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Intelligent Urban Infrastructure

metroSTOR Webinar Summary and Transcript

Downtown Trash: Lessons from Real-World Operations

03.19.26

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1 860 327 8294
enquiries@metrostor.us
metrostor.us

metroSTOR Webinar Summary

Session Summary

The central learning: multifamily recycling is not just a resident behaviour problem; it is also a system design problem. Residents often want to recycle, but existing buildings, weak infrastructure, poor accountability and limited feedback make participation difficult and contamination easy.

Ease drives participation

Residents often care more than we assume. Lisa Kowalchuk's research found strong pro-diversion values among residents, but those values were blocked by inconvenient infrastructure, poor information, single chutes and poorly managed waste areas.

Recycling needs to be visible, convenient and no harder than trash disposal.

Control protects quality

Mason Giem's SeaTac slotted lid trial showed how simple physical controls can dramatically improve recycling quality. By restricting access and requiring residents to pour individual items in, contamination fell from around 26.5% to 4%.

The key lesson: clean streams may matter more than headline diversion volume.

Feedback improves performance over time

Audits, resident input, hauler performance monitoring and operational data help cities understand what is working and where systems are failing.

Emerging tools such as sensors, access control and AI detection could strengthen this feedback loop further.

Wider system lessons

Bobby Bell connected waste systems with rodent prevention, cleaner estates, resident dignity, health and community pride.

Incentives are often misaligned in multifamily buildings, with residents, landlords, managers and haulers not always sharing the same financial motivation.

Organics is a major opportunity, especially when composting is linked to visible local benefits such as gardens, urban farming and healthier communities.

Strategic takeaway

Cities and housing providers should stop relying solely on education and start designing systems that make correct behaviour easier, misuse harder and performance measurable.

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Nigel Deacon

Welcome everyone. Thanks for joining this metroSTOR webinar. I'm Nigel Deacon, Director and Founder at metroSTOR. We have been manufacturing deposit systems that shape waste diversion behaviour in shared environments for around 12 years.

Today's discussion is built around a simple framework: education and outreach are important, but ease drives participation, control protects quality, and feedback improves performance over time.

Multifamily waste diversion often struggles not because residents do not care, but because recycling and organics systems are hard to use, easy to misuse, and rarely designed with enough feedback to improve.

I'm extremely grateful to our speakers for joining us today. Lisa Kowalchuk is Associate Professor at the University of Guelph. She will share research showing that residents often do value waste diversion, but older buildings, weak infrastructure, limited information and poorly managed waste areas prevent those values from translating into action.

Bobby Bell is Green Infrastructure Deployment Manager at Boston Housing Authority. BHA manages around 10,000 public housing units across 56 developments. Bobby's work connects waste reduction with quality of life, rodent prevention, cleaner spaces and healthier communities.

Mason Giem is Public Works Program Coordinator at the City of SeaTac. Mason will show what happens when a city changes the physical design of the recycling system. SeaTac's modified lid program targeted multifamily contamination and achieved an average 85% reduction in contamination, showing how even a simple form of controlled access can protect recycling quality.

Today we'll explore three questions. First, how do we make recycling easier for residents? Second, how do we structure access so that the right materials go in and contamination stays out? Third, how do we use audits, data, feedback and emerging tools to keep improving over time?

The goal today is not to promote any single solution. It is to understand how better-designed systems can help cities, haulers and housing providers make multifamily recycling work more effectively.

Lisa, over to you.

Lisa Kowalchuk

Thank you so much, Nigel. It's a real privilege to be part of this discussion, and I'm looking forward to hearing insights from Bobby and Mason that I can take back to the researchers I work with in Toronto.

I'm sharing results from a study I led in 2023–2024 with a team of academics and staff at a non-profit working on sustainability. Waste challenges in multi-residential buildings are well documented, as is the wider problem of landfill capacity. Recent action-oriented research by the Toronto Environmental Alliance also showed that resident teams can move multi-residential communities closer to zero waste.

What has been less well understood is the daily experience of multi-residential renters. What do residents see outside their doors? How do they feel about keeping waste out of landfill? What do they think needs to change in their buildings to achieve better waste diversion? Those were the questions our team set out to understand.

