



Bringing Down the Trash

Problems and
Possibilities for
Waste Diversion
and Reduction in
Rental High-Rises
in St. James Town,
Toronto

A research report by:
Lisa Kowalchuk,
Trisha Einmann,
Aravind Joseph,
Alaa Mohamed,
and Harris Ali

December, 2024



TABLE OF CONTENTS

| | |
|---|-----------|
| Acknowledgements | 5 |
| Abstract..... | 6 |
| Executive Summary | 7 |
| I. Introduction | 9 |
| The Growing Problem of Household Waste | 9 |
| Waste Diversion in Multi-Residential Buildings..... | 10 |
| The Waste Diversion Policy Regime and High-Rise Management..... | 12 |
| St. James Town: A World Within a Block | 13 |
| The St. James Town Study of Waste Diversion | 16 |
| Environmental Justice, Multi-Residential Buildings, and Waste..... | 17 |
| A World Within Two Buildings | 18 |
| Methodology of the Study | 19 |
| II. Waste Survey | 21 |
| Survey Methodology | 21 |
| Results | 21 |
| Profile of Survey Participants | 21 |
| What are residents' values and experiences regarding waste sorting in their buildings? | 23 |
| How do residents seek clarity about waste sorting? | 24 |
| How much of their organics and recyclables do residents sort, and where do they dispose of sorted waste? | 24 |
| How do residents dispose of expired/unused | 26 |
| medicines and expired batteries? | |
| How do the two buildings compare in perceptions and experiences..... | 27 |
| of waste sorting? | |
| How do the two buildings compare in how much waste residents sort? | 28 |
| How do residents of the two buildings compare in their uncertainty | 29 |
| about waste sorting? | |
| Do the two buildings differ in how residents seek clarity about waste sorting? | 29 |
| Do residents of the two buildings differ in where they dispose of sorted waste?..... | 31 |
| Does waste sorting in the two buildings differ by residents' age?..... | 32 |
| Does waste sorting in the two buildings differ by years lived in Canada?..... | 34 |

| | |
|---|-----------|
| III. In Their Own Words: Residents’ Experiences and Opinions | 37 |
| The Survey | 37 |
| Resident Green Teams | 37 |
| 1. Views of the Waste Situation..... | 38 |
| Waste is difficult to sort..... | 38 |
| Chute area problematic | 41 |
| Enclosure area problematic | 42 |
| Issue of health and safety | 43 |
| 2. Attribution of responsibility | 45 |
| Criticisms of management..... | 45 |
| Attributing the problem to residents..... | 46 |
| Belief in fellow residents..... | 47 |
| Matrix queries..... | 48 |
| 3. What Should be Done..... | 49 |
| Education and information..... | 49 |
| Physical modifications | 50 |
| Social and governance solutions | 53 |
| IV. Resident Green Teams’ Visioning | 55 |
| V. Structural constraints and possibilities | 59 |
| VI. Our findings through the prism of environmental justice..... | 65 |
| VII. Recommendations..... | 67 |
| Literature Cited..... | 69 |

ACKNOWLEDGEMENTS

This study was made possible by funding from the Social Sciences and Humanities Research Council of Canada (SSHRC) Institutional Grant program, adjudicated through the University of Guelph. While the Toronto Environmental Alliance (TEA) was a major inspiration for the research and its design, we are especially indebted to Emily Alfred, a senior campaigner with TEA and their point person on household waste, for the immense amount of time and expertise she shared with the researchers and with resident green teams. We are also very thankful to Calvin Lakhan for the expertise, time, and wisdom he generously shared both with the research team and the green teams. Special thanks to David Sobel for his advice, support, and constant encouragement at all stages of the project, born out of passion for environmentally just solutions to the waste dilemmas of St. James Town. Thanks to Priyanka Purushothaman and Raagave Kannan for their patient and highly competent assistance.

Academic research projects require a plethora of institutional supports to get off the ground and run smoothly, from grant applications to research ethics approval, human resources issues, and more, and behind each of these are experienced, kind, and dedicated individuals. In that regard, we are especially thankful to University of Guelph staff members Cheau Yuan Foo, Carolyn Osborne, and Carina Lang for their guidance and responsiveness.

We give heart-felt thanks to all the St. James Town residents who took the time to respond to our survey.

Finally, the study would not have been possible without the enthusiasm and commitment of our green team members. Their deep local knowledge, and their analytical insights rooted partly in lived experience, enriched the study immeasurably. At the same time, their passion for the environment, and their hope, good cheer, and sense of humour were a constant motivational motor of the whole endeavor.

Several of the numbered photos in the report were taken by green team members, and others by staff of The Corner.

All opinions, errors, and omissions are the authors' own.



ABSTRACT

This report presents the findings of a study on the barriers and opportunities for household waste reduction in two rental high-rises in the Toronto neighbourhood of St. James Town. It was conducted in 2023-24 by University of Guelph Sociologist Lisa Kowalchuk and the St. James Town Community Corner. The study also sought to understand the daily experiences, values, and wishes of the buildings' residents regarding household waste. St. James Town, a community made up primarily of renters just east of the downtown core, stands out in Toronto for its multiplicity of ethnicities and languages, its high proportion of newcomers and other immigrants, and its sheer population density. We chose to look at one building municipally owned by Toronto Community Housing (TCH), and one owned by a private rental company. Data for the study were collected primarily through a resident survey, a series of group discussions with a team of residents in each building, and a small number of semi-structured interviews with key individuals. The study was funded by the Social Sciences and Humanities Research Council of Canada (SSHRC) Institutional Grant made available through the University of Guelph.

EXECUTIVE SUMMARY

- The vast majority of survey respondents, over 90%, highly value waste diversion and garbage reduction, and see it as environmentally protective. The majority, almost three quarters, sort at least some of their waste daily. However, more than half report that waste sorting is difficult to do in their buildings.
- The main reasons reported for difficulty with waste sorting, and a main source of dissatisfaction with the buildings' waste systems were: a lack of information and education on how to sort waste, the lack of means to fully sort waste in the case of the private rental building, which does not collect organics, the inconvenience of bringing sorted materials to an outdoor enclosure, problems with the garbage chute mechanism, and not having a place to bring special items like batteries and other household hazardous materials.
- These conditions have a negative effect on the quality of life – health, safety, aesthetics and morale. In both buildings improper waste disposal practices and infrastructure lead to waste being left on the floor in chute rooms and hallways. These practices are a counterpart of shortcomings in building staffing, insufficient resident education, the absence of information, and additionally in the private building, a lack of landlord commitment to promoting waste separation.
- Some residents who sort their waste or want to do so appear to be misinformed about the system, leading to divertible waste going to landfill. In both buildings residents are placing sorted recyclables and organics in the chute that is intended for garbage only. Some Toronto Community Housing (TCH) residents do not even know there is organics collection in the outdoor waste enclosure.
- At the private high-rise there is no separate bin demarcated for garbage in the outdoor waste enclosure. This severely undermines the separation of recyclables.
- The study found that problems at the private high-rise are rooted in the policy governing waste for the Institutional, Commercial, and Industrial (IC&I) sector in Ontario. For the problems at the high-rise owned by TCH, which is much friendlier to tenant engagement and since 2018 has a specialized staff and office for waste diversion, there is a gap between the institution's potential and what takes place on the ground.
- The findings suggest that barriers to reducing waste are generally not in the attitudes of the tenants of St. James Town, but in the management of the buildings in which they live. More educational resources and staffing in these buildings would likely reduce waste sent to landfill and improve waste practices overall.



Figure 1: Outdoor waste enclosure, private rental building in St. James Town.

I. Introduction

The Growing Problem of Household Waste

It is increasingly recognized that Canada has a multi-faceted problem with landfill garbage. Landfills make a small but not negligible contribution to greenhouse gas (GHG), accounting for 7% of GHG emissions in Toronto, for example (City of Toronto 2021b). But there is also soil and water table contamination from many landfills when leachate, the liquid from precipitation or other sources that passes through the garbage, escapes into adjacent soil, taking substances such as heavy metals with it (El-Saadony et al. 2023). The most modern landfill sites use state of the art technology to prevent the escape of leachate, including composite clay and double plastic liners, and technology to capture accumulated leachate and gases from within the landfill confines. These are features of Toronto's Green Lane Landfill located near London, Ontario. But experts such as those at the U.S.-based Conservation Law Foundation assert that even technologies as sophisticated as this will all "fail over time" (Pecci 2018).

These facts are all the more sobering when we consider that Canada produces more garbage per capita than anywhere else in the world (Statista 2019), and that Ontario produces the most waste of all the provinces and territories (Bush 2024). Though the amount of household waste that Canadians collectively divert has been increasing, so has the amount that is not diverted (Environment and Climate Change Canada 2023). In 2020 just 22% and 32% of solid waste was diverted from non-residential and residential sources respectively. Most of the non-diverted amount is sent to landfills while some is incinerated. This is happening as landfill sites across Canada are reaching capacity. In Ontario, large cities and private waste companies are increasingly eying rural municipalities and Indigenous communities as sites for opening or expanding landfills. Private waste businesses also export garbage to jurisdictions with lower tipping fees, such as in New York State and Michigan (McClearn 2022; Syed 2024).

It is worth pondering the extent to which households contribute to this looming environmental dilemma, as well as other ways households are connected to local and regional waste systems. To put the situation in context, the portion of urban waste in Canada that comes from households, excluding multi-unit residential buildings (MRBs), is 30%.¹ The rest of the urban waste comes from the industrial, commercial, and institutional (IC&I)² sector which encompasses hotels, malls, retail stores, office buildings, hospitals, restaurants, construction sites, and MRBs (Government of Canada 2020). Further, municipal waste makes up only about a third of what our economy and society generate overall, with the rest coming from mining, agriculture, the military, etc. (Wilkins 2017).

¹ A multi-residential building (MRB) in Ontario is defined as a building with seven or more units, whether in the form of condominiums, co-operative housing, non-market rental (subsidized by government) or market rental buildings.

² When we consider that MRBs are not counted in statistics on household waste, the figure of 30% somewhat understates the contribution from households.

Nevertheless, even a small share of an escalating amount of garbage poses a substantial problem given the environmental threat posed by landfill growth. This is recognized by all levels of government, as seen in monitoring and data collection efforts, and policies and target goals to increase diversion. For example, Toronto has set a goal of 70% diversion of residential waste by 2030; the rate currently is 53.6%, with considerable variation by type of building as discussed in the following section (City of Toronto 2021b).

Waste Diversion in Multi-Residential Buildings

A major impediment to meeting household waste diversion targets in many jurisdictions is the poor performance of MRBs, the type of housing in which about half of Toronto's population lives, whether in condominiums, co-op housing, or rental buildings. In Toronto, diversion rates of single family homes, and of MRBs whose waste collection is serviced by the City, were 64% and 28% respectively in 2023 (City of Toronto 2024). Clearly this disparity needs to be addressed if Toronto is to reach its overall diversion target. Why MRBs lag behind single-family homes is well documented in both scholarly and governmental urban planning literature. Waste challenges distinctive to MRBs can be categorized as motivational, spatial or infrastructural, demographic, and managerial. We think that the policy regime governing waste should be added to this list.

At the social psychological or **motivational** level, it is often observed that MRBs allow residents' waste practices to be more anonymous and less visible than in single family homes with individual curbside collection. The idea here is that there is less accountability to neighbours in MRBs for adhering to norms about streaming and other waste practices (GENIVAR Consultants LP 2010). On the **spatial and infrastructural** side, waste sorting is typically inconvenient or poorly accessible in MRBs, especially ones built before the era of waste streaming (DiGiacomo et al 2018; Lakhan 2016b). A typical scenario is the high-rise building with a single stream chute (for garbage only) on each floor, as is the case with the 50-60 year old towers that make up most of the rental apartment building stock in St. James Town and in Toronto as a whole (City of Toronto 2016). Centralized waste bins that are challenging to use due to their placement (for example in an outdoor enclosure), height, how often they are emptied, and the safety and cleanliness of the bin area, magnify this inconvenience. Not having a place to store sorted waste within the apartment is another spatial detriment (Lakhan 2016b).

Demographically, there can be linguistic and cultural barriers to understanding waste streaming systems (GENIVAR Consultants LP 2010). This is supported by Lakhan's (2016a) research on the blue-bin recycling practices of first generation ethnic minorities in the Greater Toronto Area (GTA), which found that many people do not recognize the most common visual symbols about recycling, such as the triangular flowing arrows called the Mobius loop. Lakhan (2016a) also found skepticism about the ultimate destination of blue bin contents,³ and mistrust toward municipal governments, as additional cognitive factors that limit people's willingness to do more recycling. Apart from ethnic and cultural factors, there is often a pace of resident turnover in MRBs that

³ In Ontario the recycling program is referred to as the Blue Box program, while in Toronto it's called the Blue Bin program. Skepticism about what happens to these materials is well founded; see Ward et al. 2022.

makes it hard to sustain a consistent level of messaging and awareness about the ‘how and why’ of waste diversion (GENIVAR Consultants LP 2010).

In regards to income as a demographic consideration, the few studies that have looked for its correlation with waste sorting have shown contradictory and inconclusive findings (Lakhan 2016b). However, a report done for the City of Vancouver indirectly addresses the connection between poverty and waste sorting by looking at the rent-subsidized housing sector. The author, Andrew Martin (2016), observes a widespread tendency to assume that poorer people are disinclined to sort waste and more generally tend to engage in environmentally and socially harmful waste practices, because they are not environmental-minded. Under the influence of this assumption, he implies, officials and planners in Vancouver and elsewhere have neglected waste management strategizing for this sector, as though it would be futile. But Martin argues that rent-subsidized tenants are in fact no less concerned with garbage reduction than condo or coop dwellers, and that all MRB dwellers respond to improved convenience, accessibility, and educational prompts.

Martin’s argument is supported by the results of a 2015-2018 study of 20 Toronto Community Housing (TCH) buildings to pilot test a set of interventions to improve waste practices. These included education of residents and training of staff; clearer signage at the chute and in enclosures, the latter of which added a warning against unauthorized dumping and the presence of CCTV cameras; better data management; improved maintenance of waste areas; and right-sizing garbage bins by making them smaller. These measures increased waste diversion in most of the 20 buildings by the end of the study, in one case up to 45%, and decreased the overall volume of waste by an average of 25%. A crucial “quality of life” gain in the pilot sites, as a result of the greater work with tenants and staff, were waste areas that were cleaner, in better repair, healthier and aesthetically more pleasant (City of Toronto and Toronto Community Housing 2018).

Related to the income question, there is also a dearth of published research on how waste diversion rates compare among different kinds of MRBs – condominiums, cooperative housing, and rental-purpose. However, experts we have consulted generally understand that condos and cooperatives perform better than rental-purpose buildings and that within the rental sector, non-market housing has generally among the lowest rates of diversion. In Toronto, this is what gave rise to the joint TCH-City pilot project study in 2015, and TCH’s subsequent creation of a specific managerial position for waste as a result of the study.

Finally, the **managerial** aspect of MRBs’ waste diversion is about the extent of buy-in and care on the part of owners and managers. This is crucial to what residents want to do, and can do, as seen in the action-oriented study done by the Toronto Environmental Alliance (TEA) in 15 Toronto high-rises (MacLaren et al 2022), and Alfred 2022. All too often, however, this buy-in is missing from the picture, particularly in for-profit rental-purpose buildings. In turn, private landlords are not always incentivized by government to care, depending on the jurisdiction (GENIVAR Consultants LP 2010). This points to a problem with the **policy regime** for waste.

The Waste Diversion Policy Regime and High-Rise Management

Here, it is necessary to digress into the somewhat complex governance of MRB landlords' compliance with waste diversion in Ontario and Toronto. As noted, MRBs in Ontario are categorized as part of the Institutional, Commercial, and Industrial (IC&I) sector, even though they are residential. IC&I establishments contract on their own with private waste collection services, and pay privately for those services. But MRBs are a partial exception to this, in that the majority of MRBs in Ontario, 80%, receive municipal waste collection rather than private (Office of the Auditor General 2021: 2). In Toronto, under [Municipal Code Chapter 844](#), MRBs receiving City waste services must provide collection for organics, recyclables, and other specific waste types such as electronics, yard waste, oversized and metal items, and household hazardous materials. As well, to incentivize building owners to participate fully in these diversion programs, the City exempts them from fees for collection of separated waste, charging them only for waste destined for landfill. Under a "volume-based" fee system for garbage collection introduced in 2008, the fees that MRBs pay for garbage pickup are based on the volume of the bin and number of bin lifts. Each MRB's fee-per-lift increases if it surpasses a threshold allotted based on number of units in the building. MRBs can also reduce their disposal costs if they compact garbage well, and only put bins out for collection when they are full. Thus, they are rewarded for disposing of fewer bins, and for having a lower waste volume.

Meanwhile, fees that MRBs and other Toronto residents pay to Solid Waste Management Services for garbage pick-up are plowed into its collection and processing of the other streams of waste just mentioned, and a gamut of additional programs and resources. These include [Community Environment Days](#), [litter clean-up](#), maintenance of landfills, public service ad campaigns promoting best waste practices, specific resources for MRBs such as in-unit organics bins and recycling bags, and a specialized training program for MRB residents called the 3R Ambassador program – three Rs referring to "reduce, reuse, recycle".

However, making matters a little more complex, Toronto allows privately owned MRBs to opt out of City waste services. This spares them the perceived burden of organics collection. Even with this opt-out ability, 60% of MRBs in Toronto still have City waste servicing. These include of course all City-owned MRBs, principally those of the TCH, but many private ones as well (the TCH accounts for only 15% of MRBs in Toronto). MRBs that opt for non-City waste collection are governed by provincial waste diversion rules only, specifically [ON Regulation 103/94 for Industrial, Commercial and Institutional Source Separation Programs](#), which applies to the whole IC&I sector. This regulation does not require MRBs and other IC&I businesses to collect organics. It only requires blue box collection, for which they must make "reasonable efforts to ensure that full use is made of the program." However, what "reasonable" means is not stipulated. This loose wording affords a great deal of leeway for all IC&I sector businesses in their adherence to the regulation (Office of the Auditor General 2021). It also feeds into weak enforcement by the Ministry of Environment, Conservation, and Parks, since it does not empower Ministry inspectors to hold IC&I businesses to best practices. For example, inspectors cannot leverage the regulation to hold MRB landlords accountable for whether their blue box materials and garbage

are collected separately and brought to separate locations. This would require that the Ministry exercise oversight of the contract that MRBs sign with private waste haulers, which it does not do (Office of the Auditor General 2021).

The provincial and municipal waste policy regimes are relevant to the challenges that MRB residents face for waste diversion because those MRBs in Toronto that have opted to contract with private waste companies, are (a) not obligated to collect organics and (b) subject to toothless and minimally enforced regulation for the separation of recyclables. Furthermore, because ON Regulation 103/94 has not been updated since its enactment in 1994, it omits most plastics and other items from the list of items that IC&I establishments must collect as recyclables. The requirements for City-serviced MRBs, in contrast, go above and beyond the provincial policy, adding a layer of regulation, accountability, and direct incentivization to divert many types of waste away from landfill.

