

metroSTOR Webinar Key Learnings and Transcript

From data to action:

Improving communal recycling performance

13.10.26

Key Learnings

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metroSTOR Webinar **Key Learnings**

1. Start with the problem, not the solution.

Poor performance may be caused by capacity, accessibility, contamination, servicing, cleanliness or the condition of the bin area - and communications alone won't fix unsuitable infrastructure.

2. Borough-wide recycling rates don't tell you enough.

Site-level data is needed to understand why one communal scheme performs differently from another.

3. Know what infrastructure you actually have.

Enfield's audit records location, capacity, condition, accessibility, contamination, overflow and space for additional bins.

4. Make the data usable.

Mapping and dashboards can turn an audit into a tool for identifying problem sites and targeting interventions.

5. Clean the data before you start.

Enfield began with around 15 different spreadsheets, duplicates and inconsistent property information - a reminder not to underestimate preparation.

6. Create one source of truth.

The longer-term aim is a live, maintained dataset rather than separate spreadsheets sitting with different teams.

7. Waste and Housing need to work together.

Recycling performance is closely tied to wider priorities including fly-tipping, cleanliness and the quality of communal spaces.

10. Understand resident behaviour in context.

In our audience poll, 47% identified motivation as the biggest barrier - but 30% said they simply didn't know what the main barrier was.

11. Trial before rollout.

Enfield is testing different food-waste interventions and using the audit to select appropriate sites before deciding what should scale.

12. Plan for the long term.

Investment in new infrastructure only works if cleaning, servicing and maintenance are sustainable afterwards.

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metroSTOR Webinar **Edited Transcript**

Introduction

Nigel Deacon

Good afternoon, everyone, and thanks for joining us. Today we're looking at a challenge that will be very familiar to many local authority waste and housing teams: how do you improve recycling performance in communal housing when you don't have a really clear picture of what's happening at individual sites?

Poor performance can have a lot of different causes: insufficient capacity, inconvenient infrastructure, contamination, servicing issues, or simply a bin area that residents don't want to use. Before deciding on the solution, we need to properly understand the system and the problems that are occurring.

That's really what today's session is about: how Enfield Council, working with Resource Futures, is developing a much more detailed site-level evidence base to understand its communal recycling infrastructure and performance, and then use that data to target improvements.

It's also a really good example of why close collaboration between Waste and Housing teams matters. Improving recycling isn't just about tonnage and contamination; it can also mean a cleaner, safer and better-managed neighbourhood and a better experience for residents.

This is Part 1 of a two-part series. Today we'll focus on the approach, the audit and what's been learned so far. In Part 2, early next year, we'll come back to the project to look at further findings, interventions and results.

I'll hand over first to Doug Simpson from Resource Futures to introduce the background to the project.

Why the data matters

Doug Simpson, Resource Futures

Thanks, Nigel, and good afternoon everyone. I'm a Principal Consultant and Waste Strategy Lead at Resource Futures. A lot of my work involves working with local authorities to really get under the hood of what's happening with their waste and recycling services and help them make informed decisions to drive performance.

Resource Futures is a mission-led, employee-owned environmental consultancy. We work across the public, private and third sectors, with a strong focus on supporting local authorities with waste strategies, plans and services: making them cost-effective, compliant and high-performing.

We also do a lot of work around behaviour change, which is intricately linked with communal recycling performance, as well as policy advice and work with communities on the ground. We're very focused on evidence. As Nigel said in his introduction, if you understand what is actually happening on the ground, you're in a much better position to improve it. It comes back to the old adage: you can't manage what you don't measure.

We've put a lot of effort into developing our data and innovation capabilities. The aim is to understand the condition of communal recycling sites, what services are present, how residents are engaging and how collection crews are recording and servicing those locations. If you can bring all of those datasets together, you get a much richer picture of what's happening.

There's no silver bullet for communal recycling. People have been trying to improve performance for a long time. It needs a lot of things to align: simple interventions, appropriate behaviour throughout the chain, collaboration, dedication and discipline. Our hope with this project is that better data can bring all of that together, paint a clear picture and help identify the right targeted interventions.