The work meshed closely with the agenda of the St. James Town Community Corner, a sustainability hub that helps residents reuse and repair items through programs including crafting, gardening, repair workshops, a library of things and other initiatives. The Corner has already diverted thousands of kilograms of material from garbage, and I wanted to support them in extending those efforts into the buildings where community members live.

St. James Town in Toronto is a vibrant, ethnically diverse and very densely populated community east of downtown. Most residents live in rental high-rises built in the 1960s and 1970s. The neighbourhood has a higher-than-average proportion of newcomers and immigrants, and while there is income variation, average incomes are lower and poverty rates higher than the rest of the city.

We studied two rental buildings: one privately owned building and one Toronto Community Housing Corporation building. We ran focus group workshops with resident teams, interviewed stakeholders and experts, and surveyed 103 residents using a tool adapted from the Toronto Environmental Alliance and University of Toronto.

I'll summarise four key findings.

First, the values and practices of our respondents favour waste diversion. Some literature and some participants themselves reflect a tacit belief that lower-income renters or immigrants may not be interested in complying with waste diversion norms. One survey participant expressed this very starkly, saying that people in the building were often more concerned with getting through the day than worrying about "this goes in this bin, what goes in that bin," and that this was "not a condo or co-op."

Our findings challenge that assumption. In fact, I would say that this thoughtful but pessimistic respondent was wrong: the vast majority of respondents do care about sorting and diverting waste, and they make efforts to do so. Ninety-three percent agreed or strongly agreed that keeping waste out of garbage is very important to them. Seventy-eight percent said it is part of their household's daily routine. Ninety-one percent said it is a way of protecting the environment.

We also saw evidence of residents informally diverting reusable items even without being given proper systems to do so. In the private building, residents left carefully labelled bags of apparel in the laundry room. In the TCHC building, the resident Green Team created a "5R table" in the lobby as a place to leave and take used items. In the private building, many residents said the lack of any true means to sort waste was one of the things they disliked most about waste management.

The second finding is that a lot of divertible waste is still going to landfill. In the survey, 53% of respondents said they sort all or most of their recyclables, while 17% said they do not dispose of recycling separately at all. For organics, 45% said they sort all or most of their organic waste.

But when we asked where people place the waste they sort, the picture became more complex. Of those who sort organics, 60% reported putting them in the building's garbage chute at least some of the time. In the TCHC building that figure was even slightly higher. Although TCHC provides marked organics collection bins, only around a quarter of residents across the two buildings used an outdoor organics bin as one of their disposal locations.

We also asked about batteries and unused medicines. Sixty percent of participants disposed of batteries in the garbage at least some of the time, and 10% put them in recycling. For unused medicines, 51% reported putting them in garbage, 11% in the toilet, and 8% in recycling at least some of the time. These are sobering findings given the density of the community and the fact that roughly half of Torontonians live in multi-residential buildings.

The third finding is that residents' pro-diversion values and practices are an underutilised opportunity. Why is it difficult and inconvenient for so many residents to separate waste? Partly because of physical limitations: older buildings with single chute systems and no indoor common rooms for certain waste streams. But some issues are more readily actionable: chute rooms overflowing into hallways, chutes that are difficult for some residents to operate, and insufficient information about what residents should do.

The causes differ between the private and social housing settings. In the privately owned building, sorting waste is impeded by the lack of meaningful options. The landlord has provided blue bins in the outdoor waste enclosure, but there is no separate garbage receptacle there and no organics collection. If a resident has an item too large for the chute, they either put it in the blue bin or leave it on the ground. Videos taken by residents showed the hauler mixing blue bin contents with compactor bin contents, which is not surprising given the level of contamination.

To understand that problem, we need some policy context. In Toronto, city-serviced multi-residential buildings must provide residents with the means to sort recycling and organics. In exchange, they are charged only for garbage collection, not recycling or organics, giving them an incentive to divert waste.

However, since 2009, multi-residential buildings have been able to opt out of city waste services. Around 40% did so, often to avoid organics collection. These buildings are then governed by Ontario Regulation 103/94 for the institutional, commercial and industrial sector. That regulation does not require organics collection and only requires "reasonable efforts" at recycling. In practice, that is a weak basis for enforcement. Many private rental high-rises in St. James Town are in this group, contracting with private waste companies and lacking incentives to support residents in recycling properly.