St. James Town: A World Within a Block

Located in Toronto's downtown east, St. James Town is bounded by Bloor Street East to the north, Parliament Street to the east, Wellesley Street East to the south, and Sherbourne Street to the west. Even within a very diverse city, St. James Town stands out for its multiplicity of ethnicities and languages, with a high proportion of newcomers (indeed it has been referred to as a landing strip for new Canadians), other immigrants, racialized people, and lower-income earners. Fully 60% of its population are immigrants as of the 2016 Census, compared to 51% for the City of Toronto, and almost 14% are recent immigrants to Canada (with five years or less), which is twice that of Toronto. Two thirds of the community's population are visible minorities, 16% higher than in Toronto as a whole (City of Toronto-SPAR 2016). These demographic characteristics have earned St. James Town the moniker of a "world within a block".



PHOTO: THE CORNER

Figure 2: People celebrating at the St. James Town festival, held annually in September.



PHOTO: THE CORNER

Figure 3: Gardening workshop at The Corner@240.

Another unique characteristic of the neighbourhood is its population density, about ten times that of Toronto as a whole, making it the densest neighbourhood in Canada. The most recent available Census data, from 2016, indicate 18,615 people living in 32 acres or 13% of a square kilometre. Unofficial estimates place this figure as high as 25,000 to 30,000, on the assumption that newer residents and those residing part-time may be under-counted by the Census. Nineteen high-rise rental buildings ranging from 14 to 32 storeys, all built between 1959 and 1976, make up the community's geographic core. The age of the apartment towers stands as one of the challenges to waste diversion, since they predate the main forms of waste streaming that are factored into the design of more recent MRB constructions.

Socio-economic disadvantage is an aspect of life for many in St. James Town. The community's median household income is 32% lower than in Toronto as a whole, and its rate of household poverty is almost twice that of the city (40% vs. 22% based on the Basic Market Basket measure). This surely reflects the systemic hurdles to economic integration for immigrants and newcomers. Indeed, the community has a slightly higher proportion of residents with university degrees. St. James Town also has more seniors living alone (50.5% compared to 26.7% for Toronto) (City of Toronto SPAR 2016), and has the highest percentage of seniors in poverty among Toronto neighbourhoods, at 53.5% (Ferguson 2020).

Most of these kinds of challenges are heightened for TCH high-rise communities, of which there are four in St. James Town. Eighty-six percent of all TCH residents pay rent geared to income. Across the city, the yearly income for households on this subsidized plan is just over \$16,000 (Toronto Community Housing 2022). As well, in 52% of TCH households there is at least one person with a disability (Toronto Community Housing n.d.); in Toronto overall, the analogous figure for individuals 15 and older is 22% (Toronto Public Health 2023). Disability is a factor associated with depressed income.

Alongside the structural burdens just described, there is nevertheless a wealth of social capital in this community. Residents come together in several regular neighbourhood-based events across lines of ethnicity, age, ability, gender identity and sexual orientation. These include the Spring Gathering, the family-oriented multi-cultural celebration called the St. James Town Festival, and the St. James Town Leadership Forum, all annual events. In 2023, St James Town Pride joined the community's roster of yearly celebrations, coordinated by an emergent grassroots initiative, St. James Town True Colours. Other grassroots groups and organizations have formed around the needs of seniors, women, and youth, and on issues such as food security, climate-related emergencies, and tenants' concerns.

St. James Town residents collaborate with, and are supported by, a number of non-profit service-provider organizations, some of which are neighbourhood-specific while others work within the wider downtown east. They all attend in different ways to social determinants of health, holistically defined. Approximately 30 such organizations make up the St. James Town Service Providers Network (STJSPN). These include the St. James Town Community Corner, or The Corner for short, one of the two research partners conducting this study. Over the past 15 years or so, these non-profit agencies have united efforts with residents to respond to emergencies affecting entire populations of particular buildings, such as fires, floods and power-outages, as well as traumatic incidents that affect community members, and of course the COVID pandemic. These manifestations of social capital attest to St. James Town being a vibrant and resilient community.

The Corner is a community hub organization that offers wrap-around services to the neighbourhood, including programs that promote waste diversion and reduction. With funding from the [Community Reduce & Reuse Programs](#) (CRRP) of Toronto's Solid Waste Management Services Division, and in partnership with Toronto's Repair Café, the Corner's 240 Wellesley Street East location launched in 2018 with a focus on repairing household items. Since then, it has trained dozens of community members to serve as volunteers who provide free repair on home electronics, small appliances, tools, furniture, bicycles, clothing, watches, and jewelry. Residents can also opt to learn from the repair volunteers how to fix items themselves. The Corner@240 also offers residents a means to recycle books, electronic waste, organic waste, and textile waste. Organic and textile recycling are a logical complement to its skill-building workshops in balcony gardening, sewing, and crafting. The Corner@240 also has a Library of Things, which loans items that people need only once or occasionally, including toys, power tools, and camping and sports equipment. Through these programs, in a three year period from 2021 to 2023, the @240 location had achieved the diversion of 28.8 tonnes of electric and metal waste, 466 kgs of books, 783.8 kg of organic waste, and 1791.2 kg of fabric, and successful repairs to 2083 home appliances, 1169 bikes, and 756 computers and other e-devices.⁴ While instilling knowledge for reduction of consumption and waste, these programs, and events like the celebration of Waste Reduction Week,⁵ also strengthen social connections. Tackling household waste reduction in the community's high-rises is a crucial and logical frontier in The Corner's sustainability work.

⁴ The Corner@240 Annual Metrics, 2021, 2022, and 2023.

⁵ Highlights of this study were presented at an event held at the Corner in October 2024 for Circular Economy month, and specifically Waste Reduction week.

The St. James Town Study of Waste Diversion

Taking as our departure point these facts about MRBs and waste in general, and in Toronto in particular, our study set out to understand the daily experiences, values, and wishes of MRB residents in regard to household waste. What do they see every day just outside their own doors? What do they feel about keeping waste out of landfill? What do they think needs to change in their buildings to achieve this?

Specifically, the exploratory questions of the study were:

1. What are the infrastructural, attitudinal, and social barriers and opportunities for increasing waste diversion and reduction in St. James Town?
2. What is the level of resident and managerial interest in improving waste reduction in the two buildings chosen?
3. In what ways can quality of life in buildings be improved by increasing waste reduction and improving overall waste management?
4. What economic, social-psychological, or other gains do residents perceive in diverting more household waste, and are there overlaps between their positive motivations and those of management and landlords?
5. What do residents envision as ways that waste practices can be improved in their building?
6. How do the two buildings selected for the study differ on these issues?

Our focus on challenges and opportunities for waste diversion and reduction, and key aspects of our methodology, were inspired by work done by the Toronto Environmental Alliance (TEA). Their Zero Waste High-Rise Project, launched in 2018, supported groups of residents in an initial set of 15 MRBs to identify building-specific problems, challenges, and opportunities for addressing them. The project also provided various supports for residents' efforts toward greater waste diversion, and collected data through waste audits, and before and after surveys of residents on their households' and buildings' practices. One of the outcomes of TEA's project was a wealth of free online resources for others, including videos and stories of successful initiatives by resident groups, and a toolkit for residents and/or staff of any MRB to work through the same process.

Our research sought to complement and bolster the knowledge generated by TEA's participatory and action-oriented research, albeit on a modest scale, by applying a similar approach to MRBs made up of renters. TEA's focus was on condominium and cooperative housing buildings that were receiving City waste collection service. To our knowledge, there have been no studies focused on waste diversion challenges and opportunities specific to **renters** as distinct from condo-owners and housing coop residents. This is a gap worth addressing given that 48% of Toronto residents are renters (City of Toronto 2023), and 64% of renter households are in MRBs with five or more storeys (City of Toronto 2021a). The study was funded by the Social Sciences and Humanities Research Council of Canada (SSHRC)'s Institutional Grant, made available through the University of Guelph.

Environmental Justice, Multi-Residential Buildings, and Waste

Clearly, households contribute significantly to the dismaying growth of our society's garbage. But this is a complex relationship in which the quality of life for residents of many MRBs is also affected by the entire waste system and how it is governed. For many MRB dwellers, a minimalist approach to household waste by property owners and managers, enabled by obsolete and weakly enforced regulation in Ontario, are part of a laissez-faire system that manifests in their daily lives in surroundings that are often unsightly, unhealthy, and demoralizing.

This is particularly the case in privately owned rental MRBs that have opted out of City-serviced waste collection. In contracting with private waste haulers, these establishments, like the profit-maximizing hauling companies themselves, are exempt from regulation by and accountability to the municipal government's waste system. In many of these privately owned, rental-purpose MRBs, residents live on lower average incomes than condo owners. Further, renters lack the structural empowerment enjoyed by both condo and co-op dwellers in shaping all manner of issues pertaining to the quality of life in their buildings. In contrast to condos and coops, where a property manager must answer to a Board that represents home-owners and members, respectively, and must implement the Board's wishes, managers and landlords of private rental MRBs are not accountable to tenants in the same way.⁶

Such is the case for the majority of housing in the St. James Town neighbourhood. In light of the policies and socio-economic and power inequalities shaping the management of household waste for St. James Town residents, and other characteristics of the community described above, we find that an environmental justice lens helps us to frame the study and make sense of its findings. Environmental justice refers to fairness or equality in the way environmental harms, hazards, benefits and protections are socially and spatially distributed within and between societies. The "justice" aspect means that this distribution is not accidental or happenstance, but results from inequalities of power and privilege. Waste and garbage have been on the agenda of environmental justice social movements, policies, and research around the world since the term "environmental justice" was coined in the U.S during the 1970s. For much of this time, the focus was mostly on how the siting of localized hazards like waste incineration and landfill disproportionately burdens those who are poor, marginalized, and racialized (Watson and Bulkeley 2005).

Over the decades, the application of the environmental justice framework expanded beyond localized environmental harms of waste, to broader systems such as waste management and collection services (Bell and Sweeting 2013; Watson and Bulkeley 2005). Environmental justice research also examines a wide array of inequalities of power and privilege in the waste chain, such as, for example, the inequality between corporations that produce or use single-use plastic packaging, and ordinary consumers and their local governments that have traditionally been assigned responsibility for dealing with these materials (Bell and Sweeting 2013). From this we can also extrapolate to ways that profit-maximizing businesses such as waste hauling companies

⁶ This difference in structural empowerment between private renters on one hand, and condo owners and coop residents on the other, was pointed out by high-rise waste experts in conversations with the researcher.

and owners of MRBs benefit from neglecting, under-investing in, and abdicating responsibility for minimizing landfill garbage, as also being a manifestation of environmental injustice. Thus, waste policy and governance are pieces of the system that shape the inequality in people's options for reducing waste and minimizing its harms, and should be part of the focus of an environmental justice understanding of household waste and MRBs.

Though there is no consensus on what exactly constitutes an environmental injustice, and indeed, this can be expected to vary from case to case, a typology laid out by Karen Bell and David Sweeting has general applicability to many situations. Two of the eight types they outline stand out as particularly relevant to the situation of waste diversion in MRBs in diverse, renter-based communities like St. James Town: (i) procedural environmental justice, referring to informational transparency and decision-making input, and (ii) substantive environmental justice, referring to equity in the quality of the environment where people live.

A World Within Two Buildings

As mentioned, the study focused on two high-rise towers in the community. 200 Wellesley Street East is owned and managed by Toronto Community Housing (TCH), which is the largest social housing provider in Canada. 200 Wellesley E. is the largest in TCH's portfolio, with 29 storeys and 719 units. The other building in the study, which we will refer to as "Building X" to protect the identity of study participants associated with this high-rise, is privately owned by a company that has several towers in the neighbourhood. This building has approximately 30 floors and 600 units.

One of the traits that make these two buildings interesting to study together is that they fall under the two waste management regimes outlined above. Waste at 200 Wellesley E., like all TCH buildings, is serviced by the City. Conversely, Building X contracts its waste hauling with a private waste company and is not subject to City oversight of what they do around waste. It is only subject to the provincial regulation for waste in the IC&I sector. Secondly, we can infer somewhat differing demographic profiles for the two buildings, since the majority of TCH residents pay rent geared to income. This is relevant given the classist beliefs about poverty and environmentalism that still tacitly circulate. We can also infer a higher proportion of people living with disabilities in the TCH building. This could heighten challenges for accessing waste amenities within the building, and may compound the stigmatizing assumptions about doing more to support waste diversion with this population.

Because TCH buildings are City-serviced, their residents have structurally better opportunities for waste diversion than buildings using private waste companies. Further, TCH created a specific managerial position in 2018 for household waste reduction, precisely to increase diversion rates across their properties. Under that office's purview, TCH does educational outreach on waste diversion to residents door to door, in building lobbies, and special events. According to a TCH official we interviewed, the organization provides specific institutional channels for residents to pursue concerns about waste problems in their buildings, and to suggest improvements. These facts present a considerable positive contrast with privately owned MRBs that have opted out of City Service for their waste.

However, we remained open-ended in our approach to comparative questions, in no small part given the age of the TCH building in St. James Town would imply infrastructural constraints that could flatten its formal advantage over the private building. As well, local news media reporting on the organization over the past few decades has brought to light discouraging information about deficiencies in TCH management, having to do with transparency, accountability, integrity issues at the highest level, and responsiveness toward residents on issues like repairs in their units, and poor conditions in some buildings (Fiorito 2010, 2011; James 2011; Spurr 2022; Vincent 2010). Further, TCH [tenant surveys](#) from 2021 and 2023 find barely passing levels of satisfaction with various aspects of the organization's services, such as availability of local staff, and staff response times to complaints (52% and 49% satisfaction levels respectively).



PHOTO: "IPAD" @ SEAN MACENTEE CC BY 2.0.



PHOTO: "ZOOM H5" @ IGNAT GORAZD CC BY SA 2.0.



PHOTO: "MICROPHONE" @ SPARK CBC CC BY SA 2.0.

Methodology of the Study

Data for the study were collected primarily through a resident survey, workshop-focus group discussions with a team of residents in each building, and a small number of semi-structured interviews with key individuals. The methods are described in more detail in subsequent chapters of the report.



PHOTO: THE CORNER

II. Waste Survey

SURVEY METHODOLOGY

For the survey, a convenience sample of 103 people was recruited in the two building lobbies between late August and mid-December of 2023, in three sessions per building. A few additional participants were recruited during the St. James Town festival in September of that year. As an incentive, each participant was given a voucher for a lunch at the Green Café, a women's catering collective which operates out of The Corner@240. Our survey combined an online questionnaire with an audio-recorded short interview, adapting a design used in a previous, Toronto-based study of high-rise resident engagement in recycling programs (Lakhan 2016b).

Respondents completed a set of questions using iPads owned by The Corner. Though people completed the questions on their own, research team members were on hand to provide help that was often needed with the technology or interpretation of the questions. This assisted self-administered survey model, adapted from Scott et al. (2016a), was aimed at maximizing the completion rate of the questionnaire, and its external validity (ensuring answers based on genuine understanding). Indeed these gains were the main logic behind our choice of in-person recruitment and administration, instead of electronic recruitment via a Quick Response (QR) code on posters or social media. We presumed, correctly, that English reading skills and comfort level with tablet-based communication would vary within each building's population, and wanted to ensure inclusivity of newer immigrants, seniors, and others who might have challenges with the iPad and the meaning of the questions.

The digital questions were primarily closed ended and borrowed extensively from a survey instrument used by the Toronto Environmental Alliance (TEA) in its recent study of coops and condos as part of its Zero Waste High-Rise project. After completing the digital component, each respondent was then asked to do a confidential voice recording to answer two open-ended questions about their views of the waste situation in their building: their likes and dislikes, and what they believe could be done to keep more waste out of landfill. Of the 103 who completed the survey, 51 agreed to do the voice recording. We turn now to the results of the closed-ended questions.

RESULTS

Profile of Survey Participants

The sociodemographic characteristics of the survey respondents offer a snapshot of various attributes, including building and floor of residence, duration of residence, time lived in Canada, age, and household composition. For a visual representation of the sociodemographic characteristics of the survey respondents, see Table 1.

Among the 103 residents surveyed, over half (55%) live in Building X, 37% live in 200 Wellesley, with the remainder, those recruited at the St. James Town Festival, residing elsewhere in the neighbourhood. The largest proportion of respondents have lived in their buildings for one to five years (46%), followed by those having lived in their building for 6 to 25 years (30%), less than one

Table 1: Sociodemographic Characteristics of Residents (n=94*)

| <i>Variables</i> | <i>Percentage</i> | <i>Variables</i> | <i>Percentage</i> |
|----------------------------|-------------------|------------------------------|-------------------|
| Building | | Children in Household | |
| 200 Wellesley | 37 | 0 | 62 |
| Building X | 55 | 1 | 14 |
| Other | 8 | 2 | 16 |
| Floor | | 3 + | 8 |
| 1-10 | 40 | Years in Canada | |
| 11-20 | 32 | Born in Canada | 23 |
| 21 + | 28 | <1 | |
| Years in Building | | 1-5 | 29 |
| <1 | | 6-25 | 22 |
| 1-5 | 46 | Over 25 | 13 |
| 6-25 | 30 | Age | |
| Over 25 | 9 | 18-30 | 17 |
| Adults in Household | | 31-50 | 51 |
| 1 | 30 | 51-70 | 23 |
| 2 | 48 | Over 70 | 10 |
| 3 + | 22 | | |

*As the number of respondents (n) for the descriptive statistics varies, the smallest value is reported.

year (15%), and 25 years or more (9%). The largest percentage live on the first to tenth floors (40%). Slightly under a third of the survey participants (32%) report living on floors 11 through 20, and the remaining 28% reside on floors 21 and above.

Slightly over half (51%) of respondents are between 31 and 50 years old, indicating that the survey sample predominantly consists of young to middle-aged adults. The vast majority, slightly under 80% of respondents, were born outside of Canada, indicating a notable immigrant demographic within the surveyed cohort. This is consistent with the high proportion of immigrants in the neighbourhood overall.

Overall, the households in our sample are generally composed of one or two adults (30% and 48%, respectively), and most (62%) do not have children under 18 living with them. Together with the age profile of our respondents, this suggests that younger people with young children were less available to take part, no doubt due to greater time pressures. This corresponds with our experience of approaching people in the lobbies. There could also be more residents of this cohort who have cars and would not have passed through the lobby at all. In the 22% of households that have three or more adults, the adults could be spouses, children over 18 and/or other relatives or friends.

What are residents' values and experiences regarding waste sorting in their buildings?

