



THE CHALLENGE

Unique waste stream –50% of the waste was comprised of animal waste, 25% was textiles which contributed approximately 81 MT to the 109 MT of waste going to the landfill each year.

There was no program in effect to collect recyclable plastic containers, plastic film & tin food cans which comprised 5% of waste by weight or almost 6 MT per year.

There were no consistent sorting stations present.

OUR 3-TIERED SOLUTION: INFRASTRUCTURE > COMMUNICATION > EDUCATION

INFRASTRUCTURE

HAULING

The Calgary Humane Society's existing hauler (or recycler) was contacted to see if commingled recycling and organic waste could be incorporated into the current paper/cardboard recycling program. In this case, the hauler was not able to pick up animal waste, but was able to offer a commingled recycling solution that would help divert plastic materials and clean tin cans.

Another hauler was found that could take the Humane Society's animal waste, which could potentially increase the diversion rate by 14% resulting in an additional 66 MT/year being diverted from the landfill.



Haulers are often more than willing to work with their clients to ensure their needs are being met.



Request for quote (RFQ). When developing an RFQ it is important to know just what services you are looking for; check out the "Finding the Right Hauler for You" tool for some excellent information on choosing a hauler that will fit your specific needs.



Innovation and a willingness to explore options are useful in situations that demand a more customized solution. Technologies are changing and evolving every day and the waste and recycling world is no exception. This is enabling haulers to offer services that may not have been available in the past; specifically composting animal waste.



Signage is just as important as the sorting stations they accompany. Signage should be clear and concise with limited text; people process words faster than text and images cross language barriers. Consistency is key when deciding on sorting station design and signage; this limits confusion and enhances compliance.



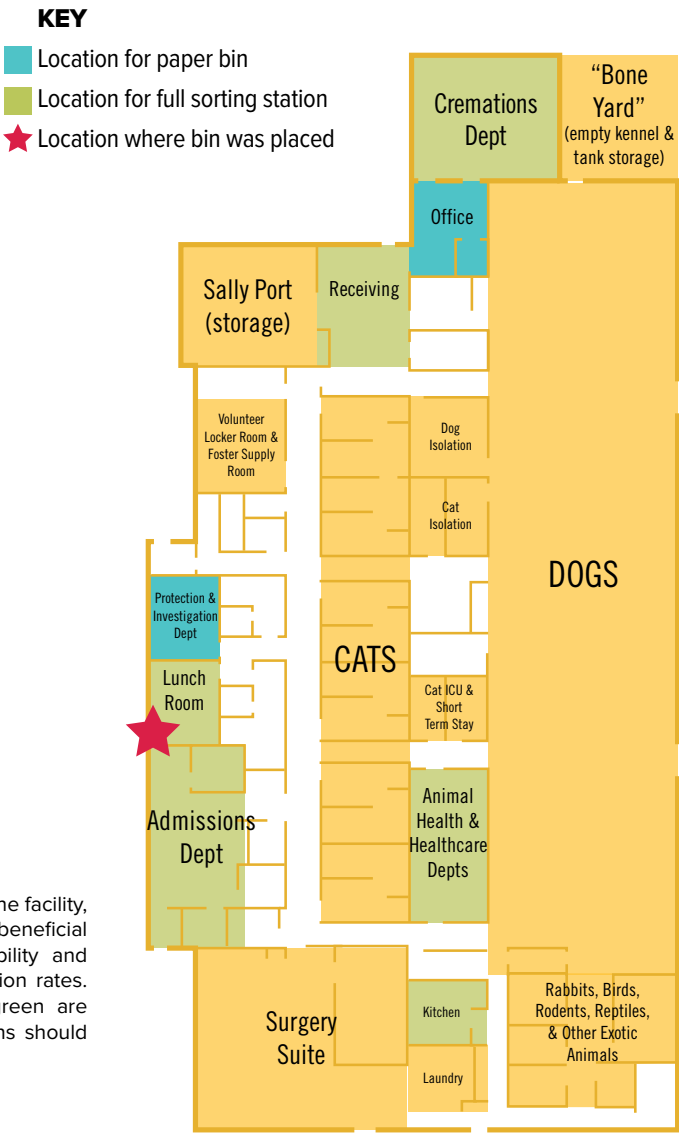
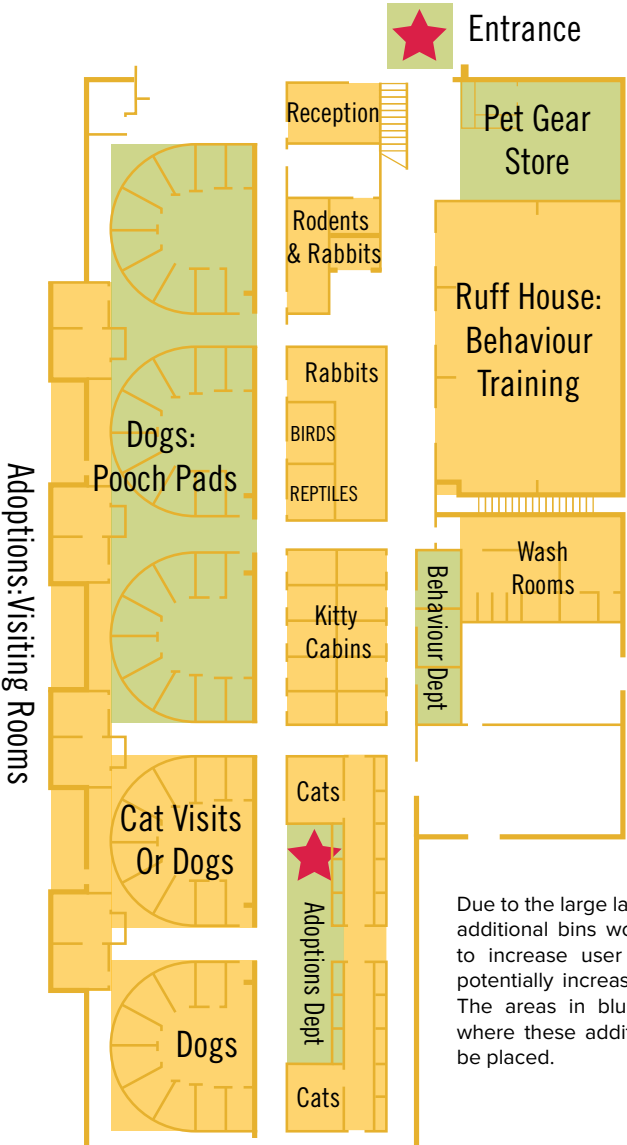
When placing sorting stations it is important to consider convenience and space. Don't place bins in an area where they are not visible or easily accessible. Also keep in mind who will be using them. For example, stations that are accessible by the general public may have more contamination than back-of-house locations.