The social housing building presents a different puzzle. TCHC has an institutional mandate around waste reduction and diversion, including a dedicated office since 2018. Yet residents still reported confusion and poor waste practices. Some did not know there was an organics bin in the waste enclosure. In this case, the issue is not the same policy failure, but there is still a need for more investigation, better building-level understanding and more continuous education.

The fourth finding is that residents experience waste in their buildings as connected to health, safety and aesthetics. In the private rental building, low landlord commitment to waste diversion was clear. But similar concerns appeared in both buildings. Residents described garbage overflowing outside chute rooms, lingering in hallways and creating what one could fairly call an aesthetic assault: odour, pests, health worries and embarrassment when inviting visitors.

For TCHC, this does not necessarily indicate low institutional commitment, but it does suggest that commitment needs to be matched by building-level understanding, work with resident groups and willingness to learn from successful examples elsewhere.

We initially thought the study would mainly support resident teams to take action in their own buildings. But we realised that advocacy beyond the buildings is also necessary. Private building management's lack of interest in doing more than "tweaks" reflects a need for policy change. Multi-residential landlords need to be compelled and supported to provide meaningful ways to divert organics, recycling, batteries, clothing, electronics and other materials.

Undiverted household waste is adding pressure to landfills and incineration. Our study shows how that happens in multi-residential buildings, but it also suggests the problem is actionable and that society should act now.

Thank you.

Nigel Deacon

Thank you, Lisa. That was extremely interesting and really shows how many moving parts need to be in place to drive change at multiple levels. We'll take questions at the end.

Bobby, over to you.

Bobby Bell

Thanks, Nigel. I'm Bobby Bell, Green Infrastructure Deployment Manager at Boston Housing Authority. It has been great to get to know Lisa and Mason, and Lisa, that was a phenomenal body of work and a really useful snapshot of what you're doing.

I'll share a snapshot of how one entity is moving forward. This is not about promoting any particular company or infrastructure, but I'll show what we have done through our metroSTOR partnership and how we are continuing to improve.

BHA is the largest public housing authority in New England. We own or oversee more than 50 public housing developments and more than 10,000 rental units, serving roughly 10% of Boston when including our Section 8 voucher program. We work closely with the city's Public Works Department and other partners because we serve a large number of residents as Boston's largest landlord.

Our communities are diverse in both residents and building types. Around 60% of the people we serve live in communities designated for seniors and residents with disabilities. Around 40% live in multifamily low-income communities.

BHA's mission is to give every resident the opportunity to thrive and to foster sustainable communities through quality affordable housing. We cannot do that without robust waste management systems focused on reduction, reuse and recycling. Waste management is a foundation for thriving and healthy communities.

The overarching question we ask is: when does waste actually become waste? Does it need to become waste at all? We are trying to reimagine waste and shift some very outdated, going-through-the-motions operations and infrastructure.

Our goals align with the City of Boston's goals. First, we want to improve quality of life and environment for BHA residents by improving waste management, which is closely tied to rats and health. Second, we have a longer-term aspirational goal of moving toward zero waste, aligned with Boston's 2050 net zero goals. Third, we want to create a culture of rejuvenation, regrowth and regeneration - a circular economy and closed-loop food systems - rather than linear consumption and disposal.

This takes more than education. BHA tries to start with people, not just buildings. One colleague puts it well: it is not a rat problem or a waste problem; it is a people problem. We serve multilingual communities from around the world, so our signage and engagement need to be accessible and intentional. We work with our language access and communications teams to provide materials in languages including Chinese and Spanish, and to tailor communication to each community.

But education alone is not enough. We also needed to provide the basic infrastructure. In one pilot at Charlestown, the largest public housing development in New England, we replaced open-top 10-yard dumpsters with enclosed trash, recycling and composting facilities. Before, there was no recycling available. Afterward, residents had enclosed trash, multiple recycling toters, and composting on site.

Charlestown has an active resident task force, and we are always looking for residents who want to take the torch. We changed from large open dumpsters to smaller wheeled containers that staff could move for servicing. There were operational questions to work through: could staff reliably open enclosures, bring containers out and return them? Public Works raised those questions, and the pilot created learning opportunities. Overall, it has been a significant infrastructure improvement.