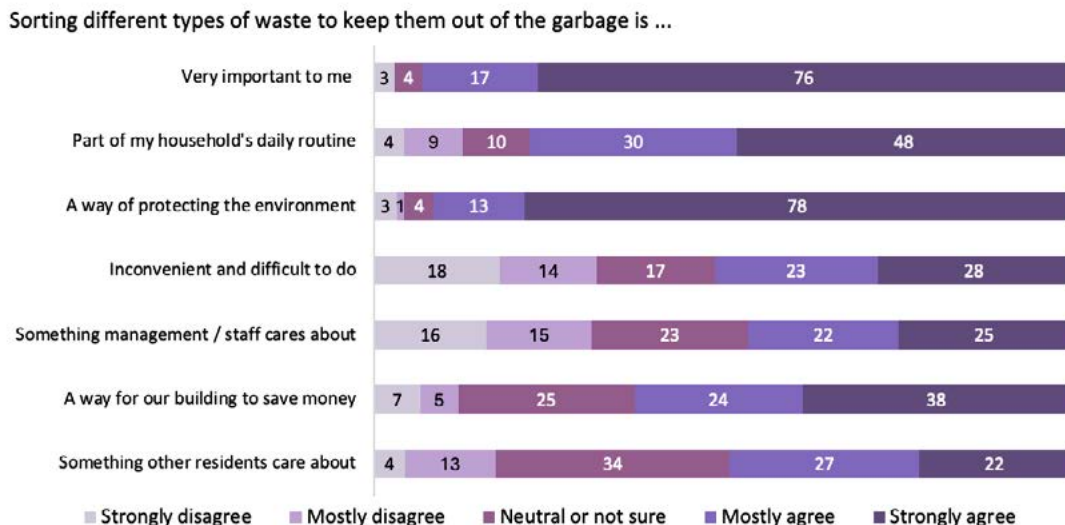
The survey asked residents a series of questions about their level of agreement with various statements regarding waste and sorting (see Chart 1). The vast majority, 93%, agree or strongly agree that sorting waste is very important to them, and 78% say it is part of their daily routine. Nearly everyone, 91%, agree or strongly agree that waste sorting is protective of the environment. Yet fully half the sample, 51%, report that waste sorting is inconvenient or difficult to do in their buildings. Together, these findings indicate a gap between what people value and want to do, and what they can do.

Almost a third of residents surveyed feel that management and staff of their building do not care about waste sorting (31%), compared to 47% who feel they do care, and another 23% who are neutral or not sure. Judging from responses to the open-ended questions, discussed in the next chapter, we believe these values might have been different had we asked separate questions about management and staff, as many participants commented favourably on staff, and empathized with the difficulty of their job.

As for participants' perceptions of fellow residents on this issue, about half (49%) feel that other building residents do care about waste sorting, compared to 17% who feel the opposite. About a third were neutral or uncertain (34%). This finding suggests directions for educational efforts in the buildings: many residents, certainly half of those in this sample, would be surprised to learn how many of their peers highly value waste sorting, and of the potential for common efforts and cooperation on this issue.

Lastly, most (63%) agree that waste sorting can help their building save money, while only 12% disagree with this statement. The other 25% are neutral or not sure. This question, adopted from TEA's survey, was aimed at discovering how residents' concerns might overlap with those of management. The question actually has very different relevance for the two buildings, since, as discussed above, Building X faces no economic incentive to reduce garbage. We will have more to say about cost incentives in chapter 5.

Chart 1: Overall Values, Experiences, and Beliefs Regarding Waste Sorting (n=91*)



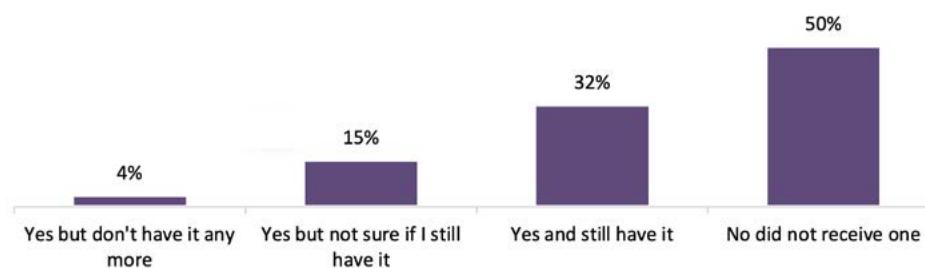
How do residents seek clarity about waste sorting?

Respondents were asked where they turn for information when they are unsure about how to properly sort their waste, with multiple answers allowed. In Chart 2 we see that signage is the most frequently consulted source, followed by general internet searches (30%), building staff (27%), family members (23%), and the City's website (23%). Only 8% report not seeking information at all, reinforcing the finding that waste sorting is important to people. The official City of Toronto waste application (TOwaste app) and the Toronto Waste Management Guide are used only 14% and 13% of the time. We also looked at how many respondents received the Guide, which the City mails to all Toronto addresses. Chart 3 shows that half the respondents did not receive it. This suggests the need to look into how the Guide is distributed in rental high-rises, and whether more needs to be done to draw people's attention to it.

Chart 2: Main Ways Respondents Seek Information when Uncertain about Sorting (n=83)



Chart 3: City of Toronto Waste Management Guide (n=82)



How much of their organics and recyclables do residents sort, and where do they dispose of sorted waste?

Participants were asked about the extent to which they separate recyclables and organics. In Chart 4 and Chart 6, we have combined the categories of all and most, and some and very little. Concerning the extent of recycling separation from general waste, over half (53%) report sorting all or most of their recyclable waste. Conversely, just under a fifth, 17%, acknowledged not segregating any recyclable waste at all. Combining those who sort very little (11%), and some (18%), with those who sort none at all, this represents 46% of the sample.

A lower proportion (45%) of residents reported sorting all or most of their organic waste, while 30% state they do not separate any organic waste from their general waste. When we combine those who sort some (14%) and very little (11%), with those who sort none at all, fully 55% of the sample are doing no or minimal organics sorting. These results are in keeping with the broader societal pattern of lower diversion rates for organics than for recyclables.

Respondents were also asked where they place the waste that they sort, allowing for multiple responses (see Chart 5). We asked this question because a pilot test of the survey suggested that some residents put sorted waste in the wrong place, especially the chute. For recyclables, 60% of residents note that they dispose of this material in the designated outdoor blue bin, at least some of the time. However, 31% report disposing of recyclable waste down their building’s chute even though the chute is only for garbage. This suggests a lack of awareness and poor provision of information. The finding that 30% report using an indoor blue bin is hard to interpret since there are no centralized blue bins inside either building. When answering the survey question, respondents may have regarded the “bin” option as equivalent to the outdoor bins. In retrospect, this is a limitation of the survey questions.

Improper disposal of sorted waste is magnified for organics. Fully 60% report disposing of sorted organics in the building’s chute at least some of the time, compared to only 24% using an outdoor bin as one of their disposal choices (see Chart 7). On this point it is important to examine the two buildings separately, since Building X has no organics bin in the outdoor enclosure. This analysis is provided below in reference to Chart 13.

Chart 4: Proportion of Recyclables Sorted (n=103)

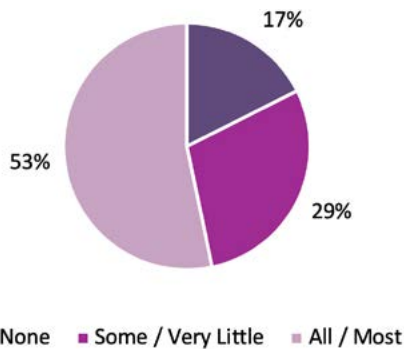


Chart 5: Where People Place Sorted Recyclables (n=101)

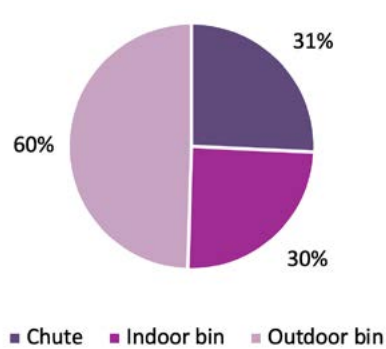


Chart 6: Proportion of Organics Sorted (n=102)

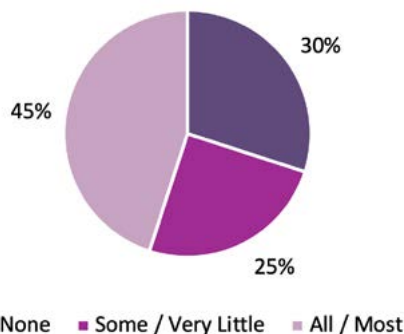
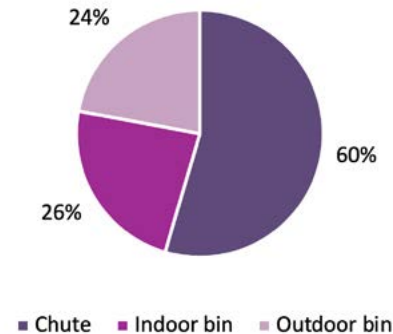


Chart 7: Where People Place Sorted Organics (n=77)

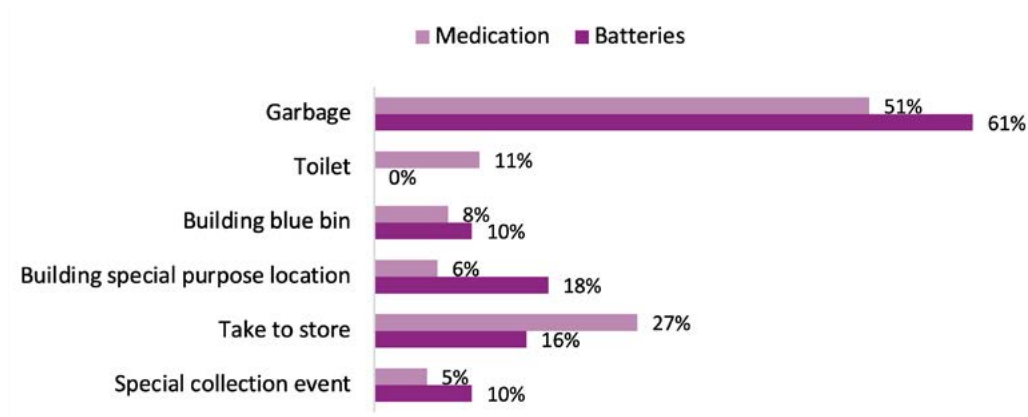


How do residents dispose of expired/unused medicines and expired batteries?

The survey also asked about disposal practices for two kinds of hazardous household waste, batteries and medicines, again allowing multiple answers (Chart 8). For batteries, 71% discard them inappropriately (i.e., in the garbage or the blue bin) at least some of the time. Forty-four percent make use of other means to keep these out of the garbage or blue bin at least some of the time, including taking the batteries to a store, a special collection event, or a special purpose bin in the building (though we later learned that there is no dedicated location in either building for the disposal of expired batteries or medicines). For unwanted medicines, 70% report discarding these in the garbage, blue bin, or by flushing them, while 32% bring them to a store or a collection event.

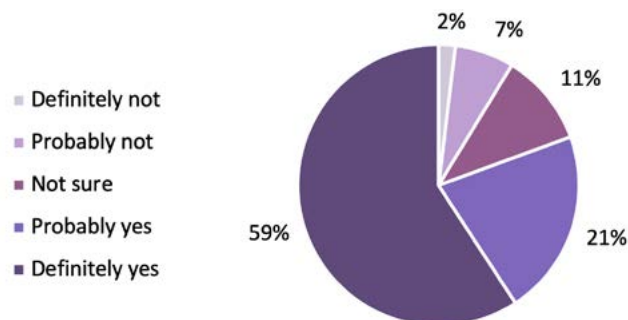
When asked how likely they are to use a special collection drop-off service at The Corner for items like batteries, medications, books, electronics, etc., (Chart 9), 80% of respondents were positively inclined toward such a service. This level of interest suggests there is a high need for special waste collection in the community.

Chart 8: Where People Place Hazardous Waste (n=100*)



**As the number of respondents (n) for the descriptive statistics varies, the smallest value is reported*

Chart 9: Likelihood of Using Special Collection at The Corner (n=103)



How do the two buildings compare in perceptions and experiences of waste sorting?

The proportions of respondents who value waste sorting, make it part of their daily routine, and see it as an environmental issue, are virtually the same between the two buildings, thus we do not present the charts for those disaggregated results. Turning to perceptions of the ease of sorting waste, note that in both Chart 10 and Chart 11, the categories of strongly agree and mostly agree are collapsed, as are those of strongly and mostly disagree.

More residents of Building X find sorting difficult and inconvenient to do than residents of 200 Wellesley: 60% of Building X respondents strongly or mostly agree with that statement, versus 39% of 200 Wellesley respondents (see Chart 10). This is what we would expect given that TCH buildings' enclosures allow for disposing separately of recyclables, organics, and garbage.

We found no difference between the two buildings on the belief that management and staff care about waste; again, we are not presenting those charts. Conversely, confidence in fellow residents does differ considerably by building. Recall that for the sample as a whole, 49% agree that fellow residents care about waste sorting. This figure is only 38% for 200 Wellesley, as compared with 58% of respondents from Building X (see Chart 11). We will have more to say about this in chapter III on qualitative survey results.

Chart 10: Perceptions of Waste Sorting Convenience and Difficulty: Comparison by Building (n=85)

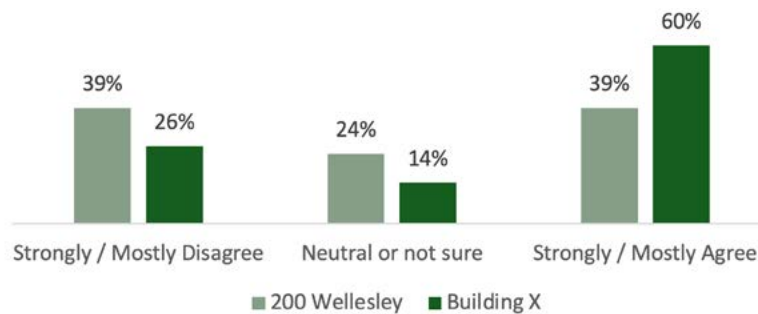
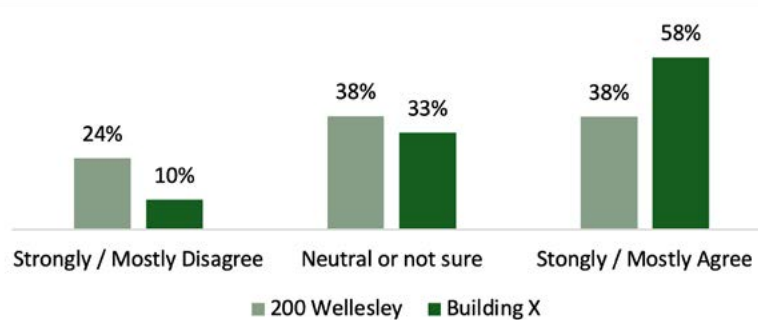


Chart 11: Perceptions of Whether Other Residents Care about Waste Sorting: Comparison by Building (n=83)



How do the two buildings compare in how much waste residents sort?

Slightly more respondents in Building X (52%) note they sort all or most of their recyclable waste as compared with residents of 200 Wellesley (47%) (see Chart 12). The difference is much greater for organics (see Chart 13): almost half (48%) of Building X respondents sort their organic waste, 10% higher than at 200 Wellesley, a difference that is mirrored in the percentage reporting “none”. These findings are striking given that there is no organics waste collection at Building X, and that 200 Wellesley’s enclosure makes it possible to separate organics from garbage, which is not the case in Building X.

Given that 200 Wellesley provides organic waste collection, whereas Building X does not, we would expect more individuals in 200 Wellesley would report having received an organic waste kitchen catcher. This is borne out in Chart 14: 27% of 200 Wellesley respondents report having been offered or received this container (even if they no longer have it or did not accept it) compared to 10% in Building X. Nonetheless, we are surprised by the high percentage of respondents in 200 Wellesley who report not having received one (73%), given that this is part of TCH’s programming around waste sorting.

Chart 12: Proportion of Recyclables Sorted: Comparison by Building (n=94)

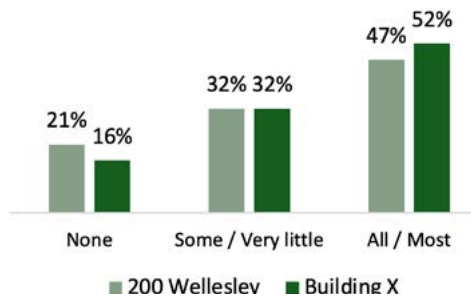


Chart 13: Proportion of Organics Sorted: Comparison by Building (n=93)

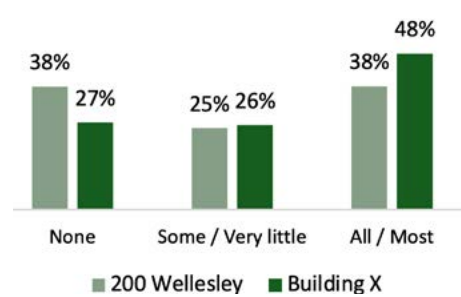
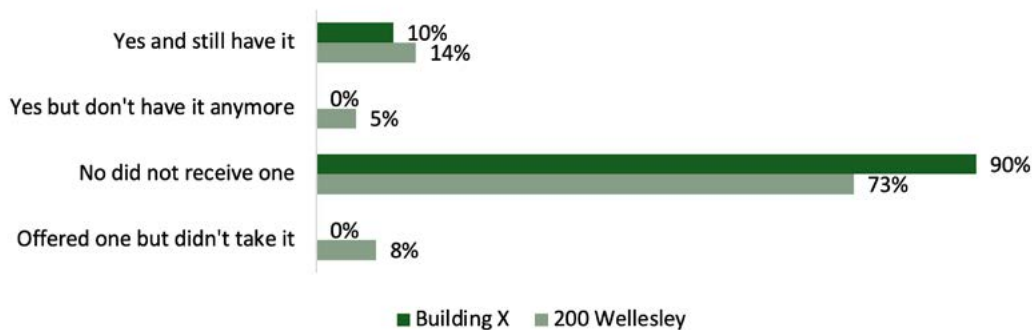


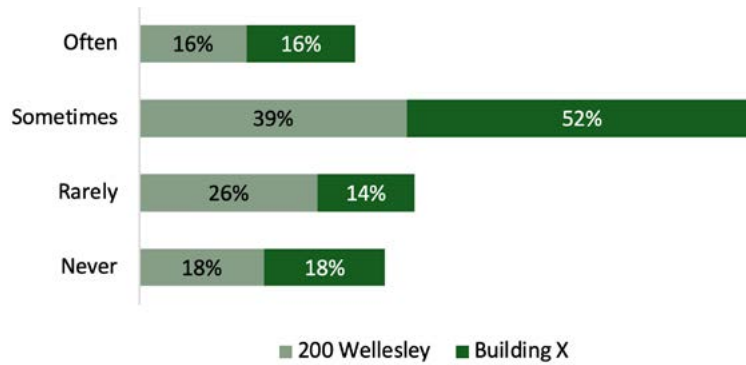
Chart 14: Received an Organic Waste Kitchen Catcher: Comparison by Building (n=85)



How do residents of the two buildings compare in their uncertainty about waste sorting?

With respect to the overall about waste sorting, more Building X residents express overall uncertainty about what goes where, with 68% saying they are sometimes or often uncertain, compared to 55% for 200 Wellesley respondents (see Chart 15). This pattern is mirrored in the rarely and never categories.

Chart 15: Waste Sorting Uncertainty: Comparison by Building (n=94)



Do the two buildings differ in how residents seek clarity about waste sorting?

Among those who report at least some uncertainty in how to sort waste, 200 Wellesley respondents are less frequent users of most of the suggested methods of obtaining information, except for the TO Waste Guide, visiting the City's website, and asking a neighbour (Chart 16).

Chart 16: Ways Respondents Seek Information when Uncertain about Sorting: Comparison by Building (n=76)



Do residents' reasons for not fully sorting waste differ by building?

