



Courting Cartons in Madison, WI

Building district-wide carton recycling in Madison, WI

When Chris Jimieson and Kim Warkentin, two parent volunteers at Leopold Elementary in Madison, WI, conducted a waste audit from the cafeteria in March 2018, they learned the school was typically producing 60 bags of trash per day. The waste audit also revealed that an established recycling program could potentially reduce waste volume by 75%.

Using enthusiasm from the waste audit, parents, custodial and school staff and students joined forces to launch a recycling program in May 2018. The objective was to capture milk and juice cartons and paper lunch trays for recycling from the cafeteria. Putting recycling practices into action, on consecutive days, the school reduced the waste volume to just 13 and 16 bags of trash.

District staff were paying close attention as the Leopold recycling program got up and running. With success, the District planned to replicate the recycling program district wide. The program had the potential to reduce waste pickups, reduce milk waste, save custodial efforts, and inspire students to take recycling practices from schools to their homes.

The Carton Council of North America, an industry association committed to growing carton recycling across the U.S., provided grants to the Madison Metropolitan School District (MMSD) to help grow and expand the program. They worked closely with SCS Engineers and [Sustain Dane](#) to lead the efforts to scale up the recycling program in the Madison Metropolitan School District, which is Wisconsin's second largest school district.

Leopold Elementary sustained their recycling program's success through the 2018-2019 school year and into the 2019-2020 school year. Meanwhile, Carton Council funding helped to conduct a waste audit and recycling program launch at Cherokee Heights Middle School in Madison in the fall of 2019. That launch helped the partners determine that the greatest opportunity was to scale up recycling programs in elementary schools first, as that is where the largest quantity of cartons resides.

In late fall 2019 and early 2020, the Leopold parent volunteers were working to scale up Leopold Elementary's recycling program to include the capture of milk and juice cartons from classrooms, along with the cafeteria. Students had breakfast in the classrooms, so the thought was to set up multiple recycling stations around the school to help in recycling cartons and reducing waste.





As momentum built, COVID-19 arrived and upended typical school operations in March 2020. When students eventually returned to the school in April 2021, meals formally in the cafeterias were now in the classrooms. The recycling station ideas from early 2020 were developed, and they found that recycling practices were largely dependent on if the classrooms had sinks. Through trial and error, an effective two-option system (dependent on if the classrooms had sinks or not) was developed to help best collect and recycle the milk and juice cartons.

At Leopold, only a small percentage of their classrooms had sinks, so they used a hallway recycling station model. Students poured any remaining milk into a container and then placed their cartons into a recycling bin and disposed of any remaining trash. Signage was posted on the carton recycling, trash bins, and waste liquid collection containers at each hallway station. Students and staff accomplished a high level of carton recycling by fall 2021. In a waste audit conducted by SCS Engineers and Sustain Dane, 212 recycled cartons were collected, compared to just five cartons being incorrectly placed in the waste (based on checking three bags of classroom waste).

Stephens Elementary School was identified to conduct another pilot. Most of their classrooms had sinks within, so a classroom model was tested. Students would empty the remaining milk into the classroom sink and then place their cartons into a dedicated carton recycling bin within their classrooms. Remaining meal waste went into the classroom trash cans. Stephens also had great success, their waste audit found 241 recycled cartons were collected, compared to just three cartons being incorrectly placed in the waste (based on checking one day's waste from all the school's classrooms).

At both schools, they found success in finding new ways to recycle. Additionally, the recycling education had a ripple effect, empowering the students to take the recycling messages home to educate their families and their community. One Stephens Elementary student shared how he stopped his dad who was about to throw a carton in the trash, teaching him how and why to recycle it instead.

In the fall of 2022, recycling programs were piloted at several more district elementary schools. With past work and learnings, the program is equipped to customize the program to fit each school's operations. While some schools have moved back to the cafeteria, several schools continue to have meals in their classrooms. The objective remains to launch recycling programs at all 33 elementary schools by the end of the 2022-2023 school year with plans to expand to all MMSD schools within the next few years.