Waste is also a health, safety and rodent issue. For years I was hesitant to talk about composting and rats together, in case people got the wrong idea. Now I actually welcome that conversation. Previously, open-top dumpsters created what I'd call a "rat buffet." Now we can separate trash, recycling and compost, place food scraps in rodent-resistant containers, send them to a farm instead of landfill or incineration, and return finished compost to resident gardens and, soon, BHA's first urban farm. Residents understand that. It clicks.

That tangible connection - food scraps becoming compost that feeds gardens - has helped move our overall waste improvement work forward.

Partnerships have been essential. The Boston Rodent Action Plan is an inter-agency effort led by Mayor Wu, and BHA has a seat at the table alongside other city agencies. The city saw what BHA had done at Charlestown and how we were containerising waste infrastructure. Containerisation has become a key concept in our infrastructure improvements. The city then invested in BHA so that we could expand.

Through the Boston Rodent Action Plan, agencies are testing whether improved education plus better containerisation can reduce rodents. In Brighton, we are also adding AI-powered rodent sensors alongside containerisation improvements to measure the impact.

We have continued to innovate. At Commonwealth in Brighton, one of our larger communities, we recently kicked off a new pilot using containers that are themselves the infrastructure, rather than enclosures placed around separate containers. The recycling and trash units are front-loading and more efficient for Public Works to service. We will gather resident feedback and, if successful, expand through Commonwealth and nearby sites such as Patricia White.

So, in summary, the "rat buffet" is officially closed at those pilot sites. We have successful and growing pilots at Charlestown, BHA Central Office and Commonwealth. These have attracted more investment from the city, helped start composting at BHA Central Office and shown residents that investment is being made to improve their environment. Residents get it and are excited to see better systems being put in place.

To keep the work engaging, we have also used creative resident engagement such as a "trashketball" activity inspired by the Celtics. Infrastructure is essential, but the work also needs to be fun, accessible and something people can see themselves in.

Thank you.

Nigel Deacon

That's excellent, Bobby. Thank you. I'm sure there will be plenty of questions.

Mason, over to you.

Mason Giem

Thanks, everyone. I'm Mason Giem, Public Works Program Coordinator for the City of SeaTac. Today I'll talk about how we feel we've figured out a big piece of the contamination problem in multifamily buildings. Stay tuned — it's exciting.

SeaTac is a city of about 30,000 people located around SeaTac International Airport, serving the Seattle area in Washington State. We have around 68 multifamily properties, a large service industry workforce, and a heavily multicultural population with many first-generation immigrants, languages and cultures. That brings many of the familiar challenges of multifamily recycling and waste diversion.

The background goes back to China Sword, when China stopped accepting much of the world's recycling because it was too contaminated. That put a major strain on our hauler, Recology, whose business model depends partly on selling recyclable materials. When the market dropped, they requested a rate increase. We agreed, but if we were opening the contract, we wanted to make other changes too.

We allowed Recology to implement a contamination fee on multifamily and commercial customers. The fee is currently $10 per cubic yard of service when a visual audit finds 5% or more contamination. Commercial businesses responded quickly because fines get attention. Multifamily was much harder because there is no direct accountability. It could be any resident in any unit. Some multifamily properties even dropped out of recycling because of the contamination fee.

We also removed plastic film from the accepted materials list. I strongly recommend that. Plastic film does not move through sorting facilities well, is a poor grade of plastic, and is not worth trying to recycle in a mixed recycling system.

SeaTac has been doing mixed recycling since the early 1990s, so recycling access is well established. In our last contract negotiation, we also embedded recycling and composting rates for multifamily, commercial and single-family customers. They pay a garbage rate, and recycling and composting come with it.

We worked with consultant Jack Harris from Blue Marble Environmental and used state grant funding for an initial pilot at seven properties. After seeing the results, we expanded to 20 properties. Now every multifamily property in SeaTac has the slotted lid.

The results are strong. It works. Before implementation, multifamily recycling dumpsters averaged around 26.5% contamination. After lid implementation, contamination fell to around 4%. It's phenomenal. It has continued working for around six years. We do not have to go back repeatedly to re-educate properties. It does not matter who moves in or out; residents simply cannot throw as much garbage into the recycling dumpster. We have not had to go back again and again to re-educate.