The survey included two questions about why residents do not sort all their waste: one regarding recyclables (Chart 17) and one regarding organics (Chart 18). The answer options provided in each question were mostly the same, with a few tailored to each type of waste. Multiple responses to both questions were allowed.

Very similar patterns are seen across the two buildings. The top two reasons for not fully sorting their waste are comparable, though with differing magnitudes. In both buildings, for both recycling and organics, insufficient space in their apartments was the most prevalent reason, though much more so for Building X than 200 Wellesley (42% vs. 24% respectively for recyclables, and 40% vs. 31% respectively for organics). The next most common reason was uncertainty about where in the building to dispose of these two types of waste, with Building X respondents slightly more uncertain about recyclables than in 200 Wellesley (24% vs. 19%), and 200 Wellesley respondents more uncertain about where the organics go, than in Building X (34% vs. 25%). This latter result is striking given that 200 Wellesley offers organics collection, while Building X does not; we would expect 200 Wellesley residents to express less confusion about this.

More residents of 200 Wellesley than in Building X find the location of the collection bins for both types of waste to be inconvenient (19% vs 6% respectively for recyclables; 20% vs. 15% respec-

Chart 17: Reasons for Not Separating Recyclable Waste: Comparison by Building (n=52)

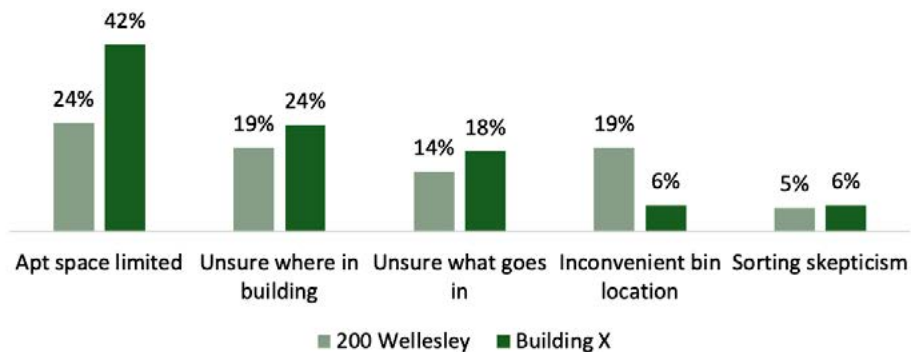
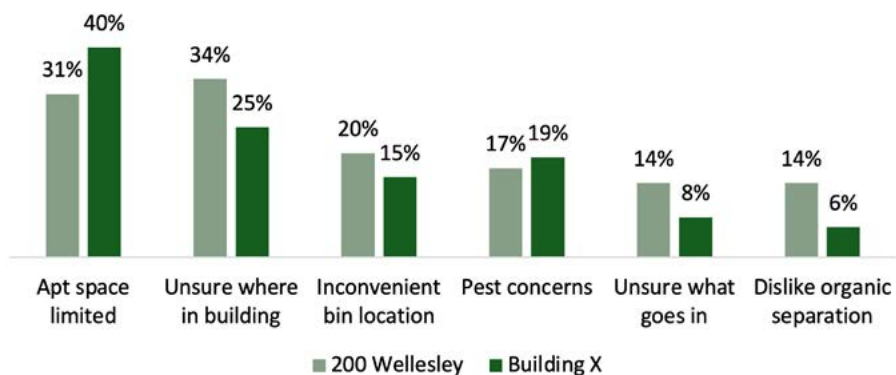


Chart 18: Reasons for Not Separating Organic Waste: Comparison by Building (n=64)



tively for organics). This pattern may very well reflect the higher presence of people with disabilities in TCH communities; having to bring sorted waste to an outdoor enclosure area can be experienced as a considerable burden. This may also help to explain why twice the percentage of 200 Wellesley respondents as Building X respondents report they do not like organics sorting; the “ick” factor may loom larger when the journey to the disposal site is more arduous. There may also be a paradox at work here: while having centralized organics collection in the outdoor enclosure in 200 Wellesley makes organics separation easier to do *properly*, it may also make it more unpleasant given the opportunity for mess and smell, compared to disposing of organics items down the chute when there is no designated organics collection.

As noted above, more Building X respondents report overall uncertainty about how to sort waste. In Charts 17 and 18 on the reasons given for not fully sorting waste, we see the uncertainty differs by waste type. In this sub-group of respondents, there was slightly more uncertainty among Building X respondents for recyclables (18% vs 14%), but more uncertainty among 200 Wellesley respondents for organics (14% vs 8%).

Finally, virtually equal proportions of respondents in the two buildings indicated pest concerns as a disincentive to keeping sorted organic waste in their units (17% of those from 200 Wellesley and 19% of those from Building X). Similarly, nearly identical – though quite small – percentages reported skepticism about the destination of sorted recyclables as a reason for not recycling (5% of those from 200 Wellesley and 6% of those from Building X).

Do residents of the two buildings differ in where they dispose of sorted waste?

Turning to the question of where residents dispose of sorted waste, when we disaggregate by building to see if either set of residents makes greater use of outdoor bins, we see that the figures are virtually identical for organics (see Chart 19). However, Building X residents make more use of the recycling bins (see Chart 20). Both findings are striking, and unexpected, given the TCH’s waste-specific programming. Further, Building X does not offer organic waste collection, yet we see 25% of respondents there are putting sorted organics into some kind of outdoor bin. It may be that Building X residents are mistaking an oversized 15-yard dumpster (the kind often seen in construction sites) that was placed there for items such as furniture, for an organic waste bin. The bin is dark green in colour but has no signage indicating organics designation.

Chart 19: Organic Waste Disposal Location by Building (n=63)

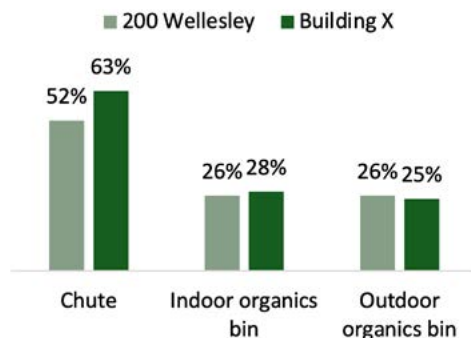
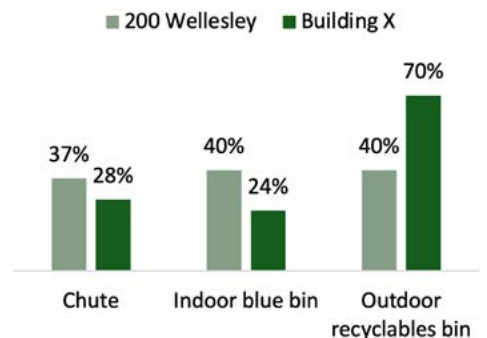


Chart 20: Recyclable Waste Disposal Location by Building (n=76)



The fact that considerable percentages of respondents in both buildings use some sort of indoor bins for both types of sorted waste is puzzling. For 200 Wellesley residents, it may reflect that there used to be an indoor room on the first floor for sorted waste, which closed in early 2022. Residents had 24/7 key fob access to this room from approximately 2014 until then.

Regarding improper use of the chute for sorted waste, recall that 31% and 60% of all respondents are using the chute for recyclables and organics, respectively. Disaggregated by building, Charts 19 and 20 show that a higher proportion of 200 Wellesley respondents are using the chute for recyclables (37% vs. 28% for Building X), while a higher proportion at Building X use the chute for organics (63% vs. 52% for 200 Wellesley). These proportions all suggest both a need and an opportunity for greater clarification and guidance in both buildings regarding waste sorting; certainly, the opportunity exists in the fact that so many residents make the effort to sort their waste.

Does waste sorting in the two buildings differ by residents' age?

We included a question on age in light of research indicating that the propensity to sort waste increases from younger to older adulthood (Commisso 2022). As a caveat, we should be cautious with our results as there are only 10 residents over 70 years of age in the sample. Chart 21 and Chart 22 present our findings on the extent to which different age groups in our two buildings separate their recyclables and organics, respectively.

Chart 21: Recyclable Waste Separation by Age (n=103)

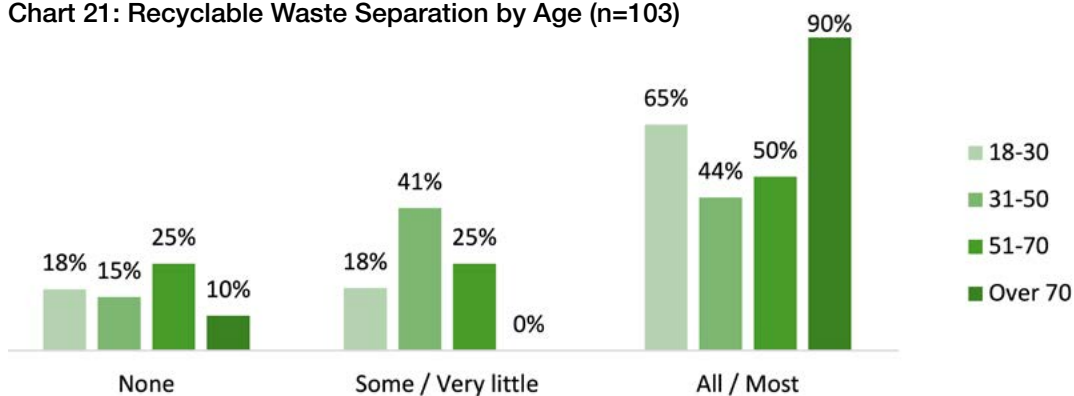
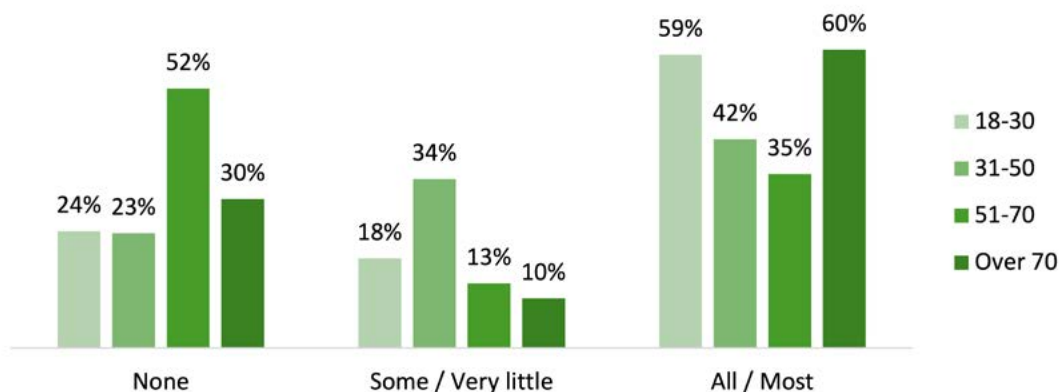


Chart 22: Organic Waste Separation by Age (n=102)



Overall, we see a curvilinear results: the highest engagement is seen in the youngest (18 to 30) and the oldest (over 70) age groups. For example, 90% of those over 70, and 65% of the 18- to 30-year-olds, separate all or most of their recycling. For organics, these figures are 60% and 59%. We can only speculate on the reasons for this curvilinearity. It could be that the conducive factor for the oldest respondents is having more available time, while the younger bracket might also have some of the benefit of available time, along with stronger information on the environmental impacts of garbage.

Our results show the older respondents (aged 51 and over) perceive themselves as more knowledgeable about waste sorting compared to younger respondents (aged 18 to 30) (see Chart 23). The elevated sense of confidence in their knowledge amongst older respondents may account for their higher rates of waste sorting. However, this confidence does not explain why the youngest age group also exhibits higher rates of waste sorting. Additionally, the reasons behind the older respondents' greater self-assurance in their knowledge remain unclear. We also looked at the correlation of age with *where* people put their sorted waste (Chart 24). We might expect to see the oldest cohort more inclined to use the chute than the younger groups, based on possible mobility limitations and less exposure to environmentalist messaging about waste. On the other hand, older residents might be less pressured than those with small children, giving them more time to bring separated waste to the outdoor bins. As it turns out, far more younger individuals in our sample are using the chute to dispose of both organics and recycling, at least some of the time, than the oldest age bracket. For organics, these figures are 92% and 29%, respectively. Conversely, the over-70s are using the outdoor bin much more than the 18- to 30-year-olds.

Chart 23: Waste Sorting Uncertainty by Age (n=103)

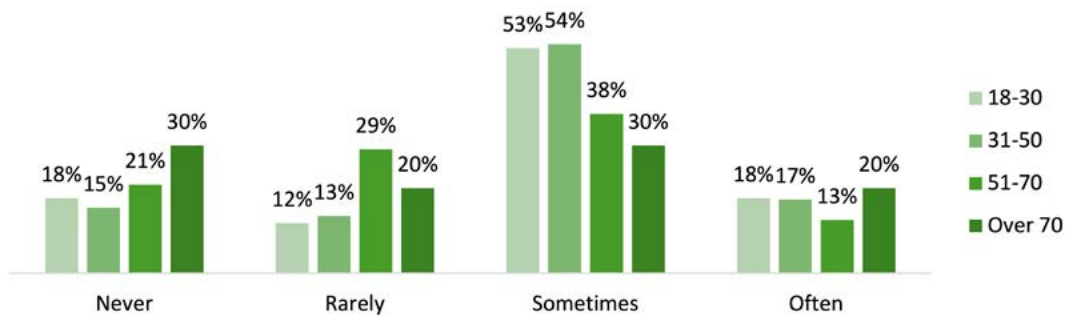
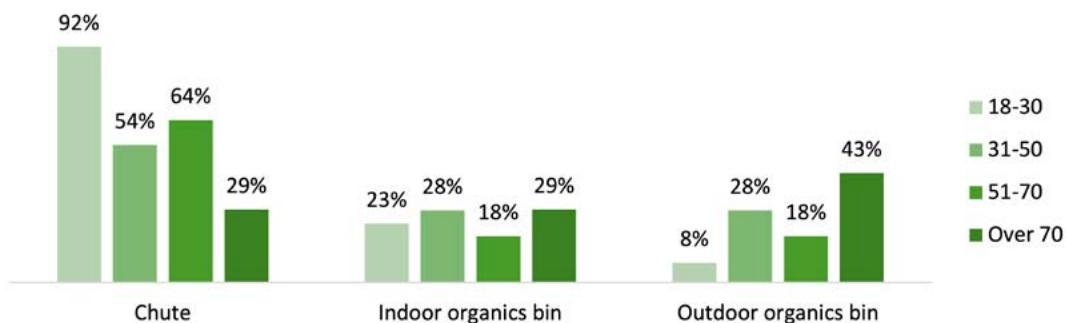


Chart 24: Organic Waste Disposal Location by Age (n=70)



The same pattern is found for recyclables, though we have not presented the chart. These findings suggest the need for better messaging and education at the very least to ensure that those committed to sorting their waste are equipped to maximize the environmental benefit of that act.

Does waste sorting in the two buildings differ by years lived in Canada?

As mentioned earlier, language and cultural differences can impede the understanding of signage and other waste separation messaging for newer immigrants. For organics (see Chart 25), immigrant Canadians in our sample are more compliant with waste separation than individuals born in Canada, of whom only 32% separate their organics all or most of the time. The Canadian-born respondents are even less compliant than the newest newcomers, of whom 42% report separating all or most of their organics. This pattern is also reflected in the “none or very little” category, with the exception of immigrants with 25 years or more. Further research with representative sampling would be needed to verify whether this is reflective of MRB populations more generally, and if so, what lies behind it. For example, do some immigrants living in MRBs retain culturally ingrained habits of saving food waste for use in gardening, an observation we have heard informally in multi-ethnic St. James Town? For recyclables (see Chart 26) this pattern is reversed. Respondents born in Canada separate recyclables more than most of the immigrant categories except for those with 6 to 25 years in the country. Again, further research is needed, which should encompass the quality of messaging and information in MRBs with higher proportions of immi-

Chart 25: Organic Waste Separation by Years in Canada (n=100)

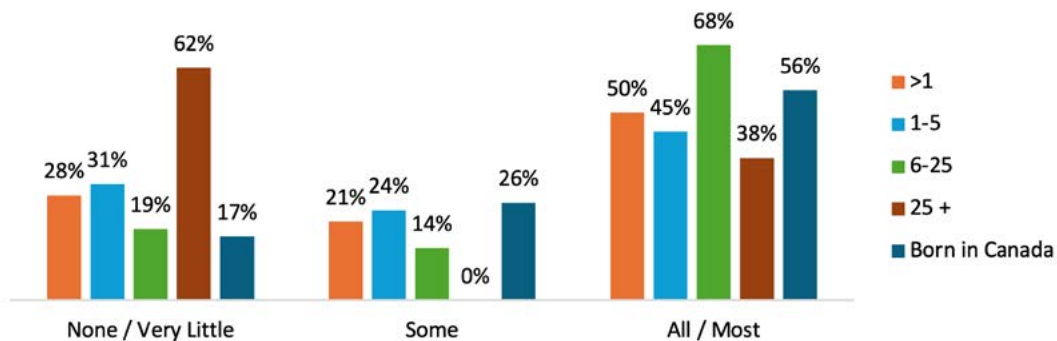


Chart 26: Recyclable Waste Separation by Years in Canada (n=101)

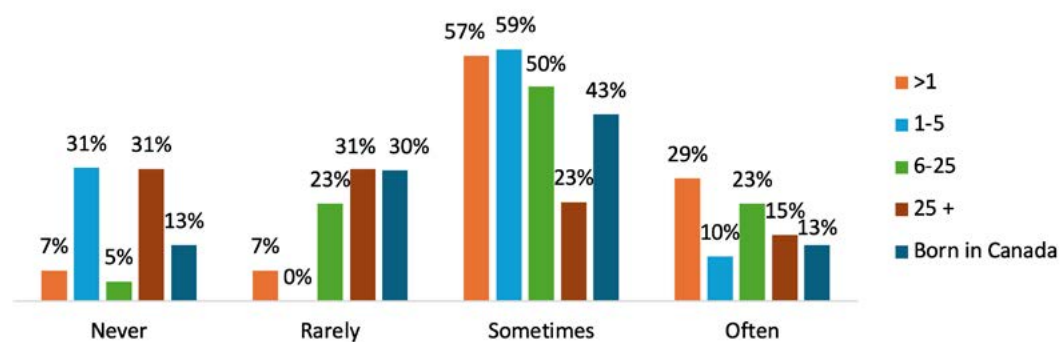
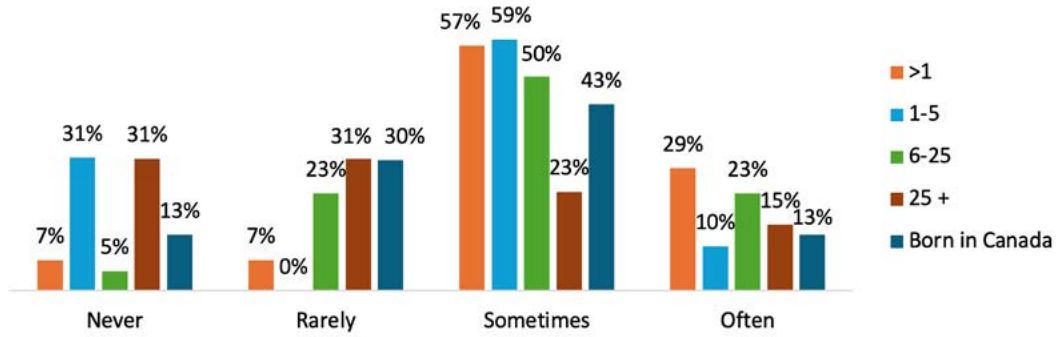


Chart 27: Waste Sorting Uncertainty by Years in Canada (n=101)



grants. It may be that Canadian-born residents have absorbed the recycling mantra, whereas newcomers hail from countries where this program and way of thinking do not exist.