The Enfield challenge

Starting position

Tim Read-Lamb, London Borough of Enfield

For anyone who doesn't know Enfield, we're a London borough with around 330,000 residents and approximately 130,000 properties. Around 43,000 of those properties are communal properties with bins, covering roughly 2,500 communal bin sites. We have quite a transient population, with a lot of people moving into and out of the borough. Our current overall recycling rate is around 33%, including kerbside households and flats, and councillors have set an ambition to reach 50%.

For flats, though, we estimate that the recycling rate is probably only around 5% at most. We don't know that with certainty because the tonnage is collected together. Back in 2019, the council rolled out food waste and recycling to a number of flats. That happened shortly before Covid and the implementation and ongoing management weren't as well planned as they could have been. Over time some bins were removed and there were problems around cleaning and other aspects of the service.

Our aim now is effectively to rebuild recycling and food waste provision across our flats and get performance significantly above that 5%. The first problem is knowing exactly where the flats and bin stores are and what infrastructure we actually have.

We also want a consistent, reliable and digitised collection system where we know when every bin has been collected, when there's a problem, when a bin is contaminated or broken, and when a collection has been missed. But all of that relies on knowing how many bins we have and where they are in the first place.

We've also been tasked with reducing fly-tipping and problems around overflowing bins. A major part of this is building a much stronger relationship with our Housing department and with managing agents, so that we can provide timely information when there is a problem and develop a clear education programme around the service.

Why Enfield needed a full audit

Lily Arkwright, London Borough of Enfield

Since the 2019 rollout, management of the service had become quite fragmented. I'm sure many people in local authorities will recognise the starting point: lots of Excel spreadsheets containing very similar, but not quite the same, information. It became clear very quickly that we didn't have the data to make informed decisions. Different services collect information for their own purposes, but that doesn't necessarily give you a consistent, unbiased and reliable baseline to work from.

Even when we were trying to plan the project and develop a budget, we didn't know exactly what infrastructure was already in place. We could potentially have ended up buying equipment twice because Housing might already have provided something at one site but not another. We therefore took a step back and asked what information we really needed.

We needed to understand where all the sites were, what infrastructure was already there, whether there was room for additional infrastructure, the true locations of bins, rather than relying on historic records and how to capture the data in a format compatible with our Bartec in-cab system. A lot of our older blocks date from the 1920s. They may have historic refuse chutes that are no longer used, while the bins have moved elsewhere. Those bins therefore needed to be properly geolocated.

We considered collecting the information ourselves and spoke to Housing and Waste Operations, but realistically we didn't have the manpower or resources to do a borough-wide exercise to the standard we needed. The solution was therefore an external borough-wide audit.

Our brief to Resource Futures was essentially, we want as much useful information as possible about every communal bin area and every bin currently being used, we want to know exactly where they are, and we need the data in a format that we can manipulate and transfer onto a digital platform.

Building the communal recycling audit

What was recorded?

Kris Wadey, Resource Futures

This is where Resource Futures came into the project. The principle behind the audit is that even the best communications campaign can't fix a bin store that is too small, dark or difficult to use. You need to know what is physically in place first. The survey was based on ReLondon's flats recycling toolkit and its principles around making recycling easy, understood and motivating.

We developed a bespoke questionnaire with approximately 75 questions covering those areas. The data was captured using cloud-based software, providing live updates. We used a parent-child data structure: the property was the parent record and the individual bin stores at the property were the child records. Every bin store was geolocated.

Before fieldwork began, we recruited and trained a dedicated audit team. We recruited locally, which helped with day-to-day work in the borough and gave the auditors more opportunity to interact with local residents. We maintained six auditors throughout ten weeks of fieldwork. Every property was visited in person.

For each bin store we recorded its GPS location and measured capacity across refuse, recycling and food waste. We also recorded whether there was space for additional bins, because we knew the information would ultimately need to support interventions and future service upgrades. We flagged overflow and contamination, as well as the overall condition of the bin store. That included things like lighting, signage, pest-control issues, condition and cleanliness, resident accessibility, collection crew accessibility and whether it was somewhere residents would actually want to go to recycle. Where possible we minimised free-text answers so that the resulting data could be compared and analysed consistently.