The lid is simple. It is the same principle used on many smaller recycling containers, applied to a multifamily dumpster. The lid is locked and has a slot with a larger central opening, usually around 12 inches, big enough for items such as a milk jug. Residents have to pour recycling in rather than throw in bags.

Our view is that we would rather have people participate correctly and lose some diversion volume than have people throw garbage into the recycling and ruin the stream. Contaminated material affects the whole recycling process. Food waste and other contaminants can damage sorted materials further down the line. The locked lid stops people from putting furniture, bags of garbage and other large contaminants into the recycling dumpster.

There are challenges, especially cardboard boxes left outside, but overall the results outweigh the problems.

We paired the lids with education. We made specific posters for the slotted lid program and translated them into SeaTac's top five languages. We added labels and stickers to containers, including reminders to flatten cardboard and avoid plastic bags.

We also did door-to-door outreach. Every unit received a flyer, and if people were not home we left a recycling tote. The tote shows accepted materials in English and Spanish and has a handle on the bottom so residents can pour recycling into the dumpster. That works well with the slotted lid.

We also created a video and used multiple outreach methods: posters, clean containers, door-to-door materials and sorting totes. We were not just installing a lid; we were relaunching the program.

Auditing was important. We can modify existing containers simply by swapping out the lid, and the lids cost about $70 each. SeaTac now audits all commercial and multifamily recycling and compost containers at least once a year. We have a consistent process, with pictures, standard operating procedures, and a three-strike letter process.

The quality of material with the modified lid is much better. When you open the container, it looks like recycling is supposed to look. How about that? Some contamination still gets in — plastic bags, bits of styrofoam, textiles — but we are down around 4%, and that has held over several years.

One of the clearest before-and-after examples is a recycling dumpster next to a garbage dumpster. Before, people threw garbage into both. If the recycling dumpster was closer to the enclosure entrance, it often became the garbage container. With the locked lid, that behaviour changes.

My philosophy is to make recycling slightly harder if necessary. The people who want to recycle will pour out their material or walk a few extra feet. If someone is not going to participate correctly, I would rather they not participate in the recycling system, because contamination affects everyone else. As I put it rather bluntly, recycling is a privilege, not a right — it needs to be done correctly.

Did we lose some volume? Yes. But I would argue much of that material was garbage to begin with. It was either being hauled as recycling and then disposed of later, or it was reducing the value and quality of the recyclable stream. Many cities focus heavily on diversion rates, but in a mixed-stream system high diversion can include high contamination. Quality matters.

The same issue will become increasingly important with composting. As cities roll out municipal composting, even small amounts of plastic can create serious problems.

There are operational issues. Some residents do not break down cardboard and leave boxes beside the container. That becomes part of the maintenance routine. Staff may need to break down boxes, but that is still easier than climbing into a dumpster to pull out a couch, or paying for a whole recycling container to be handled as garbage.

There are also lid-design challenges. The concept is strong, but the current lids are not as durable as I would like. Rain and snow can cause issues, lid sizes do not always match container sizes perfectly, and sometimes lids hang over the edge. Most importantly, the program only works if the lid is locked. The driver has to relock it after collection, and getting drivers to do that consistently has been the biggest challenge. We use performance fees with the hauler, but it remains an issue.

Overall, I care deeply about solving contamination problems in multifamily recycling, and I believe this approach works. It creates a physical barrier against large-scale contamination. We can do recycling, but we need to do it correctly. If we make it too easy to misuse, the stream gets ruined. There is a balance.

Thank you.

Nigel Deacon

Thank you, Mason. That was a very practical, real-life presentation. We have now had three thought-provoking presentations, so let's move into panel discussion.

A general question for all three of you: why do recycling systems that work reasonably well in single-family homes struggle in multifamily environments?

Lisa Kowalchuk

Mason mentioned invisibility and lack of accountability, which are often cited in multi-residential buildings. But we also need to look at policy context and what realistic options exist for keeping recycling uncontaminated.

In Toronto, buildings serviced by private haulers may have no incentive to keep recycling uncontaminated because it will be mixed anyway. It makes little sense to educate residents on doing it properly if the building does not make proper sorting possible.

The social housing building is more complex, because it does provide some infrastructure. Perhaps it needs an indoor waste disposal area, but that is difficult in older buildings and requires will and money. I was also struck by Mason's idea that recycling should not always be made easier. I need to think more about that, because my instinct is that systems need to be more convenient and within reach.