Those with less than 1 year and 6 to 25 years of residency report most often facing waste sorting uncertainty (29% and 23%, respectively), whereas longer-term residents and those born in Canada report waste sorting uncertainty less often (see Chart 27 above). Newcomers who have lived in Canada for 1 to 5 years or 6 to 25 years most frequently find themselves unsure some of the time, though the percentage is less (23%) with longer residency, and for those born in Canada (43%).

Finally, we found that living on a low, medium, or high floor seemed to make no difference in people's tendency to sort waste, where they disposed of sorted waste, or reasons for not sorting all their waste. We do not present those charts.



Figure 4: Basement waste receptacle in Building X, a private rental building in St. James Town.

III. In Their Own Words: Residents' Experiences and Opinions

In the main text of this section, we summarize the qualitative survey findings. Boxed inserts are used to integrate observations of green teams' group discussions that echoed, reinforced, or nuanced the survey participants' views.

The Survey

The mixed modal survey included two open-ended questions for which we audio-recorded and transcribed the verbal responses. Of the 103 participants, 51 agreed to do these questions after completing the digital component. Their profile differs from the sample as a whole in two main ways. First, a higher percentage of this subset were born in Canada, 38% vs. 23% for the sample as a whole. Conversely, those with less than a year in Canada, or one to five years, are under-represented. In all likelihood this reflects a lesser confidence in spoken English among the newer Canadians in our sample, which in fact, many people stated as reasons for declining to do this part of the survey. Secondly, a higher proportion of the 200 Wellesley respondents participated in the audio-recorded component.

The open-ended questions were:

1. Are there things that you like, and don't like, about how household waste is managed in your building?
2. What do you think could be done to encourage residents of your building to keep more recyclables, organics, and other items out of the garbage?

We used NVivo, a program for analysing qualitative data, to thematically sort the responses. Two members of the research team, Kowalchuk and Einmann, used reflexive thematic analysis, a process described by David Byrne (2021), to identify key themes (the NVivo "codes"). This was partly inductive – derived from what we were seeing in the transcript – but also based on the research goals, and the knowledge we were gathering overall in the project. Three overarching topics emerged: respondents' views of the waste situation their building, their attribution of responsibility for problems, and thoughts on ways to improve waste diversion.

Resident Green Teams

Two small resident "green teams" of five members each were formed at the outset of the study, one in each building. The members were recruited with the assistance of The Corner@240, who reached out to between 12 and 20 individuals in the two buildings who were known to be active and interested in sustainability. Three two-hour meetings were held with each team between August 2023 and March 2024. These sessions, whose format was a hybrid between a focus group and a workshop, elicited the participants' experiences and understanding of waste practices in their buildings, and their diagnoses of barriers and opportunities for addressing them. Their observations anticipated many of those we obtained in the open-ended survey questions, both nuancing and reinforcing that information.

The green teams were involved in the project throughout the data collection period, participating in WhatsApp chats where they shared observations and photos that vividly bolster the data collected. Green team members also attended guest presentations by experts on the topic of high-rise household waste and ways to reduce it. TEA Senior Campaigner Emily Alfred, and Calvin Lakhan, co-researcher with the "Waste Wiki" project at York University's Faculty of Environmental and Urban Change, generously shared their knowledge in a free-flowing exchange with residents.

1. VIEWS OF THE WASTE SITUATION

Waste is difficult to sort

For half of the 51 participants who did the audio-recorded, open-ended questions, the complaint that waste is difficult to sort was the first and main answer to the question about likes and dislikes. The prominence of this concern reinforces the high value placed on keeping waste out of landfill that we found in the closed-ended questions. Seven of these people, and ten in total in the sample, brought up the environment or ecology as something they valued, and as connected waste sorting.

One of the main difficulties participants in both buildings signaled was a lack of direction about where to take sorted waste and how to use designated spaces for waste, especially the chute rooms. Sometimes these observations referred to a presumed lack of knowledge among fellow residents, and sometimes in reference to their own lack of knowledge. It is striking that just as many in 200 Wellesley as in Building X complain of not being told or not knowing where or how to separate waste, in some cases for recycling and other cases for organics. From both groups of residents, there were comments that may help to explain the finding we discussed in the previous chapter of the report, that people dispose of sorted waste in the wrong place. The following excerpt is illustrative. For this and all quotations, we give each participant a unique numeric code.

I think it's not properly labeled. There's a garbage chute but there's no direction on how to use it, what kind of bags you can put in there or not. They have two bags outside, the green bags, the big ones, but again they lack directions and lack labelling as to where to put what. (Building X, Participant 94)



Figure 5: Chute room in Building X, a private rental building in St. James Town.

Figure 6: The inside of a blue bin in the enclosure of Building X, a private rental building in St. James Town. The discarded food waste and black bags constitute contamination, making this blue bin unfit for recycling.

One infrastructural deficiency that Building X green team members noticed, that did not come up explicitly in the survey, is the absence of black bins for garbage in the enclosure. Building X team members and the research team came to this collective realization some months into the study. The only bins available for residents to use in the enclosure are blue bins, an oversized dark green container for bulky items like furniture, and small brown bins from the waste chute compactor that are closed, not purposed for residents to use. This helps to explain why the blue bins at Building X contain garbage as well as recyclables, as seen in photos we took. It also helps explain why the waste hauler mixes the compactor and the blue bins content together, as evidenced in videos made on several occasions.

I don't like that they literally have no white bins, no blue bins, no compost bins, nothing and I don't know where to throw everything, I'm only told to throw it down the chute, that's what I do, unless its big stuff. If we were offered stuff like compost bins, blue bins, a lot of us are not from Canada, a lot of us don't understand the concept of recycling, or compost. (200 Wellesley, Participant 25)

There's no options for recycling, I noticed that a long time ago. I'm for recycling options. Cause I've never seen any, it's just garbage. (200 Wellesley, Participant 32)

One Building X resident who was generally pleased with their building's waste situation, and found no explicit fault in anything, added almost as an afterthought: *"About the blue bins, I feel like I couldn't find any blue bins near, even if management kept somewhere else, I'm not aware of that"* (Building X, Participant 2). The fact that this person has never seen the recycling bins could mean that they do not recognize them. This would not be surprising given the poor signage in the enclosure at Building X and the other buildings in this landlord's St. James Town properties, and the fact that the blue bins can be seen to contain all manner of waste including garbage.

Other survey respondents talked about deficiencies in the infrastructural means for sorting waste. This encompasses having only one waste chute, having to take sorted materials outdoors to the

Green team members also talked about their buildings lacking information on, or spaces for, special forms of waste. Regarding expired batteries, they themselves were not all aware that they can be taken to a Home Hardware, or to The Corner@240. Another problematic form of waste they mentioned are fluorescent tube light-bulbs, that they observed are a potential hazard for waste handlers if placed in garbage or recycling. Green team members at 200 Wellesley brought up home health-care waste, which include items like sharps, plastic tubing, and colostomy bags. Speculating this might be a more substantial problem in TCH building, they knew of residents who were concerned about how to dispose of such items. Concerning bulky forms of waste like furniture, the groups observed a kind of injustice in not having scheduled pick-up days, a privilege of residents in single-family homes in nearby wealthy neighbourhoods. The consequence, they pointed out, is that residents with mobility problems may dismantle items piece by piece, impeding reuse, and/or leave such items in the hallways.

Green team members at 200 Wellesley commented on the chutes being difficult to operate for many residents, especially for children, those with physical limitations, or people with a dog on a leash. The sides are sharp, and being spring-loaded they can be difficult and even hazardous to open. Some residents may also find it difficult if not impossible to keep the door of the garbage room open while simultaneously operating the garbage chute. Green team members pointed out that well-intentioned residents leave useable items such as unopened non-perishable food items in the building's common areas for others to take. While this is understandably seen as a nuisance and an eyesore, it signals that if there were a formally designated area for donated surplus food, residents would use it.

enclosure, not being given small containers for sorting waste for their apartments, the absence of instruction on where to get rid of specific items like batteries, broken glass, lighters with flammable fluid, and electronics. More detailed observations about the chute rooms and the enclosures, presented below, further clarify how these areas are discouraging to use. These concerns were raised by similar numbers of respondents in both buildings, but with some nuances between them. The following are some illustrative quotations.

We only have access to the garbage chute and there is no way to separate garbage, so because of that and because of my living situation, we have a tiny kitchen, I don't separate my garbage and I felt guilty when I went through the survey. I don't like that if we have bigger things that need to be disposed properly, even when we bring them out here [to the enclosure], they are all compiled together. (Building X, Participant 52)

I wish that we had an organics program. Currently we do not have any program, and also dealing with recycling is quite inconvenient because we have to take it all the way downstairs and walk a little bit to get to the recycling center. I realize it's an older building and it might be expensive to put these things in place, but I wish that was something that existed. (Building X, Participant 51)

I don't like the way waste is being managed in our building because there is no specific slots available to segregate between the organic waste, or something that can be processed, and electronic goods. The country where I come from, there used to be a segregation between the food waste and recyclable waste and electronic items. You have a different color to identify between various types of waste, which was in place already. But I don't see that kind of system happening over here. (Building X, Participant 8)

Well I mean, I see that they do try to do their green bin; they need to put something on the floors, honestly. We have the one garbage chute, but once you throw anything in there, that's it, it's all garbage, doesn't matter if they have it in the blue bags or for organics, everything just goes down that chute. (200 Wellesley, Participant 79)

This third excerpt indicates that immigrants may have country of origin experience with decent waste collection systems, and are acculturated to waste sorting. The fourth excerpt from a 200 Wellesley resident shows that certainly some residents here are aware that the chute is for garbage only, but suggests that not all residents have this awareness.

Participants from 200 Wellesley in particular were disappointed that that an indoor room for sorted waste on the ground floor had recently been closed. For example:

I've been living here for 12 years now. Even where the downstairs where they have what is supposed to be a place for the garbage, those are now locked for us, so now we have to go outside, and it's not convenient for a lot of people. It's so much easier for them to have that room where you have the boxes and the bins, so people can put their stuff in there, especially in the winter, who's going to want to go outside? I think TCH really has a bad attitude when it comes to waste and garbage.
(200 Wellesley, Participant 66)

On this point, another 200 Wellesley resident observed that the indoor bins were a more comfortable height than those in the enclosure.

Chute area problematic

Independent of dissatisfaction with the single-chute system, there were many additional complaints about the state of the chute room area, 15 in total across the subset of 51 participants. Though the complaint was more frequent among the 200 Wellesley participants, the nature of the complaints is the same in both buildings: waste left on the floor of the chute room, sometimes in quantities that occupy the entire floor space so that people have to leave their bags outside the chute room; bags left sitting in the open chute rather than pushed down (see Figures 5 and 8); chute rooms not cleaned often enough, and the chute itself being difficult to open and sharp-edged. The following is illustrative of complaints related to mess and mis-use:

I've seen the garbage left outside [outside the chute room], the garbage is full inside where the garbage chute is, and on some floors it comes right out the door, and it will be like that there for a couple days, and it starts going on bad, then they send their people to come clean it up. (200 Wellesley, Participant 79)

This comment and others suggest that food waste is quite commonly part of what gets left in or near the chute room, and many such complaints included observations about foul smells and concerns about pests. But people also noted that separated [blue bin](#) material gets left by the chute for the staff to take away. One Building X resident also noted: *"I believe there is only one simple disposal room, and every kind of waste, whether it's broken mirrors, electronics, green waste, it's all dumped in there"* (Building X, Participant 43).

A related source of discontent is waste discarded in hallways (see Fig. 8), often by an elevator presumably to make it easier for staff to remove it. These include items for recycling, furniture and garbage. These observations were again more common among the 200 Wellesley residents.



Figure 7: Outdoor enclosure at a private rental building in St. James Town showing no black bin designated for garbage.

Enclosure area problematic

The likes and dislikes question also elicited observations about the outdoor enclosures, again more frequently from the 200 Wellesley participants. In both buildings there were complaints about the space being slippery in winter, and more general complaints of mis-use of the blue bins. Distinctive to 200 Wellesley were complaints about bad smells from the organics collection in the enclosure, improper disposal of organics, poor visibility of the organics bin (since it is placed furthest away from the door), and a need for more frequent green bin and blue bin emptying.

Most of the time it's cold around the year, not snowing, but it's a little hard to recycle outside, the garbage, so the recycle room, it needs to be fixed, and even when it was open, it was very dirty, smelly, there was water on the floor always, it was always smelling very bad. They need to fix that room, and if there is an organic collection, they need to put it somewhere visible and let the resident know. They always notify us for everything, if there is construction, if they want to check my apartment, or even if I put an order for any maintenance issue, they give the notice first, so they need to let the residents know that these are the options and where they are located so that we can use it. (200 Wellesley, Participant 84; emphasis added)

Another problem of the enclosures at both buildings that green team members talked about was unauthorized dumping by non-residents, of material such as construction waste into and around the building's enclosure bins, often in early morning hours.

In the winter, that area can get very messy to the point where you can't even get to the bins, you just have to throw it in one of the piles on the ground that already exists. That doesn't look good but it's also very inconvenient to deal probably for the people who are picking it up. I wish that was better as well. (Building X, Participant 51)

I meet people in the elevators, we commiserate, people who have seen the facilities and used the facilities, but there are dozens of cases where I see people are just tossing. For example during the summer, a woman was making barbeque and selling it, and she had meat bones that should have gone in the organics. But instead they threw everything in the black bin. My balcony is facing [that area], so in the summer time, the fact that garbage is all comingled, and sits there in the sun, it's pretty disgusting. (200 Wellesley, Participant 74)

This second of these excerpts identifies several of the challenges of waste sorting at this building, including lack of awareness of the building's organics program (the interviewer had just informed them that there is, indeed, organics collection there), and the closure of the indoor waste room.

Issue of health and safety

In the experience of many participants, the waste situation in their building generates problems of health and safety that are entwined with a sensory and aesthetic assault. Most common was the complaint of smell and pests, especially roaches, from organic waste in the chute rooms and hallways, or bedbugs from furniture and other items left in hallways. One resident spoke of rodents in the parking area where waste receptacles are pulled apart overnight, not necessarily by fellow residents. Others worried about safety risks posed by batteries in the garbage and mattresses on balconies. The following are illustrative examples.

I want to be a very responsible tenant and neighbour, but I have noticed some of the people they don't put all the garbage inside the chute, it's all over the floor. But I just want to be mindful to separate all the waste and I always try to dump the recycling... Because of that we have lots of smell and the cockroaches, and sometimes bed bugs. (Building X, Participant 97)

Sometimes when you come out of your apartment in the main hallway by the elevators there's stuff there, like chairs, air conditioners, I've seen quite a few things like that out there which I don't like because you don't know where they came from, you don't what they have and it's a risk to bringing stuff into your apartment. (200 Wellesley, Participant 24)

There's no instructions on where to dump batteries. I think it's a hazard and a risk for people to recycle that. If it's thrown in the garbage, if it goes into the waste and burns and it's going to explode. (200 Wellesley, Participant 27)

I don't like the way they are throwing garbage outside. They are not leashing the dog, there is poo everywhere, and they should take care of the balconies because they shouldn't keep garbage in the balconies. The building looks ugly outside, when you look outside you see all those stuff they are keeping in the balconies. We should be worried about that, because we had a big fire and it was caused because of that. They are keeping a lot of things a lot of garbage in the apartments. (200 Wellesley, Participant 63)

Green team members discussed another health and safety problem related to waste: items being tossed from balconies, including glass, cigarette butts, dog feces, used diapers, feminine hygiene products, used needles, and full bags of garbage. At Building X, residents on the second floor have had to deal with some of these kinds of items dropped onto the large terrace that serves as their balcony.

The 200 Wellesley green team noted a problem that appears to originate from non-residents, but negatively affects residents' environment, and possibly their morale. This is a problem that would seem to have a straightforward remedy, with an onus on building management. The following is an excerpt of group discussion with codes to replace names.

GT1: Also we have these food programs and after this there is a lot of waste. There are the food bag programs. There is a lot of waste after, full boxes of bananas rotten, and no one is going to eat it and you can't just leave it there, it's waste. So, we have to manage this process, so we have to maybe give instruction [to the donor organization] of how to deal with the waste or they leave it on the table.

GT2: Last week it was rotten potatoes.

GT3: The rotting food is very disturbing. I saw it yesterday. How is this sanitary? How is this helping people? This is not the way to distribute food.

GT4: You have to respect people's dignity. You have to respect people. They are not animals, they are people. I don't see it as polite when someone offers me rotten food.

The connection between morale and waste was made implicitly by team members who said they would feel more confident to invite people to their homes if waste management in the building were improved. Some team members do not feel comfortable inviting guests to visit because of the appearance of the outdoor waste area, which some can see from their balconies, and lobby.

2. ATTRIBUTION OF RESPONSIBILITY

Criticisms of management

Several participants from both buildings interwove their observations of waste problems with an attribution of responsibility to management, fellow tenants, or both. In many cases, things they did not like could only fall under management's responsibility, such as poor signage and inadequate maintenance of waste areas like the chutes. For the excerpts below, we zero in only on the more explicit criticisms of management. The comments highlight a perception of management's non-responsiveness to residents' concern; incompetence; unfairness (policing bad practices through threat of fines); and lack of care for the issue's connection to environment.

There is nothing I like. Waste is not managed at all. I need to write emails or call the management office to bring their attention to the garbage chute and they don't even care about it. The chute malfunctioned. The building and corridor smells because of these waste so they don't care. I'm so sorry to say, but unfortunately, there is nothing good to say about waste management, especially with Building X because I lived at Building Q [another building in this landlord's holdings] as well and it was still better. This one is not. (Building X, Participant 4)

It's not [being managed]. Toronto Community Housing has no concept of how to deal with waste. People put garbage bins, on my floor alone there's always people putting trash in the waste closet and the garbage chute. Sometimes I've gone there it's so nasty and stinks. Cameras need to be put up so we can monitor this sort of thing, more importantly considering the amount of people in this building, we definitely need to get a really laid out concept of how waste is dealt with, like cardboard boxes, garbage disposal. We don't have the boxes that the City puts out for the waste and organics, we don't get that. Even if we do, people will use that for other things. We need not only education, but a code or concept of monitoring and explaining to people what needs to be done. Especially now when climate changes, we really need to start saving and become eco-cognizant about what is going on and I think TCH does not do the job about that. (200 Wellesley, Participant 66)

There were participants at both buildings, 11 in total, who expressed satisfaction with **management's** efforts around waste, particularly around cleaning, but praise and empathy toward **staff**. These sentiments were sometimes voiced along with criticism of fellow residents' behaviours. For example, management has made waste sorting easy at 200 Wellesley, one respondent stated, but people are just not doing it. At Building X, a couple of respondents attributed a reduction in inappropriate placement of waste to reminders posted by management. Another praised cleaning efforts but was disappointed with lack of direction for waste sorting.