Property reports and quality control

Kris Wadey

We were able to produce an individual PDF report for each property, covering every bin store surveyed on that site. That has been useful for Enfield because it creates a tangible document containing the information in one place, which can also be shared with departments outside Waste.

We also built several stages of quality control into the process. The first is at the point of capture: making sure auditors are properly trained, understand the objectives of the project and know what the information will ultimately be used for. We then downloaded and sense-checked the data weekly, alongside automated checks throughout the ten weeks.

Finally, the dataset was quality-controlled by a project director before sign-off. The opportunity then is to go beyond simply recording the information and use it to identify where interventions should be targeted. We also wanted something more accessible than a large Excel spreadsheet, which is why we developed the dashboard.

The data dashboard

Kris Wadey

The dashboard gives Enfield headline information such as bin-store types, contamination flags and overflow. It can start to highlight problem areas - for example, locations where one bin store may be servicing too many households. The mapping function allows properties to be filtered according to different characteristics and can highlight intervention opportunities, such as sites where there is room for additional bins.

One particularly useful part is the individual bin-store detail. You can search for a property and immediately access the associated audit information, map location and PDF report. The GPS location is especially valuable for Enfield's Bartec system because it establishes exactly where the bin store is located when designing and implementing future services. Rather than just having a spreadsheet, the idea is to make that information visual, searchable and useful for decision-making.

Audience poll

Kris Wadey

Thinking about your own flats and recycling services, where is the biggest barrier right now?

Ease - residents find it physically difficult to recycle – **10%**

Knowledge - residents don't know what or how to recycle – **12%**

Motivation - they know how, but aren't motivated – **47%**

We simply don't know – **30%**

Kris Wadey

It's interesting that motivation is the largest response, but "we don't know" isn't far behind. That information gap is exactly what an audit like this is designed to address.

Trials and interventions

Food waste liner distribution

Tim Read-Lamb

Alongside the bin audit we've started several trials, and some of the audit information is already helping us decide where and how to run them. One is with ReLondon around the distribution of food waste caddy liners. Simply delivering rolls of liners to every flat can be expensive, particularly if some residents aren't going to use them.

We're therefore looking at alternatives, such as leaving liners in communal areas or providing dispensers that residents can use when they need them. Our first dispensers kept disappearing, so we've now developed a metal version that can be securely fixed to the wall and hold multiple rolls. We're still in the middle of that trial. In Part 2 we'll be able to share more about what has worked, what hasn't and what we would recommend doing differently.

Reborn food waste caddy trial

Tim Read-Lamb

We're also working with Reborn, which produces higher-quality kitchen caddies. Like many councils, historically we've tended to provide the cheapest food waste caddy we could buy. We wanted to test whether giving residents a more attractive, better-designed product could actually influence motivation and food waste participation.

There's also a circular economy story. Plastic from Enfield is ultimately being used in the UK to manufacture these caddies. It's still very early in the trial, but the initial resident feedback has been very good. The key question, of course, is whether that translates into an actual increase in food waste recycling, and we should have more to report in Part 2.

Using the audit to choose trial sites

Lily Arkwright

The audit has already proved useful in selecting suitable sites for the Reborn trial. We wanted variation in property type and tenure rather than simply using Enfield Housing sites. Using the audit, we could quickly look up a location, see what was already in its bin store, view photographs and decide whether the site met our criteria.

We could also get down to basic but important details such as exactly how many homes were at the location, so we knew how many caddies we would need. We had only bought a finite number, so having accurate information made the selection process much easier. That's a good real-world example of how the audit has already become useful.

Lessons learned so far

Tim Read-Lamb

We've certainly learned things along the way. We started with around 15 separate spreadsheets containing property information. They were all different. Addresses were formatted differently, there were duplicates, properties outside the borough, and locations classified as flats that turned out to be houses.

We managed to get that down to one spreadsheet, but even then there was a lot of cleansing to do. There were also practical issues around obtaining information from operational teams and understanding how auditors could access certain properties. So one important lesson is: don't underestimate the amount of preparation and data cleansing required before an audit starts.

