

# CASE STUDY

## Central City Concern: Recycling and Reuse Operations Center

*A REvolve Waste Project*



# CLIENT PROFILE

Central City Concern (CCC) provides comprehensive solutions to ending homelessness and achieving self-sufficiency. Part of their work includes providing housing, and nearly half of the 1700 housing units they manage are transitional, primarily for people newly engaged with CCC's addiction treatment services.

In the fall of 2014 REvolve partnered with CCC to divert left behind textiles from landfill and redistribute them to people in need. As a result of this collaboration, more than 15 tons of clothing and housewares will be saved from the trash in 2016, helping improve lives within the community, and uncovering exciting possibilities for how this pilot can begin to shape what's possible for the used textile management infrastructure of the future.

## OPPORTUNITY

CCC operates a robust housing program for people who are transitioning from homelessness into self-sufficiency. These individuals are particularly prone to experiencing crises, which can lead to them abruptly leaving their homes. In this case, people leave behind assorted items: clothes, linens, housewares, etc, most of which CCC was forced to throw away if they remained unclaimed. In addition, CCC has thousands of new clients and residents enter their programs every year, many of whom arrive with few possessions.

Instead of sending what is left behind to landfill, there was an opportunity to provide new clients access to the items that are still in good condition. In order to accomplish this goal, a sorting and redistribution system to manage thousands of pounds of clothing and other housewares every month needed to be developed and implemented.

The need and mission at CCC presented a powerful opportunity to leverage the human value of textiles and explore specialized sorting and redistribution

models. Together, REvolve and CCC launched a pilot project whose goals were to divert as much as possible from landfill, help those in need, and provide insight into new frameworks for textile collection and sorting. CCC was so encouraged by the pilot's results, they adopted the program, created a new Recycling and Reuse Coordinator (RRC) position to staff it, and built out a space to continue the effort. This new facility is appropriately named the Recycling and Reuse Operations Center (ROC).

## SOLUTION

The pilot project lasted 16 months and tested methods to sort, store, and redistribute clothing and footwear through a variety of channels. It also explored and developed techniques to mitigate risks associated with sharps and pests. Once testing was finished and stakeholder input was collected, the team defined best practices and created the tools to transition the pilot into a permanent program.

The system was designed with a basic framework whose components are easily modified based on stakeholder needs, the waste profile, and available local resources. Sorting categories group usable clothing, footwear, and housewares by end use as they relate to the needs of CCC clientele and other redistribution channels. Redistribution channels were chosen based on the cross section of inbound materials, CCC programs and client needs, other local agencies able to use overflow items, and the inbound materials requirements of area recycling facilities.

Today the ROC manages over 3000 pounds of abandoned property and donations every month, and it has the capacity to increase the volume handled by an estimated 15-20%. Items are collected, sorted, and redistributed to clients, other agencies in the area, or put into recycling channels when reuse is not an option.