Attributing the problem to residents

In responses to both open-ended questions, some participants attributed some responsibility for waste problems to fellow residents. A few participants referred to the human tendency, including their own, to take short-cuts with the waste sorting process. This Building X participant admitted:

People usually take out things when they go out, like if I am going somewhere I'll take this bag and just put it [in the enclosure but not in the bins]. When they are in a hurry, they don't care. I need to go it's getting late and I'll just put it. I have also committed that mistake. [Interviewer: Do you think the management can enforce it more?] They can, and the city can even enforce it. But you can't hold someone for doing that wrong. They also have a certain limit of what they can do. This is something that has to come from within the individual, because even if city or management can enforce it in a strict manner, but people will find ways to crack it...People will always find a hack to it. (Building X, Participant 45)

As we will see, there were other participants who believe, contrary to Participant 45, that residents' practices could improve under a more proactive and disciplinary stance from management.

At 200 Wellesley, several participants felt that bad waste practices around the chutes, hallways, and enclosure were due to shortcomings of character – laziness and lack of consideration toward fellow residents and staff. A distinct, less blaming sentiment voiced by a few was the belief that poverty and disability, particularly mental unwellness, stand as major hurdles to waste sorting in 200 Wellesley. Such a view seems implicit in this participant's statement that residents simply do not and will not sort their waste at this building:

I was telling your comrade earlier, the people in this building generally don't recycle. If we can get to people just to put their garbage down the garbage chute you're ahead of the game, but to get to people to separate organics, plastics, batteries, and to do a recycling effort, most people just don't do it. Some do it, they try to lead the way, but a population of 2,500 people, it doesn't happen. That room over there used to be a recycling room, but they took it out, because people were putting stuff into recycling that shouldn't be in recycling. (200 Wellesley, Participant 22)

Asked what remedial action they thought might work, this same participant's response is an echo of the defeatist assumptions about poverty and environmentalism discussed earlier.

I am pessimist on that, I don't think so. There's so much, the people in this building, this is kind of an offshoot of a hospital. There's a lot of mental illness, alcoholics, drugs, domestic violence, the whole gamut is in here, and the people are more interested in just trying to get through the day without worrying about this goes in this bin, what goes in that bin. They don't have time for it. I don't see that happening, unless it's enforced, and people will never accept that either. This is a unique building, this isn't a condo or co-op, where there are rules and regulations. This place is kind of the wild west. (200 Wellesley, Participant 22)

Green team members at Building X commented on specific positive steps that management had recently taken regarding waste. These included efforts to encourage the appropriate disposal of dog waste on the buildings' grounds, specialized disposal receptacles for cigarette butts on the grounds, and notices and increased camera surveillance to discourage leaving large items by the elevators. At the outset of the project these steps made them optimistic that management would be willing to support the green team in improving the situation further.

It must be noted that none of those who voice the sense of resignation and futility have had the chance to observe what changes are possible when management and staff work together with committed residents to achieve a multi-faceted improvement in waste practices including greater waste diversion and other disposal practices that support the well-being of others. As we will see, many residents feel that far too little has been done by management to positively motivate and educate residents to sort waste, or to make it easier to do so.

Belief in fellow residents

In contrast to the few who are pessimistic or resigned, 44 of the 51 participants offered concrete suggestions to the question of what is to be done, which we summarize below. This is important, because calls for remedial actions imply some degree of belief in fellow residents' potential to do more. Several residents from both buildings were more explicit in this regard. From 200 Wellesley, we heard "*People would do more things if it's convenient*" (Participant 31), and "*I'm willing to do it. I never heard anybody talking about it. There are never any fliers about it or anything*" (Participant 32). At Building X, P100 mused: "*Typically, people are willing to differentiate organic, nonorganic, plastics, medicines. But the problem is due to the cost of living in our country. Buying a garbage bag is a difficult thing. If we have a government or management take decision to provide garbage bags, that would be most efficient way.*" From Participant 7 at Building X, we heard, "*The first thing is more awareness and more clear understanding. The important thing is clear direction because I believe most people are willing to dispose of waste the right way. If we provide a clear direction and the right tools, things can be much better.*" A statement by this participant (Participant 25) at 200 Wellesley also shows an awareness of differential treatment of tenants of multi-residential buildings compared to single family homes:

Just because we are in a building that does not mean we cannot make a change. Not just tell people throw it in a bag and throw it down the chute and they get mad at us, but it's not our fault. If you can do the same thing for houses why can't we do the same thing for buildings? It should be the same law, I believe though, but apparently other people don't (200 Wellesley, Participant 25)

In the results summarized above, larger numbers of participants from 200 Wellesley voice complaints about the condition of their chute and enclosure areas, and more of them are critical of both management and fellow residents. Further, just as many 200 Wellesley residents as Building X residents feel they are insufficiently instructed about how to sort and where to take sorted

waste. Given that this is convenience sample, we cannot generalize to either building's population. But the results suggest a disjuncture between TCH's official goals and programming for waste reduction, and the experiences of its residents at 200 Wellesley.

Matrix queries

The "matrix query" feature in NVivo allows exploration of how attributes of participants correspond to themes in their narratives. We were curious about possible connections between thematically coded material, and characteristics of the participants for which we had data: years in Canada, age group, floor level (low, medium, high), having children under 18, and how many adults live in the household. This could tell us, to give one example, whether people on higher floors at 200 Wellesley had more or stronger complaints about not having an indoor waste room, or whether chute room conditions on either building were described as more problematic on higher floors. The query explorations, however, showed no noteworthy patterns of differences in the content of the comments, perhaps due to the small sample size.

3. WHAT SHOULD BE DONE

Education and information

Both of the open-ended verbal questions elicited ideas on what can and should be done. To preface our synopsis here, our question on recommended actions referred only to ways to increase diversion. Had we asked about ways to encourage better waste practices overall, we may have gotten more responses geared to addressing the condition and use of the common waste spaces.

The most frequent recommendation was for more education, information, and guidance to residents. We heard this from 23 people, roughly evenly split between Building X and 200 Wellesley. On the recommended content of the education there were slight differences between buildings. At 200, the suggestions were somewhat more fine-tuned, such as better signage specifically at the chute area, and a need for information on where to bring batteries and other hazardous items. This may reflect the fact that the basic means of diverting the major streams of waste are already in place. At Building X the ideas were more general, and conveyed less awareness of where *any* separated waste should go. Participants in both buildings envisioned a variety of formats to transmit information: signs, posters, pamphlets, strategic use of colour-coding, general notices in the lobby and mailboxes, in-person events, and social media. And in both buildings, several people identified a need for continuous efforts to account for resident turnover, and educational refreshers for everyone.

I think there should be classes, or a little program so people can learn because not everyone is from Canada. Especially in St. James Town, there's a lot of people that come from other countries that don't know this knowledge...A lot of people here are from the streets, and they don't know these things, so they're not helping these people gain knowledge. They're not helping people coming into Canada or coming off the streets. If you're not giving them knowledge how are they going to learn? It's the same thing as a baby, same thing as a kid, you can make anybody change but you need to give them knowledge. No knowledge, no change. (200 Wellesley, Participant 25)

The first thing that comes to my mind is the knowledge. I've been living here for 5 years, I'm still not sure where exactly to put the garbage...Separation needs to be done. Most of the garbage directly goes to the chute on my floor. It's a lack of knowledge I would say. Maybe at least any session or any demo that can be done may be useful...We can have some review or checks or spot checks once or twice a week, as an initiative to see if they are following that, not as a punishment, but just so people who are not aware of where garbage has to go, in organic or garbage. That spot check can be done any time so at least as part of knowledge they can gain it. In these types of high rise buildings, it's a matter of educating people on a consistent basis. People might be staying in their apartments for three or four years, and new people are coming in each month. It has to be a consistent process. New people who are coming into the building are still lacking the particular knowledge. (Building X, Participant 18)

Green team members told of numerous ways they practice sustainability in relation to waste in their own lives: avoidance of purchasing single-use plastics such as bottled water; recovering old clothing to sell as vintage; collecting waste cooking oil in a container instead of disposing in kitchen sink; flattening cardboard boxes to take up less space in the blue bin; donation of clothing and other household items in good condition; minimizing use of throw-away items like paper towels; taking care not to waste water in the home; picking up and disposing of stray litter outside; and taking part in annual community clean-ups.

Physical modifications

Many participants, 19 in total, called for physical, technical, or equipment-based changes to reduce barriers to waste separation. The interventions most commonly suggested were providing the means to separate waste either in their homes, at the chute, or somewhere else on each floor. Very few referred to the enclosure area, even though at Building X, the lack of a designated black garbage bin makes it impossible to keep garbage separate from the recycling (see Figures 6, 7, and 13). Here we need to acknowledge that at Building X, where there is currently no organics program, any means of facilitating organics separation in apartments, at the chute, or elsewhere on the floor, would not keep organics out of the garbage if not accompanied by a profound change in the landlord's approach. Participants at this building who called for such measures may or may not be aware of the need for this larger transformation; some may believe that the smaller technical measures would facilitate the larger change.

The following excerpt captures people's reasoning regarding in-unit solutions:

To begin with it may seem that it may be expensive to give each resident separate bin or box to have in their home. I personally feel like it has to begin from their home. If you are asking someone to sort their waste without the proper equipment, there might be handling issues. If you ask them to separate the bags in their expense they might think twice, but if garbage boxes are given to them, a demo of where to put the correct waste and recyclables would be an effective option. (Building X, Participant 18)

Those who called for blue or green bins for home use stated they had never received these from building management. One person, who used a mobility device, spoke from experience in saying that in-unit containers would benefit people with mobility limitations. Another said that it was because of not having a home green bin that they put all the organics waste in the chute.

Several people in each building called for upgrading the chute to allow organics and/or recycling. For context, under the Green Standard introduced in Toronto in 2010, MRBs built since then are required to install infrastructure to make sorting organics and blue bin material as easy for residents as disposing to landfill, and the same with bulky, electronic, and hazardous waste. In exchange for a monetary incentive, buildings may go further by adding in-unit storage space, in kitchens, for streamed waste (MacLaren et al. 2022). One of our participants felt that converting

the chute for organics is more important than recyclables because people are less willing to carry organics waste in the elevators (that are often slow and full) down to the enclosure. Clearly, some may be under-estimating the challenge of retrofitting for a tri-sorter chute, but their views reflect an understanding that alternatives are possible.

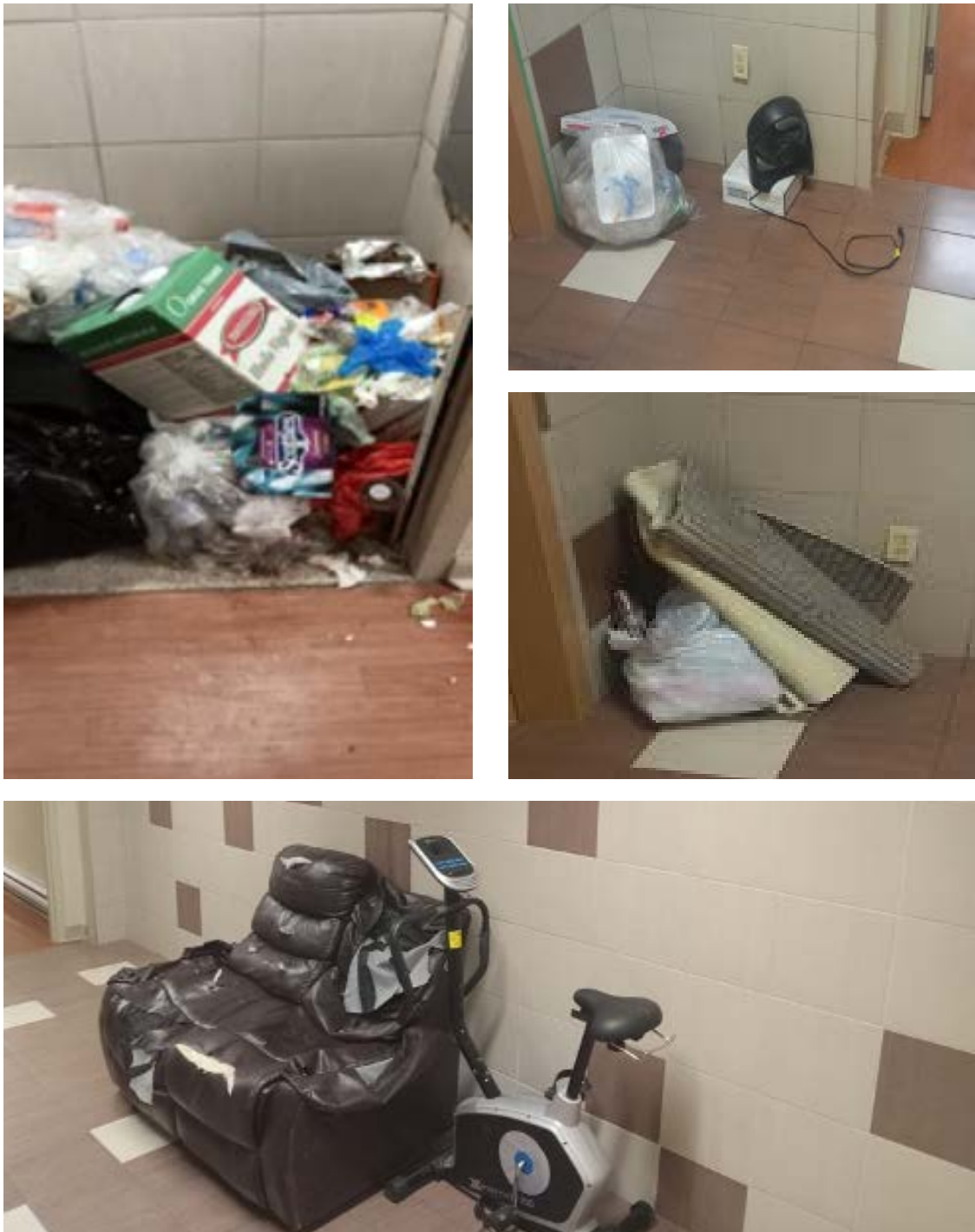


Figure 8: Top left: A chute room in 200 Wellesley East. Top right and middle: various kinds of waste left in a hallway at 200 Wellesley East. Bottom: Furniture and gym equipment left in a 200 Wellesley East hallway.

On social aspects of addressing waste problems, the Building X green team pointed out that the unavailability of common interior spaces makes it difficult for residents to meet for discussion of waste and other issues. We would add that this makes it challenging for residents to imagine where or how to undertake a simple repurposing initiative such as a clothing or books swap. This is a disadvantage related to building governance found in most of the private rentals in St. James Town, which are known to have a considerable amount of space in unutilized basement common rooms. This is in contrast to 200 Wellesley, a TCH building of the same vintage as Building X. As a public serving institution, TCH makes common spaces available for tenants' collective events. Additional impediments to communication in Building X are the lack of a building newsletter, and the need for management permission to post items on bulletin boards in the lobby and other common spaces.

"Yeah, what I don't like...this building is old, however no one has renewed their garbage disposal system. What I mean is we still have the old chute, like back in the 70s or 80s, where they just throw everything in the same place, and it hasn't been renewed. It's not hard. We have like a room that has a garbage chute, they could install literally, just decide that there's another one for recycling and organics, so you would have three of them in that same space so you could throw one of each." (Building X, Participant 102)

Apart from chute modifications, nine individuals envisioned common-use bins on each floor to collect organics, recycling, or both. One participant recognized that this would need to be paired with increased staff attention, and residents' own efforts to keep the areas clean. This 200 Wellesley resident put it this way:

Sometimes I think if they had a little [bin] on each floor, where they could actually put their own things, it might not be as bad. But again it also depends on the cleaners too because we can have it all set up but if the cleaners don't come and get rid of it. I know it's a hassle, but if you want to live in a peaceful, clean environment, you have to do it, everybody has to chip in, not just cleaners, because when the cleaners go home, we still have to take care of the building. Everyone needs to chip in and take care of the building. (200 Wellesley, Participant 79)

On this point, we later learned that although TCH was considering piloting door-to-door collection of streamed waste for residents at three of its seniors buildings (Martin 2016), it decided against this because of the fire hazard it would present. Finally, in 200 Wellesley, several people wanted to see the ground floor waste room restored, but with modifications to address the issues that led to it being closed: mess, smells, wet floors, etc.

Social and governance solutions

Apart from educational and technical remedies, we also heard calls for social and governance solutions. The social actions included forming a building-level committee of residents and holding informational meetings, and in the broader society, having more primary school education on household waste and climate, and incorporating the topic into citizenship tests. Regarding governance, six people want to see more proactive, disciplinary, and dissuasive actions by management, ranging from increased surveillance (for example cameras near the chute rooms), to warnings, to fines. The idea of fines, which became an issue at 200 Wellesley during the study, drew this well-articulated opposition:

There have been notices up there saying people were putting garbage in the recycling bins and they were going to fine people for it, so I think that would discourage people from even recycling because if you don't do it right, they will fine you. They will give you a \$50 fine, and people already struggle with money issues. They are threatening to fine you for improperly recycling, throwing the recycling in the garbage bin. If you do that accidentally, not your own fault but just accidentally, they'll charge you \$50 every time. It's absurd, it's like they appointed themselves as recycling police. I've never seen anywhere like that before where you can be financially charged for improperly recycling. They had posters up by the elevators, maybe they still do, I don't know. (200 Wellesley, Participant 77)

Participant 77's comment illustrates the ethical complexity of punitive measures applied to waste practices in a community of lower income renters. Another unprompted mention of fines that was no doubt also fueled by the warning posters at 200, called for turning the tables:

There should be a fine. If you own an apartment building and your tenants are not listening, there should be a fine for you and then maybe superintendents will get it through their heads that you shouldn't just be throwing everything. Because at the end of the day it's not just about our animals, it's about everything else that's happening to us. (200 Wellesley, Participant 25)