Next steps

Lily Arkwright

Between now and the next webinar we're completing revisits to the small number of properties where access wasn't possible first time. We'll then get the audit information onto our digital platform and establish a process for maintaining it. The aim is to stop individual service areas maintaining their own spreadsheets. The audit dataset will become the common baseline.

We'll also be planning the rollout of food waste. We now have much better information about numbers, infrastructure requirements and likely purchasing needs. We'll be working closely with Housing to understand what they can support and, more generally, establish the scale, budget and timescale for the work over the next six to nine months. We'll update everyone on that in Part 2.

Kris Wadey

From the Resource Futures side, we're continuing to develop the dashboard as an ongoing tool rather than simply a one-off audit output. We're also working with Enfield on flats above shops and hope to incorporate those into the same dashboard. The aim is effectively to have something like a CRM for bin stores.

We also want to build in processes for keeping the information current through periodic updates or re-audits, and help councils turn dashboard insights into prioritised, costed intervention plans. Ultimately, we'd like the audit and dashboard approach to be readily deployable for other boroughs facing similar challenges.

Q&A**Nigel Deacon**

Do we have a sense of the ownership mix between council and private properties?

Lily Arkwright

It's roughly half and half. The private communal properties are particularly challenging compared with Housing, although I suspect that's a fairly universal experience. One advantage of the audit is that we'll now know what is already present at those private sites, which means we can tailor our approach. Rather than approaching a managing agent in general terms, we'll be able to say: we know what infrastructure you currently have, we know what you need, and here's how we propose moving forward.

Nigel Deacon

What have you found to be the best way of engaging those private property managers?

Tim Read-Lamb

The honest answer is that we haven't really got to that stage yet. We've had mixed results from the small number of trials, but we needed the audit information first so we could determine what we wanted to do and where. We're currently rewriting our management-agent terms, conditions and plans - everything from bin provision through to cleansing and repairs. We're doing a lot of work with Housing first, and that will help inform how we approach the private properties later.

Nigel Deacon

Is the Reborn trial considered large enough to be representative?

Lily Arkwright

We've deliberately selected a varied range of properties for the Reborn trial. We don't have huge numbers because the budget is limited, but we've tried to include different tenures, different levels of affluence and areas with significant non-English-speaking populations. So although it is a limited trial, we've tried to make the group as representative as possible.

Tim Read-Lamb

These trials are really starting points. If we establish that an intervention has an impact, we can extend it. With Reborn, for example, we're working on a more economical version of the caddy. If the first trial suggests there is a measurable benefit, we can test that lower-cost version with a larger group before considering wider rollout. With around 2,500 communal bin locations, none of this can happen overnight. Development and testing will continue for at least another six to eight months.

Nigel Deacon

Will you be able to measure any change in contamination as well as participation?

Tim Read-Lamb

Hopefully. One of the problems at the moment is that we don't have accurate information about where contamination is occurring. Often we only find out that a bin is contaminated because the crew hasn't emptied it and, several weeks later, the managing agent contacts us asking why. Digitising the service should allow contamination to be recorded properly and enable our recycling officers to target the right locations. That gives us a much better basis for trying to reduce contamination.

Nigel Deacon

There's a question about the approximate cost of the audit.

Doug Simpson

It does depend on several factors: the size of the area, density of sites, transport requirements and the level of granularity required. As a very indicative guide, a relatively top-level survey might be around £35–£40 per site, rising towards £70–£80 per site for a more detailed granular assessment. Typically we'd expect something somewhere between those levels, depending particularly on scale. We're happy to speak directly with any authority that wants to understand what its own survey might involve.

Nigel Deacon

Does the audit capture a site's vulnerability to use or abuse by non-residents?

Kris Wadey

Not specifically, because identifying whether something has been caused by a non-resident is difficult without speaking directly with residents. However, we do record the physical condition of the bin store. If there is graffiti, damage or another sign of misuse, that would be captured and could be filtered through the dashboard. The property report also includes photographs, so you can see exactly what the auditor encountered.

Tim Read-Lamb

We also recorded whether bins or the site itself had locks or restricted-access arrangements. So while we don't specifically record "abuse by non-residents", we do have information that indicates how accessible the site is to people who shouldn't necessarily be using it.

Nigel Deacon

How do you deal with properties that share a bin store?

