1 and 309).

For blind and low vision citizens, it may be helpful to provide a drop-off location layout



description, using cardinal directions, and post that on your community recycling website or social media accounts. This would provide some orientation to citizens before they arrive at the drop-off location and they will know which container holds each material, if they are unable to read posted signage.

As an example, if the roll-offs were in the blue example configuration, you could post "Three rectangular roll-off containers are in the HyVee parking lot, north of the main store building. From east to west, you'll find the cardboard roll-off, the glass roll-off and the aluminum can roll-off. Container openings are

found on the east and west sides of each container."

To assist blind citizens to differentiate between trash/landfill and recycling bins, you can try using bins with different shaped openings. For example, for cans and plastic bottles, the opening would be circular and for paper sheets, the opening would be a slit, rather than a large opening. These differing shapes can assist someone who is blind to determine what material goes where for recycling.



Communication Materials

Alt Text

As for communication materials, we encourage people to get into the habit of adding image descriptions (alt text) to all photos. For those citizens who use screen-reading technology because they are blind or low-vision, adding alt text provides them with a visual description of the photos included in a social media post or webpage.

Here's a step-by-step guide on how to add alt text to your electronic media:



- 1) Choose the photo you'd like to use
- 2) Upload it to the website page, social media platform
 - 3) Select "edit photo"
- 4) Select "alternative/alt text" or image description
- 5) Add custom alt text by describing the main focus of the photo, what action is happening and the background. Note the emotion on people's faces, the overall photo atmosphere and anything else essential to highlight.

For this example photo, alt text

could be: "Two Caucasian middle aged men sitting beside a brown manual wheelchair, cleaning and preparing it for an event. One man is sitting on a stool, wearing disposable gloves, and the other man is crouched beside it, gesturing.

6) Save alt text and post your photo.

Alternatively, you can include an image description directly in a social media post, however if you do that, you don't need to also add alt text in the edit setting.

Website

Regarding website accessibility, it's best to familiarize yourself with <u>WCAG 2.2</u> standards (web content accessibility guidelines) so that your website content is

accessible to all citizens. This may be a long-term goal for your organization, as websites can have a lot of content to share. You may also need to hire a website accessibility consultant, depending on your budget and website size/layout.

Video

When making videos for social media or websites, be sure to include closed captions and audio descriptions on the video clips so that deaf and blind citizens have equal access to information portrayed in the created videos. Audio descriptions share what someone can see visually in the video and it's usually heard between dialogue or general narration of a video clip.



Event Considerations

If you staff an informational table for your organization at events and festivals, you can provide QR codes as an alternative to paper handouts for blind visitors. You'll need to inform blind visitors to your table about the QR codes' availability, but this is an alternative way to provide accessible information to the blind community. They can scan the QR code with a smartphone and use screen

reading technology to read the data in your QR code-linked document. If you have any tactile items, props or models at your booth, these items are great to explain your organization's purpose and mission to the blindness community.

When organizing public collection drop-off events, please confirm that entrances to your event are accessible to wheelchair users with clear curb cuts and ramps and near public transit options for those citizens who do not drive cars. You might also consider offering moving assistance to citizens who are unable to carry materials themselves and/or do not drive. It's also helpful to include a reasonable accommodation disclaimer on event flyers/promotional outreach, with contact information included.

Durable Medical Equipment Collection and Rehome Events



Durable medical equipment (DME), such as powerchairs, hospital beds, manual wheelchairs and walkers often can be large, heavy and difficult to dispose of, but a needed item for many individuals. Sometimes these items end up in the landfill or stored in a garage or basement for years, even though they are still in good condition. To prevent

that from happening, if you want to organize a durable medical equipment collection/rehome event in your community, here are some steps to get started:

- 1) Partner with an organization or individual(s) who is knowledgeable about durable medical equipment, such as the <u>local Aging Office</u>, DME vendor, medical facility, or state agency or non-profit organization that works with individuals with disabilities. If possible, find an organization that can accept donated equipment that is still usable, if not rehomed during your event. Storage space is often limited for these types of organizations, so that may be a challenge. They will be essential to identifying donated equipment, assessing condition, and preparing it for a rehome event.
- 2) Determine what equipment you want to focus on. There are some items that are harder to dispose of, rehome and work with. Will you only accept equipment in good condition or also broken/old items? If you accept power chairs or electric scooters, for example, do you have personnel and tools to remove dead batteries? Do you have the physical strength to handle large/heavy items like hospital beds or power chairs? What items are most needed in your community/area?