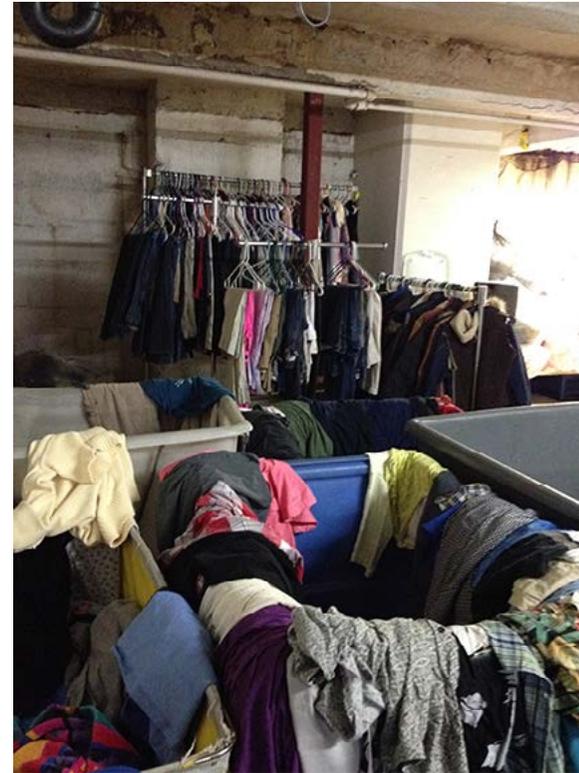




*Left behind items ready for sorting*



*Sorting process trials and an increasing volume*



*Staging and storage system development*

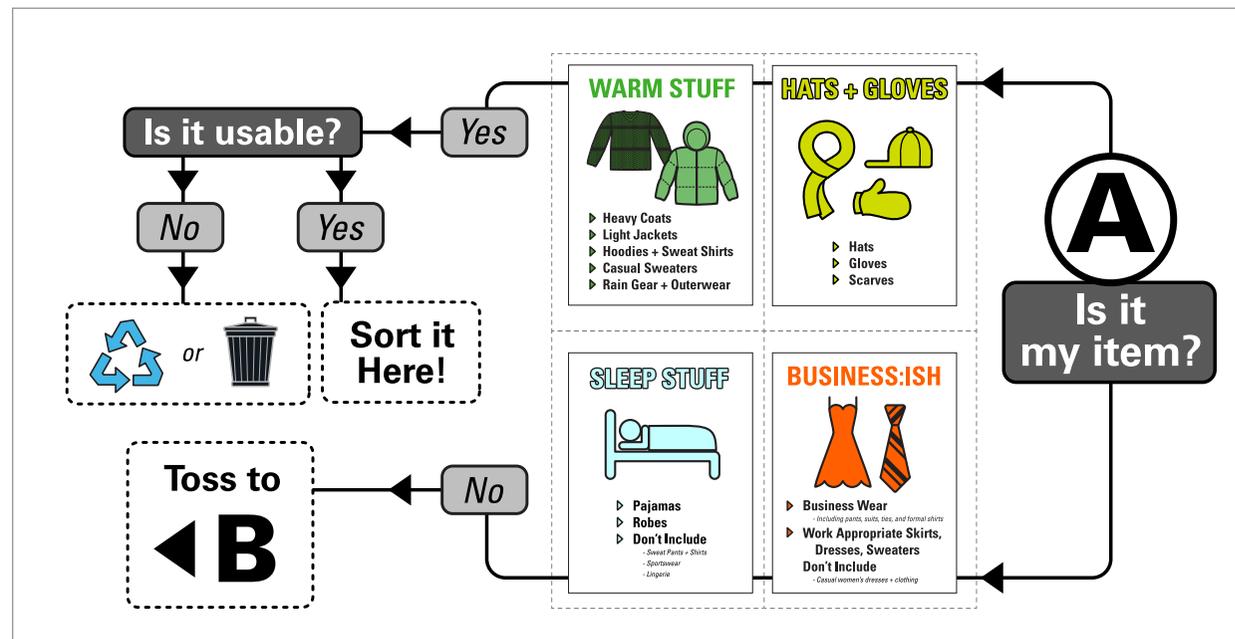




The ROC space before build out



The ROC space after build out



Flexible process flow signage and sorting details per category enable anyone to sort efficiently. Sorting flows right to left at the ROC due to the space layout and risk management procedures.

## RESULTS

CCC has achieved an 84% diversion rate on clothing, footwear, linens, and housewares processed at the ROC. From the launch of the pilot in October 2014 through March 2016, more than 10 tons of clothing and housewares have been saved from landfill. At the current volume, the program will save approximately 15 million gallons of water and 173,000 pounds of CO2 emissions through textile reuse and recycling every year\*.

In addition to the environmental impact, the local community is benefiting as well. Feedback from CCC's clients has been tremendous. "I get hugs galore when people come to the ROC to get things they need. It means a lot to them that they can get things to help them feel home a little faster," says Jerry the ROC's first RRC.

Additionally, CCC's donor services staff is saving an estimated 15 working hours per month while increasing the volume of donations they can accept, thanks to the ROC's processing capabilities. The program's financial cost is currently being estimated using the change in waste hauling fees due to higher diversion rates, savings of staff working hours, and total program overhead. While the cost of the program is estimated to exceed the financial savings from diversion and staff hours, the added benefit to CCC's clientele and environmental impact add tremendous value to the organization's service to the community.

*\* Approx. 2/3 of the ROC's total volume is textiles. Calculations are based on a pilot program textile diversion rate of 90%, an average monthly ROC volume of 3000 lbs, and impact data from the Bureau of International Recycling. The ROC diversion rate of 84% is for textiles and other materials combined.*

## LOOKING AHEAD

The success of this pilot has led to more questions. One at the top of REvolve's mind is what types of Extended Producer Responsibility policies could be implemented to increase in the amount of textiles that are reused and recycled, help those in need, and create feedstock (input materials) streams for textile recycling technologies? We believe there is a place for facilities like the ROC in future models for collection, sorting, and redistributing used apparel within a closed loop system and hope to explore these opportunities with a range of stakeholders as time goes on.

Interested in collaborating? Get in touch!



*Leveraging tremendous human value*



# WHO IS REVOLVE WASTE?

REvolve is a collaborative consultancy that specializes in bringing together stakeholders to solve complex systems challenges. We connect brands, recycling technologies, waste streams, and non-profits to close the loop on textiles.

Our team of experts provides consulting and research services, educates, standardizes and sources feedstocks, and plans and executes pilot projects. Our goal is to close the gaps slowing the development of better textiles and increase the positive human capital in the textile supply chain.

REvolve's broad range of skills, depth of experience, and commitment to excellence make us a strong partner. We're geeks who love what we do... and it shows. Let's make the future better. Together.