SORTING STATIONS

There were a number of single garbage bins present at the Humane Society before the recycling program was implemented. These single bins, referred to as ‘catch-alls’ (meaning they capture both recycling and waste which is then landfilled), don’t encourage recycling and result in an ineffective system.

Sorting stations were placed in convenient locations where waste was known to be produced. These locations included

the lower kitchen, conference room, adoptions area, and lobby. Ideally there would be a station located in each kitchen, in the general office area, animal health care facility and training area. However, due to funding restrictions this was not feasible during the study period but is planned as funds become available.



In this case the signage was customized in order to accommodate typical items found in the Humane Society's waste, helping to provide a clear message of what items are accepted in specific bins.

SIGNAGE EXAMPLES



REDUCTION:

The three r's should always be treated as a hierarchy with reduction at the top. Identify areas where reduction initiatives can be implemented. When making suggestions take into account the specific barriers that may arise within your facility.

In this case, by encouraging staff/volunteers to adjust the feeding quantities to only what the animals will eat,

resulted in a decrease in food waste. In the case of an animal care facility there are many variables that can limit the success of such an initiative. The turnover of animals is constant not to mention change in routine and life style affects appetite. Monitoring feeding habits and communicating these to other staff and volunteers can lead to a reduction in wasted food and cost savings in food purchasing further up the chain.

TESTIMONIALS

“I think they're great. It makes it easy to sort out everything and they are easy to find in the shelter.”

“I love the recycling bins... I just wish we had more.”

“I like the new recycling stations, they are clearly marked and have avoided much confusion around what should/can go into the old blue bins we had.”



BEST PRACTICE TIP:

Include results in the third survey, ie: you have helped increase the diversion rate by x%. This shows staff that their efforts are paying off and encourages them to continue to improve.

Communication is key to a successful recycling program. Here are some effective strategies to engage staff.

FEEDBACK

An initial 5 question survey sent to all staff (including facilities and custodial) during the planning phase to solicit feedback is a great step to implementing the recycling program. A second survey after 6 weeks of implementing the program can identify any areas for improvement. Once you make improvements a third survey can be sent to monitor progress. These surveys provide valuable feedback while also involving staff in the process. They also serve as an excellent communication tool to demonstrate an organization's commitment to becoming more sustainable.

LAUNCH EVENT

It's a good idea to encourage the team to host a formal launch of the program once the plan is ready for implementation. This gives staff an idea of the new recycling program and their role in helping make it a success. The best time to do a launch is after the plan has been made but just before the program is started. It can be simple, and just needs to give staff an idea of the upcoming changes and how they can help make it a success.

GREEN TEAMS

To encourage staff to take ownership of a recycling program, it's a good idea to establish a Green Team. Waste report cards can help your Green Team measure compliance. These report cards require regular spot checks of the stations. Pictures can also be taken to help provide examples to other team members of how the various scores were interpreted.

A Green Team should be made up of representatives from as many departments as possible. Each of these departments may deal with a wide variety of materials that perhaps the other departments may not have been aware of, as they don't come across them in their day to day operations.

REPORT CARD**CALGARY HUMANE SOCIETY WASTE**

This form is designed to enable Green Calgary to support you in tracking the interim success of your new or improved waste and recycling programs. By filling it out and sending it back to your contact at Green Calgary, this will give us the information we need to make suggestions and further support you and your coworkers in your journey towards zero waste.

Take a look in the waste and recycling bins in the following locations and give the bin a grade of 1-5 (1 being poor compliance, 5 being excellent compliance) then send it via e-mail to your Green Calgary Consultant; attach pictures where you can.

DATE				
Location:	Barking Lot	Adoptions	Kitchen	Reception
Commingled Recycling				
Beverage Container				
Garbage				

BEST PRACTICE TIPS:

Have staff sign a pledge that states their commitment to adopt sustainable practices in the workplace. Post the pledge in the staff newsletter, in lunchrooms, anywhere where it is clearly visible. This is especially important when

staff see that corporate level staff have committed as well. Upper level buy-in is important not only because of their ability to influence decision making but also show a corporate commitment to sustainable practices.

Studies have shown that people are more willing to follow through on a

certain behavior change when they have made a public commitment such as signing a pledge. It also serves to help change the social norm; when they see that their colleagues have committed to making a change they are more likely to make a change themselves.

OVERVIEW

A lunch and learn was provided to Humane Society staff to review the results of the initial waste assessment and to give an overview of waste in Calgary and the reasons behind waste diversion in general. This served to let staff know how they were doing currently and where they could improve. Once the commingled recycling program was established, communications were sent out to staff and volunteers via newsletters. Site visits were also performed to tour the Humane Society facility and provide onsite education for both the Green Team and any interested staff.

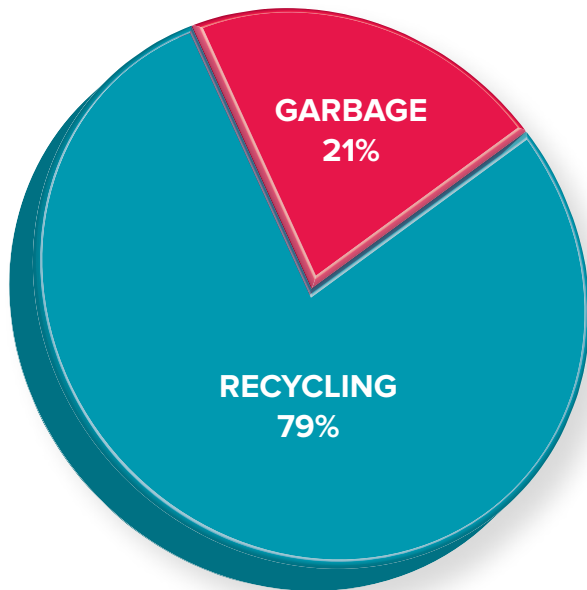
As beverage containers and paper were already being recycled, it wasn't difficult to add plastic containers and plastic film to the list. Also helpful was the fact that the plastic and paper did not need to be sorted prior to disposal.



Oftentimes the reason behind the requested behavior change is not communicated. Avoid saying "it's the right thing to do" give them specifics. When staff don't know why materials should be diverted or reduced they tend not to be as compliant as they may otherwise be.



WASTE COMPOSITION



It was found that 21% of the 24 hour sample of waste assessed was actually waste that could not be recycled. Hypothetically, if the Humane Society were to implement a comprehensive recycling program (including animal waste) with 100% compliance they could divert 79% of their waste. However, that level of compliance is not a realistic goal.

BEST PRACTICE TIP:

Organics and fibre materials are a major source of methane gas production in landfills. The nature of a landfill does not promote the biodegradation of material; there is very limited oxygen and moisture, both of which are necessary for these materials to breakdown. This anaerobic environment results in the production of methane gas, one of the largest contributors to greenhouse gas

Provide staff with an educational workshop to inform them of any new recycling programs and how they can contribute to its success. It's important to give an overview of the importance of diverting waste from the landfill with specifics.



RESULTS

At the Calgary Humane Society, as there was only one month between the commingled recycling program being rolled out and the second waste assessment, no significant change in waste reduction and diversion rate was noted. Typically, it would be advised to do a second waste assessment at a 6-12 month mark to determine the rate of change.

Compliance at the sorting stages was excellent; staff were clearly dedicated to sorting their waste at the station. The follow through when depositing the recycling in the appropriate outside bin was hampered due to an overflowing recycling bin and inconsistent signage. These were issues that could be easily remedied by adjusting the frequency of pickup and developing more consistent signage for the external collection bins. Given the excellent compliance at sorting stages, it's not difficult to assume that compliance at the external bins could see similar results.

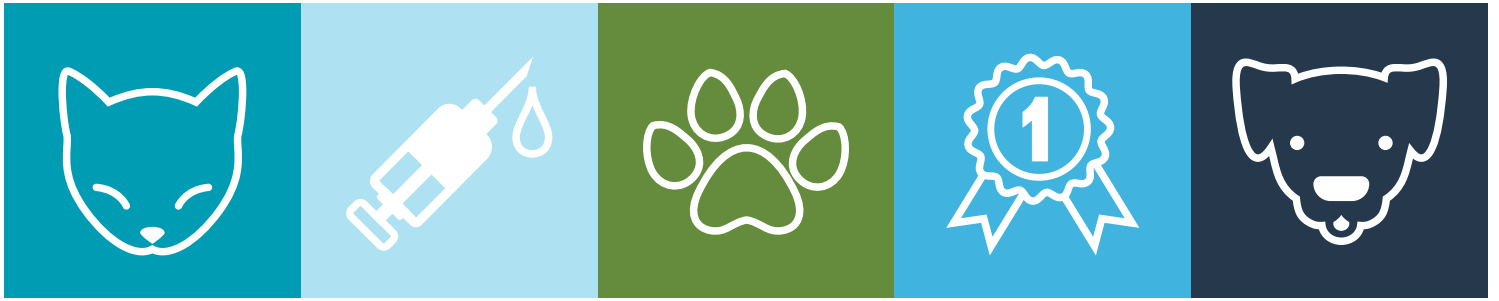
When developing the recycling program at the Calgary Humane Society, both funding and staff time were taken into consideration when developing goals. Since setting attainable goals are important to ensuring success while maintaining staff moral; these were incorporated into the plan.

TIN FOOD CANS:

Most commingled recycling programs will accept tin food cans. However, cat/dog food tins can take on a life of their own when not cleaned out. Contamination of the recycling stream is a concern as it can lower the value of the commodity and potentially result in the load of recycling being landfilled as opposed to recycled if the contamination rate is too high (generally 5% or more).

Develop a system; a bucket of warm soapy water will do the trick. Place the bucket in the feed room and when staff are preparing food they can toss the tins in the bucket and leave them to soak. After soaking for a short time the residual food is softened and rinses out easy; a quick wipe with a towel to dry them and they are good to go.





THIS CASE STUDY WAS CREATED IN PARTNERSHIP WITH THE FOLLOWING:



**TD Friends of the
Environment
Foundation**

RESOURCES TO HELP YOU ESTABLISH A RECYCLING PROGRAM FOR YOUR BUSINESS OR ORGANIZATION:

Green Calgary can provide customized waste audits and assessments, training for your staff and tenants, customized signage, and support in developing or enhancing your waste and recycling programs. Contact our Green Workplace program to learn more.

These downloadable resources can be found on greencalgary.org:

- Finding the Right Hauler Tool
- Green Calgary Recycler Directory
- Waste @ Work Tip Sheet
- Green Calgary Specialty Recycler Directory

These downloadable resources can be found on calgary.ca/businessrecycling (waste & recycling):

- How to Guides for Businesses and Organizations
- Sample Signage & Posters
- DIY Waste Audit Kit
- Starting a Green Team guide

The Alberta Beverage Container Recycling Corporation provides grants for specialized recycling bins. Learn more about their Community Champions program on www.abcrc.com

www.greencalgary.org

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