

Zero Waste and Recycling Stations – UMC

Basic Organizational Information

The CU Recycling Program operates as a partnership between USCU, Facilities Management, and the Housing department. The organization's main mission is to divert as many recyclable materials from the landfill in a cost effective manner, while providing meaningful involvement for students. A combination of full time staff and paid student staff make this program effective through its day to day operations, as well as in its long term goals.

Primary Contact Person

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Project Description

As the University Memorial Center is the hub of student activity on the CU campus, a large amount of recyclable waste is generated from the day to day activities. The main focus of this project is to expand capacity and visibility of recycling collections in the UMC through additional and updated recycling cabinets (stations).

The main areas for capacity expansion include:

- 1st floor by bathrooms near Baby Doe's
- UMC 235: Zero Waste Station
- 3rd floor outside of room 308
- 5th floor lounge area

The current state of the recycling cabinet on the 1st floor near the bathrooms is very poor, since it is more than 15 years old. Doors are falling off the hinges and the cabinet is falling apart. Also, it is currently a 3-bay cabinet. At this location, we are proposing a new 4-bay cabinet that will have added capacity for recycling collection (mainly office pak), leading to ease of use and better visibility.

UMC 235 is a large room where many events are held. These events generate various types of recyclable waste that include commingled containers, mixed papers, and organics (ie: food scraps and compostable products). Currently, UMC 235 does not have any waste receptacles beyond the basic trash cans for any events held there. To capture any of the recyclable materials that are generated from events in 235, CU Recycling must place specific bins for the event and then remove them once the event is over. This becomes very time consuming for Facilities Management and the CU Recycling staff. It also becomes nearly impossible to be at every event that is held in this room, leaving times when recyclable materials are not captured. At this location, we plan to install a 4-bay recycling cabinet to capture the following materials: Commingled Containers, Compost, Office Pak, and Newspaper. This station would be more elaborate than then other cabinets in the UMC for functionality and appearance. Specific features would include rolling castors for mobility and birch wood, as suggested by the UMC Associate Director, Jimmy Baker.

The recycling cabinets on the 3rd and 5th floors are also in poor shape, as they have also been around for about 15 years. These cabinets have also been designed with a 3-bay capacity. To increase capacity and visibility, we are proposing to build new 4-bay

cabinets on the 3rd and 5th floors. This will allow for extra types of materials to be collected (mostly office pak).

All locations for recycling station placement/expansion will be collected by the CU Recycling Student staff. Since there is only one location that does not currently have recycling (UMC 235), this will not be a large increase in labor time for CU Recycling.

Project Scope & Timeline

For two main reasons, the Zero Waste Stations would be built by the CU Carpenter Shop. One, the CU Carpenters have built many recycling cabinets for the campus buildings and they know about the necessary specifics needed to build functional, visually pleasing cabinets. CU Recycling has been satisfied with their production of recycling cabinets in the past. Two, by keeping the labor local, we are keeping the money local and supporting the University employees. Local production also reduces the need to transport materials and finished products, which reduces the attached carbon emissions.

The implementation timeline is expected to be as follows:

- November
 - Design cabinet to match each area’s dimensions
 - Work with Carpenter Shop to order materials
 - Start production of stations

- December/
January
 - Production of cabinets
 - Develop signs for stations

- February
 - Install the stations with signs
 - Train CU Recycling UMC Collection employees
 - Train UMC Catering about stations and their use

This project should only take one main person to implement. This “Project Manger”, Dan Baril, will be responsible for seeing the stations from design to production. Necessary departments that need to be involved include the UMC Board, UMC Catering, CU Carpenter Shop, and CU Recycling.

Detailed Project Budget

Item	Cost
4-Bay Zero Waste Station (UMC 235)	\$ 1,700
4-Bay Recycling Station (1 st Floor)	\$ 1,200
4-Bay Recycling Station (3 rd Floor)	\$ 1,200
4-Bay Recycling Station (5 rd Floor)	\$ 1,200
Bins for inside cabinets (16 total @ \$37ea.)	\$ 592
Shipping and Handling	\$ 0
Total	\$ 5,892

Environmental Impact

Since there are currently no permanent recycling containers in the UMC 235, recyclable materials that are generated at events there are not always captured. By providing a permanent recycling option, via the Zero Waste Stations, people will always have an option to recycle their waste during events in that room.

Also, by eliminating the need to deliver and collect container for every event, we are eliminating the need to drive a vehicle to drop off/collect these containers. This will

ultimately lead to a reduction in carbon emissions from the recycling fleet, further improving the benefits associated with the recycling process.

Furthermore, as we are expanding capacity for collecting recycling in the UMC, there will be more materials diverted from the landfill.

Quality of Life and Student Involvement

As this project requires professional carpenters to build the recycling stations, there will not be much student involvement in the actual production of these stations.

However, quality of life for all those who attend events in the UMC will be improved because the attendants will now have the option to recycle their waste. Along with saving precious natural resources, attendants will feel more environmentally minded because they have disposed of their waste properly.

Also, people who are exposed to the Zero Waste Stations who do not know about recycling or composting will become educated about proper waste disposal. By exposure to the options they have for recycling, they will learn that not all waste is trash. Ultimately, this will help them make informed decisions in the future and help them see the results of their actions.

Saving Money

As an increased collection of recyclable materials leads to a decrease in the amount of trash that needs to be collected, there is a potential savings in the avoided trash disposal cost. This avoided cost may be significant depending on the number of events at the UMC, along with the size of each event.

Also, by eliminating the need for recycling containers to be delivered, set up, and collected at the UMC, there is a reduction in the labor hours for the Facilities Management Recycling crews to visit the UMC. These labor hours can be spent collecting valuable recyclables at other locations on campus.

Project Longevity

As the CU Carpenter Shop performs quality work, it is estimated that these Zero Waste and Recycling Stations will be around longer than the first cabinets that were built for the UMC, which lasted about 15 years. Since the desire of the stations are to be permanent, it will be ensured that they are built with the highest quality materials to last many years.