Mason Giem

I think it depends on context. If you are rolling out recycling for the first time, ease matters a great deal. But in SeaTac, we are 30 years into mixed recycling. Many people already want to recycle. We are empowering those people by making sure that when they go to the bin, it looks like recycling and not garbage.

It is so disheartening to clean out a peanut butter jar, take it to the recycling bin, open the lid and see garbage. Why did I spend all that time cleaning it? By keeping contamination out, we support the people who care and protect their effort.

Nigel Deacon

That's a good point. I'd summarise that as needing to make recycling easy enough for people to participate in the first place, but with enough intentional friction to stop contamination. It can be a tricky balance.

Bobby, any comments?

Bobby Bell

I agree. I'm already partly persuaded by Mason's point about intentional friction. It is a bit of a lightbulb moment. Money and time are issues, but infrastructure matters. Lisa's research shows it is not that people do not care. You do not need to be wealthy to recycle, but funding and infrastructure do help.

Through redevelopment at Charlestown, we are now able to design a building with a chute system that can handle both trash and recycling. But that takes partnerships and funding.

Socorro Medina

This is Socorro Medina from the City of Seattle. Thank you for the presentations. In Seattle we have around 6,000 multifamily buildings and a robust multifamily program. One major difference between single-family and multifamily is the economic incentive. In single-family housing, residents have a clear financial incentive to recycle and compost.

In multifamily, the incentive is often split. If residents are charged through a third-party app, the manager or owner may not care about the cost because residents pay it. If costs are embedded in rent, residents may not care because the landlord pays. That has been a very hard problem for us.

Nigel Deacon

That is a great point. If we could link residents' actions to a benefit - for example, saving as they recycle or paying according to refuse - would that make a difference? Mason?

Mason Giem

Socorro is right. Without a financial incentive, it is harder to boost participation. In multifamily, we may need to go back to explaining why recycling matters and proving that material is actually recycled. There is a lot of skepticism now. People hear that recycling is not really recycled or ends up elsewhere.

Keeping contamination low helps validate the effort. We can say: yes, your material is clean enough to become a new product. In multifamily, it may not be about money for residents. It may need to be about environmental value, circular economy and doing the right thing.

Lisa Kowalchuk

I agree. The Toronto Environmental Alliance's Zero Waste High Rise Project showed that motivation, environmental values and building cleanliness can be strong drivers, although that project involved condos and co-ops rather than rentals. Condos and co-ops may be more conscious of the waste bill, but individual fees are still difficult to link to specific residents.

There is also skepticism about recycling here, partly linked to extended producer responsibility and concerns that some collected recycling may be sent for incineration. We are fighting skepticism as well.

Nigel Deacon

There are also questions in the chat about ADA compliance. Standard dumpsters can be difficult to access and do not always meet accessibility requirements. With the unit Bobby shared, one of the things we have tried to do is ensure accessible openings.

There was also a question about chutes in buildings with gravity chutes. Chutes are often the easy option, while recycling requires additional effort. In the UK, some chutes have been decommissioned, sometimes to improve recycling but often also because of fire safety, maintenance issues or repeated blockages. It is worth considering whether a chute should be maintained or whether the whole building system should be changed to create parity of effort between trash and recycling.

Bobby, any experience around chutes?

Bobby Bell

BHA is doing a lot of construction, modernisation and redevelopment. At Charlestown, we have a more innovative chute that allows residents to choose trash or recycling. But we cannot retrofit more than 500 buildings overnight.

In older buildings, we have tried placing recycling bins inside or just outside chute rooms. Results are mixed. It depends on the site and how engaged the operations staff are, because staff need to move those bins outside. It is still a problem to solve, but we have had some success.

Socorro Medina

In Seattle, it is a challenge when garbage chutes are convenient but recycling and compost are in inconvenient locations. For new buildings, we are seeing more double and triple chutes for garbage, recycling and compost, and those are working fairly well.

We also see bi-sorters and tri-sorters, where one chute changes outlet at the bottom, but those have mechanical problems and require the user to wait. We prefer double or triple chutes for new buildings. We have been using gravity to move garbage for a long time, so we encourage better chute design in new construction.