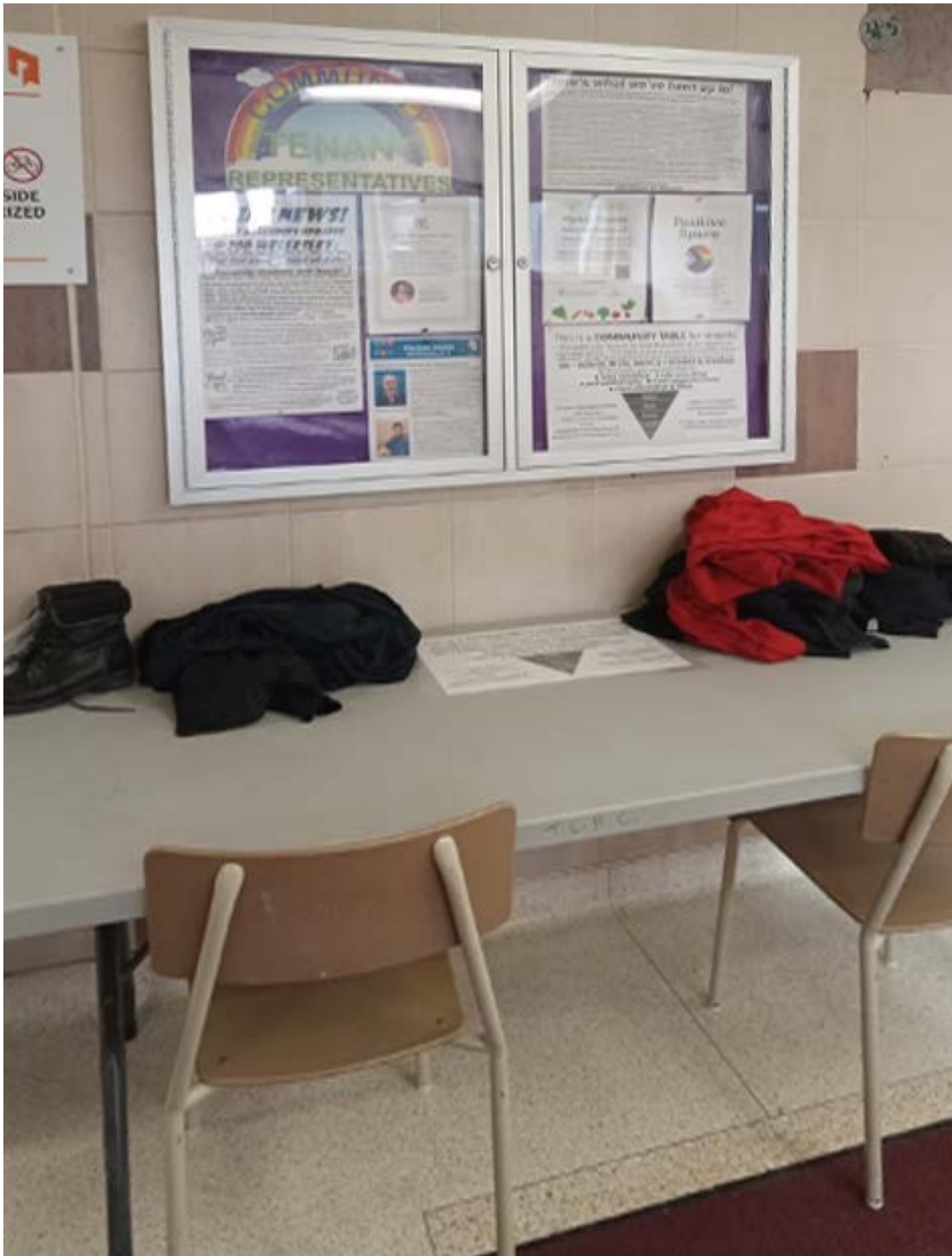


Figure 9: Table in lobby of 200 Wellesley East for which green team members in this building, inspired by a guest presentation by the Toronto Environmental Alliance, obtained permission to place a poster (Figure 10, right), inviting residents residents to use it as a waste repurposing table in December 2023. One member observed: “Our Community Table has been very successful. Yesterday dozens of winter sweaters were exchanged there, plus some kids boots & lots of food & canned goods. A lot of tenants have commented on its positive benefits, and it has inspired conversations regarding similar initiatives which we’re going to action in the new year.” A few weeks later, however, TCH staff removed the table altogether.

IV. Resident Green Teams' Visioning

Having summarized remedial actions envisioned by the residents we surveyed, we turn now to those articulated by the two “green teams” of residents whom we enlisted to participate in in-person group discussions and online chats through the duration of the project. These are individuals enlisted on the basis of having shown and expressed a deep concern for the sustainability goals promoted by the Corner. Their ideas merit a separate section because throughout the project both teams’ members evinced keen observational abilities and analytical insights regarding the household waste issues in their buildings and community. In our next chapter, we will discuss structural constraints and possibilities for the kinds of changes that all of our participants brought up.

A theme that emerged in the green teams’ discussions, that echoes the predominant recommendation from the open-ended survey questions, is that better information and guidance would help people to do more sorting and reducing. Part of this, to be sure, concerns the “how to” and “where to” of sorting, and of good and bad practices with waste in the building. But the teams also talked about more value-based messaging – informing residents on the environmental harms of unsorted food and plastics sent to landfill, about how a great deal of food waste can be diverted for compost that they themselves can use. Perhaps inspired by TEA, they also believed that messaging based on tracking their building’s diversion achievements could be effective.

Implicitly, several of the calls for action imply or require a dedicated team of residents to work on them to promote better practices and to communicate about progress. Some actions would also

This is a COMMUNITY TABLE for tenants
This table is for tenants to sit at & socialize, & for tenants to exchange goods. This table is also a community tool for more effective waste management in our building by practising our **5Rs – REDUCE, REUSE, RECYCLE + REMAKE & RECOVER**

At this table, you are welcome to:

- *leave something*
- *take something*
- *post wanted notes*
- *leave suggestion notes*
- *share information & ideas*

For more information, contact your
Community Tenant Rep Randy
or
200 Wellesley's
GREEN TEAM Eco-Committee @
200WellesleyTenantGroup@gmail.com

Follow Us on Instagram
@200WellesleyStreetEast
@SJTResidents

St James Town Residents
Council @
SJTResidentsCouncil@gmail.com

Reduce
Reuse
Recycle
Recover/Waste to Energy
Dispose

Figure 10: A poster designed by the green team at 200 Wellesley East, inviting residents to use a table in the lobby (Figure 9, left) to leave and take items, in an effort toward waste diversion.

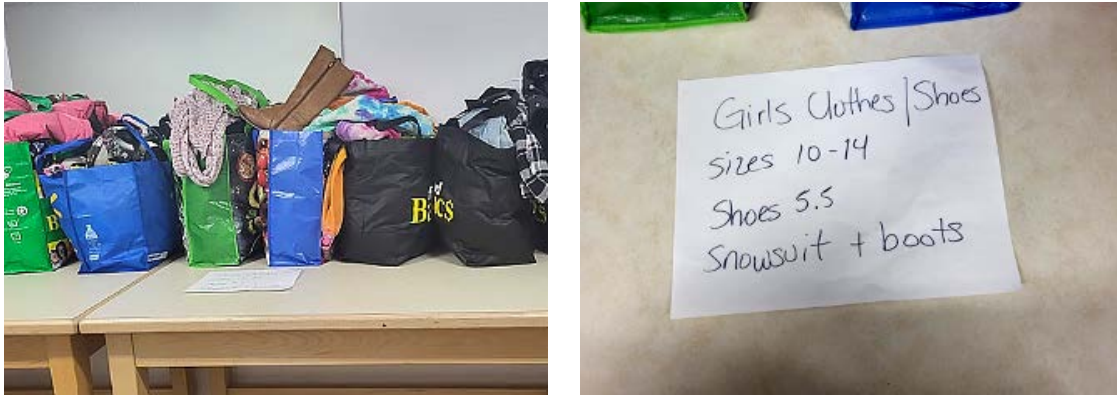


Figure 11 & 12: Bags of clothing anonymously donated by a resident left in laundry room of Building X. The hand-written sheet indicates sizes.

be facilitated by agency support, such as The Corner, whose presence in the issue-space was obvious and a taken-for-granted part of the context. Both groups also wanted city and provincial government to be made more aware of their waste dilemmas, and to incentivize and pressure landlords to do more. As with the residents in our survey, some green team ideas would require significant changes in current waste practices by residents and staff, and staff deployment. Most of these more ambitious ideas arose from the team at Building X where there are fewer basic means to do full waste sorting.

The following list combines what we heard from both teams:

- Incentivizing waste reduction and diversion among residents through programs that track building progress and allow residents to see improvements over time. (This presumes some interventions designed to promote positive change).
- Rebranding “waste diversion” to be more positive, so that it sounds less like a chore.
- Teaching people how to do balcony gardens to help grow their own food items and reduce packaging waste that comes with grocery store items.
- Making waste disposal better understood by having residents bring compost to a local farm or garden to see how it is used.
- A project that brings residents to see how organics waste is used in farms or gardens, documented by means of a vlog.
- Clearer signs, and in multiple languages, at the waste chute areas on each floor.
- Signs in all waste areas, and waste containers, should be cross-culturally understandable, because the colours (green, blue) and logos for different types of waste are not recognized by some newcomers.
- Clear information on waste sorting and other waste practices aimed at newcomers to Canada.
- Devise ways to communicate about waste with residents who seldom leave their units.
- Provide designated receptacles in the building for special waste like batteries, oils from cooking, etc.
- Place waste bins in the parking garages.
- Educate residents about what kinds of waste end up in landfill that could and should be separated out; educate them on greenhouse gas emissions from waste.

- Explore ways for residents to reap a monetary value from recycling beverage containers, such as bringing a “reverse vending machine” to the neighbourhood.
- Fining residents for improper waste practices should not be done except as a last resort following education, warnings, and making available a means for people to dispose of large bulky items they might otherwise leave in hallways.
- Green teams should continue, and should have landlord and municipal support.

The following are recommendations that arose from the Building X team and are specific to their building:

- Plant a garden on the 2nd floor terrace to discourage the throwing of waste from upper floor balconies.
- Better signage in the enclosure area to inform people which type of waste goes into which enclosure bin.
- Educate building staff on the proper sorting of waste at the enclosure area, since it has been seen that cardboard boxes and bags of garbage are going into the oversized green dumpster.
- Close the waste chutes completely, and instead improve the accessibility and convenience of the building's common waste sorting areas.
- Weekly pickup of sorted waste from outside residents' doors on specific days.
- Charge a transparent, upfront fee to tenants that is earmarked for extra expense of new waste sorting efforts, so the landlord can recover their costs for this (they empathize with landlord regarding the costs associated with improved collection and efforts needed to improve waste practices).
- New leases could include wording that persuades residents to comply with good household waste practices.
- To reduce contamination of the blue bins in the enclosure (as seen in Fig. 6), landlord should provide a black bin clearly demarcated for garbage.



PHOTO: "A SNAPDRAGON GROWS IN MY BACK PATIO" @ ROBERT NUNALLY, CC BY 2.0

V. Structural constraints and possibilities

The previous chapters presented residents' thoughts on ways to improve waste practices and reduce the amount going to landfill. We now turn to the systemic constraints and opportunities for realizing these ideas, which of course differ between the two buildings. We first consider how this looks at Building X as a private rental MRB.

The green team at Building X was initially optimistic about finding synergy between residents' and management's concerns around waste, and about bringing an action plan forward to management for collaborative efforts. There are several ways in which their concerns do overlap. Members of the team were sensitive and empathetic to the landlord with respect to the cost of introducing new diversion efforts, as seen in their suggestion of making this a transparent addition to monthly rent, and making adherence to waste disposal norms a condition of the lease. They were heartened by recent steps that Building X management had taken to encourage proper disposal of dog waste and cigarette butts on the grounds of the building.

There are several additional ways in which Building X management actions around waste address residents' needs and concerns for health and safety. In an interview that a member of the managerial team graciously gave the researchers, they explained that the company's considerable investment in pest control encompasses efforts to discourage hallway abandonment of mattresses or furniture, and other neighbours' re-use of these items, since this can be a vector of insects spreading between units. The 15-yard open-top dumpster in the enclosure is part of this effort. Further, Building X management makes staff available to help any tenant with mobility issues to move such items to the enclosure. Finally, management uses a system of general notifications and specific warnings for residents who do leave items in the hallway, resorting to billing or fining violators (if they are identified) only if these go unheeded. These efforts seem to be reflected in one survey participant's sharing that they had seen much less of this problem in recent months.

This team's optimism for joint resident-management action to increase waste diversion diminished over time, however. When the researchers asked management about the landlord's openness to working with the team, we were told they would listen to any individual tenant with a concern or observation, for possible "tweaks" to what they do (a word repeated several times in the interview). Hardly an eager embrace of resident interest in achieving greater waste diversion, and far from managerial buy-in that it takes to move toward zero waste, as TEA's project with City-serviced MRBs shows.

In their apparent lack of enthusiasm for working with committed resident champions to reduce garbage and increase diversion, the private landlord is responding to the economic disincentives for diversion. On the surface this is an economic barrier, but it is underpinned by the policy regime and the political will that lies behind it. And it applies not only to MRB owners but to the other actors in the IC&I waste disposal chain. Private waste haulers that service MRBs pay up to 600% more to separate the recyclables collected from MRBs than to bring them to landfill. One reason for this is a high level of contamination of the blue bins at MRBs, a fact confirmed by the Auditor



Figure 13: Outdoor waste enclosure at a private rental building in St. James Town. There are no black bins for garbage.

General's 2021 survey of waste companies. This is not surprising when MRB landlords do little to promote waste diversion and can even undermine it, as seen in the absence of black bins in the enclosure that would give residents the opportunity to separate recyclables from garbage at that disposal point. Other factors stemming from the broader political economy of plastic packaging, are the increased complexity of these materials making them more expensive to recycle, and the limited commercial destinations for them (Office of the Auditor General 2021). As well, privately serviced MRBs face comparatively low fees to dispose of garbage. Because municipal landfills such as Toronto's Green Lane are not available to the private waste haulers that service the IC&I sector businesses, the haulers take their garbage to private landfills which have lower tipping fees than municipal ones. Many take their loads to even cheaper landfills across the border in Michigan.

MRBs serviced by private waste haulers could benefit economically from going with City-service only if they were to maximize participation in recycling programs, introduce an organic program and promote a high level of participation, and dramatically reduce their amount of garbage.



Figure 14. Benches in lobby of 200 Wellesley East, October 2024, months after the community gathering table had been removed. Residents continue to leave repurposable items in the general area.

This would be daunting for Building X, as we have several forms of evidence that all of its waste currently goes to landfill in contradiction of the management’s claims. Here, the *raison d’être* of private rental housing, and the power imbalance in the landlord-resident relationship, play a role as well. Like the other actors in the IC&I waste system, private rental MRBs are profit-maximizing and profit driven. Their governance structure differs from that of cooperatives and condo buildings which allow sustainability and environmental values of residents to influence decision-making.

Coupled with the cost disincentive for MRBs to reduce garbage is the lack of legal imperative we have discussed already. Under provincial regulation ON 103/94, MRBs like Building X need only make the most superficial gesture toward recycling, and nothing toward organics separation. The Auditor General found that in most cases “poor quality recycling programs passed Ministry inspections,” and that inspectors do not look for, or encourage, best practices such as subdividing the recycling stream into different sub-types such as cans, glass bottles, and paper, allowing only (and providing) clear bags for blue bin waste, and investing in more staff to monitor and adjust the sorted waste (Office of the Auditor General 2021).

In this *laissez-faire* landscape, waste hauling companies for their part are allowed to make contracts with MRBs and other IC&I businesses that give them the discretion to take waste wherever it is cheaper for them to do so. Almost half of the haulers whose records were sampled for the Auditor General report take separated blue bin contents to landfill. Further, neither hauling companies nor waste processing facilities are required to report their diversion rates to the Ministry, making it impossible for MRB owners, let alone MRB residents or members of the public, to know how much diversion the companies do (Office of the Auditor General 2021).

Our study affirms some of the Auditor General's observations about the itinerary of waste from privately serviced MRBs. Prompted by video taken on two occasions showing the waste hauler combining Building X's blue bin and compactor materials together, an inquisitive resident contacted the hauling company to be told that none of this waste is sorted anywhere after it is hauled; it is all taken to landfill. Asked if their contract with the landlord requires them to separate the waste, the company declined to divulge this information. But based on the Auditor General's 2021 report, the contract almost certainly does not require it. In its review of 40 contracts with waste haulers, only three had language obligating the hauler to separate these waste streams. This is an enormous weakness of the provincial recycling program for the IC&I sector.

We think that many Building X residents simply do not know that by contaminating blue bins with non-recyclable or food waste (see Fig. 6), they are adding to landfill. Some building staff certainly believe that the bin contents get separated after collection, as we learned during an informal chat at another one of this company's buildings. Even the managerial personnel we interviewed was certain that the compactor bins, blue bins, and oversized green dumpster are collected on different days, not all taken to landfill, and are not just there "for show". This attests to the landlord's minimalist approach to informing residents and staff – perhaps even its managers – about how the program works. It is hard not to conclude that the landlord does not want resident compliance with streaming, because it is against their economic interests to be compliant and is not part of their contract with the waste hauler.

Food and other organic materials constitute about 40% of the waste produced by households in Canada, and are a major source of methane emitted by landfills (Environment Canada 2013). As mentioned, the absence of organics in ON Regulation 103/94 for Industrial, Commercial and Institutional Source Separation Programs, which has been in place since 1994, constitutes another shortcoming of the regulation. This is recognized in the [Food and Organic Waste Policy Statement](#) issued by the Conservative government of Doug Ford in 2018. It pronounces that by 2025, all MRBs will be required to provide organics collection to their residents, and should achieve a 50% reduction in organics sent to landfill. Five years on, however, no apparent steps had been taken to move this from a statement on paper to a law with enforcement mechanisms, or to promote awareness of it (MacMillan 2023).

In short, the waste system in Ontario allows profit-maximizing businesses such as private rental MRBs, and the bevy of actors in the IC&I waste chain, to dodge responsibility for keeping waste out of landfills. To speak in terms of environmental justice, this allows some of the wealthiest groups in the province to grow their profits at the expense of the environment – of the communities who live near landfills in Ontario and Michigan, and the broader public whose air and water are inevitably affected; there is no real "away" for garbage to go. For MRB residents, too, their local environment reflects the laissez-faire, cost-reductive approach to waste management.

The structural constraints and opportunities for enhancing waste diversion at 200 Wellesley are quite different. Clearly, the cost incentives for all City-serviced MRBs work in the opposite direction from those of privately serviced MRBs. In addition, waste diversion became an institutionalized mandate of the TCH as a result of the 2015-2018 pilot project on waste. The study led to

the creation of a new Waste Management Unit and Waste Program Manager. This is the overarching contrast and structural advantage for TCH buildings compared to privately serviced MRBs.

Under the Waste Program Manager's leadership, the new unit launched an array of interventions that the pilot study revealed to be effective. These included improved signage in the chute rooms and enclosures, staff education, tenant engagement door to door, in lobbies, and in special events, and the provision (still ongoing) of waste kits which include kitchen catchers, a reusable recycling bag with a handle with acceptance criteria on the side of the bag; scented compost liner for kitchen catchers, clear bags for garbage to discourage use of black bags, a fridge magnet with do's and don'ts; and a "put waste in its place" poster which identifies the 3 basic waste streams.

Further, officially at least, TCH has institutionalized a complaint and response system for waste issues. Tenants who notice problems, we were told by a TCH official, should relay these to the site superintendent or staff who in turn, are expected to contact TCH's waste team. Tenants can also lobby for things like the indoor waste room to be reopened, something that many surveyed residents said they wanted. The TCH official explained that residents need to make a good case for the request, and that technical requirements for organics storage would be taken into account – whether the room has adequate drainage and ventilation for mitigation of odours, temperature control to avoid pests, and fire prevention. This opportunity, and possibility, for substantial infrastructural change, are a marked contrast with Building X management's openness to possible "tweaks". Currently, renovations are underway in a few TCH buildings to add internal waste streaming rooms to be placed near laundry rooms.

TCH also considers tenants' request for changes to the chute system. Chute changes (closure or conversion) need approval from at least 51% of the building's households in order for TCH to apply to the City for the change. As explained to us, this ensures that there has been strong tenant organizing to promote both initial and ongoing buy-in. Vigorous training is also required. The TCH official stated that chute conversions had been carried out in a few of its properties. One case involved a chute closure whereby all streams of waste are taken to one centralized place, and in another building, the chute was converted to organics only. As explained in Toronto's Solid Waste Management Services [chute closure program](#), which is available to all City-serviced MRBs, the logic of closing a chute is to make disposal of all streams of waste equally convenient, and to mitigate the favouring of garbage disposal.