Here's the accepted/not accepted equipment list from NRC's recent Rescue and Reuse events:

Accepted Equipment:

Lift Chairs in good condition (no fabric rips)

Steel Frame Hospital Beds

Power Wheelchairs

Hoyer Lifts

Portable Ramps

Wheelchair Lifts

Stair Lifts

Seated Wheeled Walkers

Tub chairs and benches

Power Scooters

Manual Wheelchairs

Aluminum walkers with rubber feet or slides on back

Crutches

Canes

Not Accepted Equipment:

Oxygen concentrators/tanks, AED (Automated External Defibrillator) units, CPAP machines and supplies, prosthetics, medical boots and braces, blood pressure cuffs, mattresses, expired/opened medical supplies

3) Find a location to host an event, plus equipment storage space and space for



assessment, cleaning and preparation. Depending how many days you will accept equipment, the space may need to be sizable to house everything you receive. Make sure the general public can find it easily and that it is accessible.

4) Find a scrap metal/battery recycling vendor, so you can accept any equipment that is broken, old and/or unusable. You may want to get a roll-off container from them so you can

- easily put broken, old equipment in the roll-off to be recycled. A pallet for dead batteries may also be helpful.
- 5) Organize community outreach and promotion, including website, paper flyers, social media posts and advertisements through radio, TV and newspaper, so the public knows where to bring equipment and when they can acquire equipment for themselves, if you decide to rehome donations. Reach out via email or phone to disability organizations, veteran organizations, assisted living facilities, auction/estate sale companies and share all of the relevant information about your event. Word of mouth is powerful with these types of events!



- 6) You may want to create a liability form for people to sign, if they take equipment home with them. If applicable to the event host organization, you may also offer to send a donation letter for tax purposes to people who donate equipment.
- 7) Keep in mind that people who participate in these events may be family members, friends or caregivers of people with a medical condition or disability, so be prepared to

interact in a respectful manner. They may have lost someone and may donate the equipment after their loved one's passing.

- 8) Share the impact/results of your event publicly! Tell the stories of people who participate.
- 9) Data tracking is essential, especially if this event is grant funded or being used as a tax write-off. You can track data like equipment collected, equipment brought home, number of people participating, zip codes of participants, volume of scrap metal and batteries diverted from landfill.

Event Supplies List:

- Sign-in sheets for equipment drop-off
- Pens
- Paper towels
- Soap

- Bleach
- Sprayer
- Gloves
- Ramps
- Source of water (spigot and hose)
- Tools for equipment repair and removing batteries from power chairs
- Clipboard with list of accepted/not accepted equipment
- Signage
- Extension cord
- Laptop
- Table and chairs for sign-in
- Liability form for equipment rehome event
- Roll-off dumpsters for scrap metal and landfill
- Wooden pallet

Durable Medical Equipment Resources in Nebraska

Assistive Technology Partnership (statewide)
Independence Rising (50 counties in central and western Nebraska)
HELP Equipment (Eastern Nebraska)
Chrissy's Closet (Lincoln area)
Nebraska Methodist Equipment Loan Program (Omaha area)

Next Steps

The Nebraska Recycling Council provides resources like this publication to communities, organizations and businesses to increase recycling access for citizens with disabilities. We prioritize continuing partnerships, conversations, research and advocacy for recycling access in Nebraska for citizens with disabilities. We welcome conversations with people with disabilities and want to involve them in this important work.

The Nebraska Recycling Council thanks the Nebraska Environmental Trust, who provided grant funds for our Rescue and Reuse: Durable Medical Equipment Collection and Rehome Events in Scottsbluff and Lincoln in 2024 and in Kearney and Omaha in 2025, as well as multiple important partners.

Resources

Let's Talk about Recycling and Accessibility (2021 Nebraska Recycling Council webinar on recycling access): https://youtu.be/W8sJFBLK3Do?si=Knu_mQCMpuar2BRO

NRC Recycling Access for People with Disabilities: https://nrcne.org/recycling-access-for-people-with-disabilities/

WCAG 2.2 Guidelines: https://www.w3.org/WAI/standards-guidelines/wcag/

Americans with Disabilities Act of 1990: https://www.ada.gov/

ADA Standards: https://www.access-board.gov/ada/about.html

Disability Rights Nebraska: https://www.disabilityrightsnebraska.org/

Center for Disease Control:

https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html

Addendum 1: Tracking Template for Equipment Drop-off Events

Event Equipment Drop-off Sign-in Form Location, Date

| First Name | Last Name | Zip Code | Mailing Address if donation letter desired | Equipment description |
|------------|-----------|----------|---|-----------------------|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |