



SUMMARY

Busch Systems partnered with McMaster University in December 2018 to compare the refuse streams for two different residence halls, McKay Hall and Hedden Hall. McKay Hall recently implemented organics collection while Hedden Hall only collects two streams, recycling and garbage. The study documented two separate things. First, it compared the diversion rate for each hall based on the overall amount of waste and recovered materials generated from one floor of each building.

Secondly, a composition study for one common room was done in each residence building as well to account for common contamination issues. Based on the composition study, on average 56% of material being thrown out was organics. Note that this was not a broad representation of the entire campus, however it is an indication that organics makes up the majority of material being discarded in the residence halls.

QUICK FACTS



University



Hamilton, ON



Population: 31,843



Organics, Recycling, Waste

The residence hall with organics collection has a diversion rate **39% higher** than the one without.

KEY FINDINGS

McKay Hall: This was the residence that had recently implemented organics into their collection system, in addition to their waste and recycling. This resulted in an average 70% diversion rate for the fourth-floor sample area. The weights of each stream translate to 41% recycling, 30% waste, and 29% organics. 46% of the material in McKay's waste bins was organic material that could have been diverted if it were sorted properly.

Hedden Hall: This residence hall collects waste and recycling only. This resulted in an average diversion rate of 31%. The weights of each stream translate to 31% recycling and 69% waste. 72% of the waste stream was compostable material, 42% of the recycle stream was compostable material.

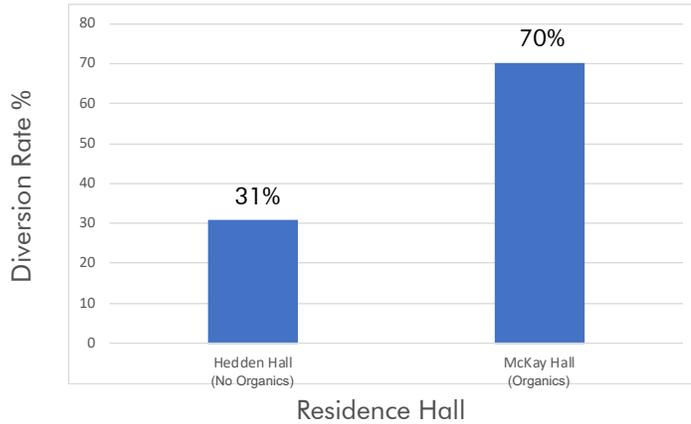


Busch Systems Spectrum containers in McKay Hall. Streams include organics, recycling & waste.



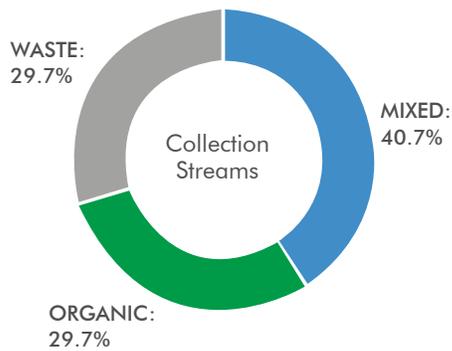
FACTS & FIGURES

Snapshot of Refuse Streams



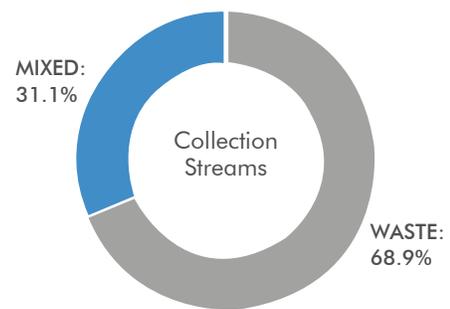
Waste and recycling containers in the garbage room of Hedden Hall.

McKay Total Refuse



McKay Hall breakdown.

Hedden Total Refuse



Hedden Hall breakdown.

RECOMMENDATIONS

1. Expand organics collection to all residence halls and eventually campus-wide to further increase diversion rate.
2. Standardization of bins and signage for campus refuse collection to reduce confusion at the bin. Consider streamlining labels and signage on refuse bins to only show the most essential information.
3. Continued engagement and education of students on the importance of waste diversion and what materials go in each stream.
4. Continued auditing of the waste collection system as well as expand to study the composition of waste material from garbage rooms and other locations to track success and areas for improvement.

For the full waste audit visit: <https://www.buschsystems.com/resource-center/casestudies.phtml>