Asked about TCH's openness to working with a team of committed residents to promote better practices, the staff member was resoundingly positive. TCH recommends that members of resident teams enroll in the City's 3R Ambassador program. Once the residents are trained, or if they have an action plan, members of 3R program will do a walk-through of the building with them to identify specifics for improvement. They also indicated that a certain percentage of additional waste kits allotted for distribution each year are held back for special requests, such as those made by a resident team doing its own campaign. Again, these are opportunities that do not exist for renters in MRBs that have opted out of City waste service.

Nevertheless, as we see in our survey results, 200 Wellesley residents express at least as much confusion about waste, and criticism of fellow residents' and management's practices, as do those of Building X. Further, green team members at 200 Wellesley expressed low confidence that TCH management cares about their concerns on waste issues or that they are willing to work with a resident green team, regardless of whether they enroll in 3R Ambassador training. Two discouraging responses to residents' efforts and advocacy on waste issues have left green team participants with the sense that TCH is not interested in resident input. As one member stated it, "our municipal landlord often misperceives our population as unwilling or incapable of participating in effective waste management systems and strategy development."

One of the situations concerned the absence of garbage or recycling waste bins in some of the building's common spaces such as the lobby, and its six acres of outdoor park space. These outdoor areas, members feel, remain underused for much needed recreation because of the presence of all manner of litter including dog feces. Team members report that six years of campaigning TCH to address this issue had gotten nowhere. A second disappointment concerned a table in the lobby that residents had been using to leave and take repurposable items, especially clothing and food. Inspired by a recent guest talk by the Toronto Environmental Alliance (TEA) on actions that high-rise residents can collectively undertake to increase waste diversion, green team members placed a poster on the table announcing and inviting its use for that purpose (see Figures 9 and 10). Some weeks later the table was removed without explanation. Green team members perceive this as TCH thwarting their effort to promote the "3 Rs" (reduce, reuse, recycle). Since then, as photos taken in October 2024 attest, the practice of leaving items for others seems to have continued in a less orderly way, as seen in Figures 11 and 12. Further, whereas for years the table had doubled as a gathering spot for elder residents to socialize during the colder months, it is unclear whether the benches will be similarly conducive given their design.

Beyond waste management, members said that TCH has minimized and neglected resident concerns about fundamental issues such as unit repairs, unit pest control, and modest upgrades needed for accessibility. Added to this, the team members perceive a lack of enforcement of building rules, including barbecuing on balconies, throwing waste off balconies, disposing of cigarette butts improperly, etc. Together with our survey findings, these views point to a puzzling disjuncture between the promise and potential of the institution's resources for, and proactive stance toward, waste reduction, and the extent to which this is realized in residents' lived experiences. Given that resident resentment toward management around general tenant issues can dampen adherence to waste goals (MacLaren et al. 2022), TCH attentiveness to these concerns is important. It must also be recognized that TCH's capacity to do more hinges on funding it receives from the City.

VI. OUR FINDINGS THROUGH THE PRISM OF ENVIRONMENTAL JUSTICE

On the sides of blue bins in the outdoor enclosures of Building X and the other high-rises owned by this landlord in St. James Town, stickers with weather-faded text above faint pictograms of the permitted items indicate that the bins are for “recyclables only” (see Fig 1, p. 8). But residents are not given the means to separate recyclables from garbage at this point in their disposal efforts. Residents have no place to dispose of garbage that is larger than the chute opening, except the outdoor blue bins. It is thus not surprising that the outdoor blue bins and dark green bins for oversized items are replete with black bags that no recycling facility can accept, along with all manner of other waste, as seen in photos taken on several occasions. Furthermore, our survey suggests that residents are not being informed that everything placed in the outdoor blue-bin is being taken to landfill. Since even some maintenance staff believe that the highly contaminated blue bins are sorted by the hauling company, they may be relaying this incorrect messaging to residents. Managerial staff also incorrectly assert to the researchers that blue bin contents are collected separately from the compactor bins. Even if the blue bins were collected on different days, which is belied by simple videos of the hauling trucks in action, we are told that no effort is made by the hauler to sort their contents. As well, inquiring residents are not entitled to know details about the building’s contract with its private waste hauler, specifically whether it obliges the hauler to collect blue bin and garbage materials separately.

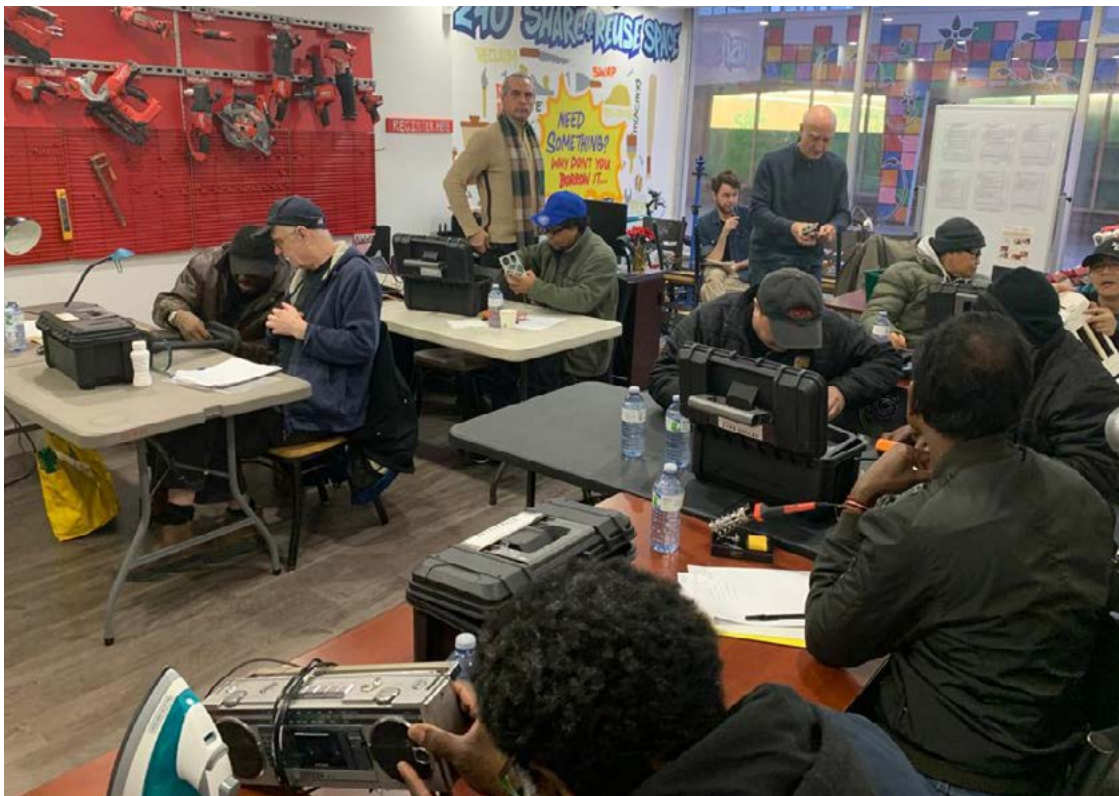


Figure 15: Electronics repair workshop at The Corner@240.

To return to the principles of environmental justice we outlined earlier, these facts stand out as stark instances of procedural environmental injustice: informational transparency about actions that affect one's own and the broader environment, in this case about one's role in the waste system, should not be contingent on ethnicity, social class, ability, age, the fact of having immigrated, or one's status as a renter vs owner of one's home. This transparency is sorely lacking for Building X residents. And at both buildings, the fact that many residents who separate organics place them in the chute strongly suggests they are (a) not being informed that this waste will go to landfill (b) not being educated about the harms of food and other organics in landfills, or (c), in the case of 200 Wellesley East, not being informed that their enclosure has an organics collection.

At a perhaps more fundamental level, these problems are interwoven with substantive environmental injustice. In both buildings, improper waste disposal practices and infrastructure lead to waste being left on chute room and hallway floors. These practices are a counterpart of shortcomings in building staffing, insufficient resident education, the absence of information, and additionally in the private building, a complete lack of landlord interest in promoting waste separation. For many of our respondents, the outcomes of these practices are a reduced sense of health and safety, and a blow to morale.

VII. RECOMMENDATIONS

1. In the context of the environmental dilemma posed by the steady expansion of Ontario landfills, we urge landlords of multi-residential rental properties in St. James Town and across the city that currently contract with private waste haulers to adhere to the spirit, not just the letter, of ON Regulation 103/94 for Industrial, Commercial and Institutional Source Separation Programs in its current form. It is especially crucial that they enable residents to separate recyclables from garbage in centralized disposal locations such as outdoor enclosures, by providing bins clearly designated for trash alongside designated blue bins. This should be accompanied by active encouragement of residents to separate these two kinds of waste, via clear signage and other forms of messaging. Their contracts with private haulers should also stipulate separate collection and disposal.
2. We echo the recommendation most commonly voiced by the residents we surveyed by calling on both private multi-residential landlords and the TCH to increase the staff and other resources for continuous education of new and current tenants regarding appropriate disposal methods and locations for the different types of waste that they collect, and appropriate uses of the common waste disposal areas. Education along with other measures may obviate the need for more staff time for dealing with unhygienic practices in waste areas like the chute rooms and enclosures.
3. For TCH to fulfill the immense potential of its specialized resources for waste reduction, and for the quality of life enhancements that improved waste management can bring, we call on the institution to:
 - i. Respond to the waste-related concerns of the residents of 200 Wellesley Street East, its largest property, including the perception that residents' own collective efforts to enact the "3R" ethos are dismissed.
 - ii. Dedicate resources to collaborating with The Corner, 200 Wellesley residents, and other St. James Town stakeholders to make this building an exemplar of environmentally sound waste practices, one that can be scaled up within the TCH's portfolio and beyond.
4. Privately owned rental multi-residentials in St. James Town should make unused common rooms available for green initiatives among residents, such as the swapping of repurposable household items including clothing and books.
5. Private rental MRBs' waste management falls under ON Regulation 103/94 for Industrial, Commercial and Institutional Source Separation Programs. The regulation is long overdue for revision. It must address, among other shortcomings, the absence of a requirement for organics collection, a gap recognized in the province's yet to be implemented Food and Organic Waste Policy Statement of 2018. The dismaying weaknesses of data collection, monitoring, and enforcement of regulations for waste in the whole IC&I sector, by the Ministry of the Environment, Conservation, and Parks, are detailed in the Auditor General's 2021 value for money audit. We call on city councilors and provincial MPPs to push for the full implementation of the recommendations in the Auditor General Report.

6. We commend the Toronto Environmental Alliance (TEA) for its exemplary achievement in demonstrating how committed teams of multi-residential building residents, acting together with management, can move their buildings closer to zero waste. We also applaud its tireless advocacy for waste reduction policies at the city and provincial level. We encourage TEA to extend its impactful Zero Waste High-Rises effort to the waste diversion dilemmas of renters in private MRBs whose landlords have opted out of the City's waste services.
7. We encourage residents of St. James Town high-rises to organize collectively within and across buildings in pursuit of their rights to safe and healthy conditions in their buildings, and to collectively hold landlords accountable for transparent and environmentally ethical waste management practices.

Literature Cited

- Bell, Karen, and David Sweeting. 2013. "Waste Collection as an Environmental Justice Issue: A Case Study of a Neighbourhood in Bristol, UK." Pp. 201–22 in. Bristol, UK: Policy Press.
- Bush, Olivia. 2024. "Waste Management Statistics in Canada." *Made in CA*. Retrieved August 10, 2024 (<https://madeinca.ca/waste-management-statistics-canada/>).
- City of Toronto. 2016. *Rental Apartment Buildings: Results of Public Consultation and Proposed Regulatory Regime*. LS15.3. Toronto: Municipal Licensing and Standards.
- City of Toronto. 2021a. *Inclusionary Zoning Assessment Report: Housing Need and Demand Analysis*. Final Report.
- City of Toronto. 2021b. *TransformTO Net Zero Strategy: A Climate Action Pathway to 2030 and Beyond*. Toronto: Transform TO Environment & Climate Division.
- City of Toronto. 2023. "City of Toronto's Generational Transformation of Toronto's Housing System to Urgently Build More Affordable Homes Report." *City of Toronto*. Retrieved October 19, 2024 (<https://www.toronto.ca/news/city-of-torontos-generational-transformation-of-torontos-housing-system-to-urgently-build-more-affordable-homes-report/>).
- City of Toronto, City of. 2024. "Solid Waste Reports & Diversion Rates." *Solid Waste Reports & Diversion Rates*. Retrieved October 19, 2024 (<https://www.toronto.ca/services-payments/recycling-organics-garbage/solid-waste-reports/>).
- Commisso, Danielle. 2022. "Trash Talk: Less Than a Third of Young Adults Recycle on a Regular Basis." *CivicScience*. Retrieved October 19, 2024 (<https://civicscience.com/trash-talk-less-than-a-third-of-young-adults-recycle-on-a-regular-basis/>).
- DiGiacomo, Alessandra, David W. L. Wu, Peter Lenkic, Bud Fraser, Jiaying Zhao, and Alan Kingstone. 2018. "Convenience Improves Composting and Recycling Rates in High-Density Residential Buildings." *Journal of Environmental Planning and Management* 61(2):309–31. doi: 10.1080/09640568.2017.1305332.
- El-Saadony, Mohamed T., Ahmed M. Saad, Nahed A. El-Wafai, Hamed E. Abou-Aly, Heba M. Salem, Soliman M. Soliman, Taia A. Abd El-Mageed, Ahmed S. Elrys, Samy Selim, Mohamed E. Abd El-Hack, Sajeesh Kappachery, Khaled A. El-Tarabily, and Synan F. AbuQamar. 2023. "Hazardous Wastes and Management Strategies of Landfill Leachates: A Comprehensive Review." *Environmental Technology & Innovation* 31:103150. doi: 10.1016/j.eti.2023.103150.
- Environment and Climate Change Canada. 2023. *Canadian Environmental Sustainability Indicators: Solid Waste Diversion and Disposal*. En4-144/71-2024E-PDF. Environment and Climate Change Canada.
- Environment Canada. 2013. *Technical Document on Municipal Solid Waste Organics Processing*. En14-83/2013E.
- Ferguson, Lisa. 2020. "Senior Poverty & Inequity: The Toronto Experience." *Social Planning Toronto*. Retrieved October 19, 2024 (https://www.socialplanningtoronto.org/senior_poverty_report).
- Fiorito, Joe. 2010. "Progress on Housing Needed Now - Not Later." *Toronto Star*, August 9, Greater Toronto.

- Florito, Joe. 2011. "An 8-Point Plan to Fix TCHC." *Toronto Star*, March 2, Greater Toronto.
- GENIVAR Consultants LP. 2010. *Maximizing Residential Waste Diversion in Connection with the Mayor's Tower Renewal Pilot Feasibility Study*. Project No. MA-09-445-00-MA. Markham, Ontario.
- Government of Canada. 2020. *National Waste Characterization Report: The Composition of Canadian Residual Municipal Solid Waste*. EN14-405/2020E-PDF. Environment and Climate Change Canada.
- James, Royson. 2011. "Social Housing Board Should Resign Now." *Toronto Star*, March 3, Greater Toronto.
- Lakhan, Calvin. 2016a. "Effectiveness of Recycling Promotion and Education Initiatives among First-Generation Ethnic Minorities in Ontario, Canada." *Social Sciences (Basel)* 5(2):23. doi: 10.3390/socsci5020023.
- Lakhan, Calvin. 2016b. "Out of Sight, out of Mind: Issues and Obstacles to Recycling in Ontario's Multi Residential Buildings." *Resources, Conservation and Recycling* 108:1–9. doi: 10.1016/j.resconrec.2016.01.005.
- MacLaren, Virginia, Ece Ikiz, and Emily Alfred. 2022. "Meeting Urban GHG Reduction Goals with Waste Diversion: Multi-Residential Buildings." *Buildings & Cities* 3(1):1042–58. doi: 10.5334/bc.277.
- MacMillan, Sarah. 2023. "No Green Bin in Your Building? Ontario's Plan to Fix That May Be off-Track, Experts Say." *CBC News*, April 28.
- Martin, Andrew. 2016. *Improving Waste Management in Non-Market Housing: Challenges, Strategies, and Recommendations to Get to Zero Waste*. Vancouver: Greenest City and UBC Sustainability.
- McClearn, Matthew. 2022. "Ontario Is Running out of Landfill Space. Will It Embrace the Circular Economy or Sleepwalk into a Crisis?" *The Globe and Mail*.
- Office of the Auditor General. 2021. *Value-for-Money Audit: Non-Hazardous Waste Reduction and Diversion in the Industrial, Commercial and Institutional (IC&I) Sector*. Ontario: Ministry of the Environment, Conservation and Parks.
- Pecci, Kirstie. 2018. "All Landfills Can Leak, and Our Health and Environment Pay the Toxic Price." *Conservation Law Foundation*. Retrieved August 10, 2024 (<https://www.clf.org/blog/all-landfills-leak-and-our-health-and-environment-pay-the-toxic-price/>).
- Social Policy, Analysis and Research Unit. 2016. *Neighbourhood Profile: North St. James Town*.
- Solid Waste Management. 2018. *City of Toronto & TCHC Waste Pilot Program. Final Report*. Toronto: Toronto Solid Waste Management.
- Spurr, Ben. 2022. "Toronto Community Housing Buildings Score Worst in City's Own Evaluations, Star Analysis Shows." *Toronto Star*, June 8, GTA.
- Statista. 2019. "Largest Waste Producing Countries per Capita." *Statista*. Retrieved October 19, 2024 (<https://www.statista.com/statistics/1168066/largest-waste-producing-countries-world-wide-per-capita/>).
- Syed, Fatima. 2024. "Ontario Could Run out of Landfill Space in Nine Years. Then What?" *The Narwhal*.

- Toronto Community Housing. 2022. *Opening Doors for the Future: Celebrating 20 Years*. Annual Report. Toronto.
- Toronto Public Health. 2023. *Toronto's Population Health Profile*. Toronto.
- Vincent, Donovan. 2010. "Housing Agency Admits Errors: CEO Says TCHC Is 'fully Accountable' in the Tragic Case of Al Gosling, 82, Who Died after Being Evicted." *Toronto Star*, June 18, Greater Toronto.
- Ward, Rachel, Harvey Cashore, Chantal Lavigne, and Gil Shochat. 2022. "Illegal Canadian Trash Keeps Ending up Overseas. And the Federal Government Won't Say Who's Shipping It." *CBC News*, April 20.
- Watson, Matt, and Harriet Bulkeley. 2005. "Just Waste? Municipal Waste Management and the Politics of Environmental Justice." *Local Environment* 10(4):411–26. doi: 10.1080/13549830500160966.
- Wilkins, Charles. 2017. "Canada's Dirty Secret." *Canadian Geographic*. Retrieved August 10, 2024 (<https://canadiangeographic.ca/articles/canadas-dirty-secret/>).



PHOTO: THE CORNER; COVER PHOTO: THE CORNER; PUBLICATION DESIGN: STEVEN BOYLE