Nigel Deacon

Thank you. As we are getting close to time, one final question: what emerging approaches or technologies would you most like to see cities test over the next few years?

Bobby Bell

I would take it back to composting. There is so much opportunity there, and it has resonated with residents because they can see a tangible product coming back. Compost can support urban agriculture, green infrastructure and rain gardens.

I would like to see more in-vessel composting in urban environments, from small one-cubic-yard systems to larger shipping-container-scale systems. I would love to see food scraps stay within a BHA community and become compost that supports our urban farm or other site improvements.

Nigel Deacon

Great vision. Lisa?

Lisa Kowalchuk

I am excited by both Mason's and Bobby's solutions. High-rises may have different realities, but we should not exclude them from the possibility of change. Mayfair on the Green, a condo building in Toronto Environmental Alliance's project, converted its garbage chute to an organics chute.

I would like to see more creative thinking from city-serviced buildings, including Toronto Community Housing. For private rentals, the policy regime needs to change before we can expect serious technological change.

Nigel Deacon

Mason, what would you like to see next?

Mason Giem

I'm working on an organics pilot now using the same concept of restricted access, and early results are looking fantastic. I hope to share those results next year.

More broadly, I think the industry needs a shift in philosophy. We often try to make participation easier at the expense of downstream processors. But processors are part of the system too. They need material, but they need good material they can process. If we damage the product to the point that processors cannot handle it, we have failed. Contamination matters, and multifamily is a particularly tricky area.

Nigel Deacon

I agree 100%. There is still a great deal we can do to increase diversion at source rather than passing the problem down the line. I keep coming back to the same principles: ease drives participation, control drives quality, and feedback loops allow us to improve performance over time.

Thank you, Mason, Lisa and Bobby. We really appreciate the effort you put into this. Thank you also to everyone who joined and contributed such an active discussion around a challenging topic. We will return to this topic in a few months with more ideas and experience from other cities across North America.

We will also share materials shortly. Enjoy the rest of your day.

Chat Questions

Q1. How many languages are spoken amongst the residents?

Bobby: At least 10 languages.

Q2. How large are the garbage dumpsters and how are they accessed?

Mason: Mostly 3 and 4 yard

Q3. Was it necessary for the hauler trucks to be altered to service the new containers?

Mason: Straight lid swap

Q4. Do the lids have gravity locks?

Mason: no, they currently have padlocks – haven't found a suitable gravity lock yet

Nigel: check these out: metroSTOR metroLID System - Retrofit Controlled-Deposit Lid

Q5. How do you ensure ADA accessibility with these containers?

Mason: 3yd better than 8 yard due to loading height

Nigel: check these out: metroSTOR metroPOD System – Controlled-Deposit FEL Dumpster

Page DuBose: In the City of Gresham, OR we have dumpsters with slots in the front of the bin instead of on the lids, which has worked much better than slotted lids I've dealt with in previous roles. Highly recommend

Q6. Are those plastic film wire frames in use in outdoor enclosures in the winter and rainy months?

Mason: No, they didn't work well.

Q7. Any data on the reduced capture of materials vs quality?

Mason: Contamination reduced from 26% to 4% and volume from 75% to 41% so net reduction of 12%

Q8. Any experience with locked 96 gallon carts and restrictive lid similar to your slotted lids on dumpsters?

Mason: organics pilot in progress

Q9. Mason will you remind me what department of the city is doing this? Who is funding?

Mason: State grant for pilot then reallocation of program funds

Q10. Could we have more information about how Mayfair on the Green mitigated contamination after converting the chute from garbage to organics?

Lisa: First, residents are condo members and therefore have a clearer financial stake in reducing garbage volumes and avoiding costs linked to problems such as grease disposal. Because the building is serviced by the City, residents also benefit from reducing garbage, as diverted organics are not charged in the same way.

Second, the building has strong management support, including a sustainability-minded superintendent. This matters because the organics chute does not work on infrastructure alone; staff actively check the green bin receiving the chute waste several times a day for contamination.

Third, residents are given transparent bags, making contamination easier to identify. The building also provides clearly marked areas for materials such as cooking grease, electronics, medical waste and reusable items.

Lisa shared TEA's video on the building here: https://www.torontoenvironment.org/mayfair_spotlight

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