Kris Wadey

That was recorded in the property information, including general comments where a bin store was shared between properties. The more important measure from a service perspective is how many households the bin store serves. We captured that separately, so it becomes part of the quantitative dataset and can feed directly into capacity calculations.

Nigel Deacon

Did that include bedrooms or just households?

Kris Wadey

Just households.

Nigel Deacon

Have you secured funding for the additional bins and infrastructure?

Tim Read-Lamb

Not external funding. There is some funding within the Waste department and Housing also has significant investment available for upgrading housing sites, which can include waste infrastructure. There is therefore funding within different parts of the council, but this won't be a one-year project. It's likely to happen over several years.

Nigel Deacon

How did the surveyors gain access to bin stores?

Kris Wadey

We used several approaches. Enfield provided sets of keys that gave the auditors access to most locations. The auditors were clearly identifiable and carried letters of authority from Enfield Council, so if residents challenged them they could explain what they were doing. Sometimes a nearby resident simply let the auditor in.

The most difficult issue was fob-controlled access. In those cases we sometimes had to arrange for somebody from Enfield to accompany an auditor. Out of around 2,000 properties, roughly 300 required some form of revisit because of access issues. With hindsight, fob access is something we would build into the fieldwork planning much earlier on another project.

Nigel Deacon

Are residents restricted to starch-based liners, or can they use plastic bags?

Tim Read-Lamb

Enfield currently uses starch-based liners, although our anaerobic digestion plant actually prefers plastic liners. The council's decision has been to stay with starch-based liners largely because of the issues and public messaging around single-use plastics. You could make an argument that plastic bags can perform better for food waste in some systems, but explaining that - even internally - can be difficult. At present, starch-based liners are therefore the easiest approach for us.

Nigel Deacon

How will you keep the audit information current as bins and infrastructure change?

Kris Wadey

The data handed over to Enfield includes the underlying spreadsheet, which Enfield can maintain. For the dashboard, we're working through how it can develop into a more interactive tool that can be edited and kept current rather than remaining a snapshot in time. That work is still being developed.

Lily Arkwright

From Enfield's perspective, we want to get away from separate spreadsheets maintained by different service areas. We've been working with Bartec on how the audit data can be incorporated into that system and maintained there. The intention is to have controlled permissions and agreed processes around updating information, because bin provision and site circumstances can change daily.

Nigel Deacon

One authority has already completed a bin audit but likes the dashboard. Could Resource Futures work with their existing data?

Kris Wadey

Potentially, yes. It would depend on what information has been collected and how the dataset is structured, but it is certainly something we could investigate.

Nigel Deacon

Do you currently clean recycling and food waste bins, and who would pay for that service?

Tim Read-Lamb

We don't currently provide that as a standard service, but it's something we're looking at as part of our wider review of management charges. There's good evidence that if you don't keep food waste bins clean, people stop using them. That means long-term maintenance has to be part of the solution. There is no point spending a significant amount getting 2,500 bin areas up to standard if, two years later, the service has deteriorated because there isn't a sustainable maintenance model. So a major part of this work is working out how the service can be supported and maintained over the long term.

Final question: what should another council get right?**Nigel Deacon**

If another council or landlord wanted to start something similar tomorrow, what is the one thing each of you would tell them to get right from the outset?

Tim Read-Lamb

Build a big enough bin area in the first place.

Lily Arkwright

Education and communications.

Kris Wadey

Have a proper tracking system and maintain good, up-to-date data on what infrastructure exists and any changes that are made.

Doug Simpson

On the human side, form good partnerships. Get to know colleagues across departments. Tim has emphasised the importance of good relationships with Housing teams and those who deal with managing agents. Get everybody in the chain aligned so that the approach is genuinely collaborative and co-created.

Closing

Nigel Deacon

Thank you very much. It's been a really insightful session and we're looking forward to coming back for Part 2 and seeing what outcomes are starting to emerge. Clearly this is a multi-year project and not everything is going to change within a few months, but it's been extremely useful to understand the work Enfield and Resource Futures are doing and the lessons you've shared today. Thanks to everyone for joining us, and we look forward to seeing you again at the next session.

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