









Rubbish Refuse

Why our commercial waste management system does not work for high streets and how to fix it for people, place and prosperity

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Any errors or omissions are the authors' sole responsibility. The report content reflects the views of the authors and not necessarily those of Central District Alliance, South Bank BID and London Heritage Quarter.

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Foreword

In his book *Dirty old London: the Victorian fight against filth*, Lee Jackson highlights an intriguing paradox. 'In 1899, the Chinese ambassador was asked his opinion of Victorian London at the zenith of its imperial grandeur. He replied, laconically, 'too dirty.'

Jackson also recalls that American journalist Mary Krout was visiting London for Queen Victoria's Diamond Jubilee. Krout found Londoners' response to the dirt on London's streets 'strangely apathetic.' Krout remarks, 'if the same conditions were visited upon Washington or New York, some solution would have been found.'

Fast forward 125 years. London remains (in overall terms) a prosperous and aesthetically pleasing city. But ascend from one of the Stirling Prize winning stations on the Elizabeth line and too often you risk being confronted with a level of filth and squalor not entirely out of place in Victorian London. Aiming off for semi-abandoned phone boxes and half-finished roadworks, unending piles of refuse often greet you.

This independent report from our friends at Create Streets has been commissioned by a number of Business Improvement Districts to look specifically at the often chaotic arrangements for business waste collection that has evolved in our urban centres. It provides a detailed and thoughtful analysis of the problems at hand and constructive, pragmatic suggestions as to how we can tackle them.

The authors rightly suggest that a collective effort is required. Local authorities need enhanced powers and to make better use of existing laws to bear down on street waste. Businesses and BIDs need to redouble their efforts to help make waste collection a more organised, collective activity. Higher penalties for those who violate the rules could help provide some of the resources needed to help clean up the mess. Alongside these, co-ordination, tighter

regulation and stronger leadership from London and national government are needed.

As the report notes, New York and many of our European neighbours have stolen a march on us, with plans to containerise street refuse and rationalise waste collection either already in place or being implemented.

Without action, London's streets, and the streets of all our city and town centres, risk descending further into places of 'private affluence and public squalor' as leading economist J.K. Galbraith put it. At a time when our private and public sectors are investing in place-making schemes and fighting off competition from other world cities for investment, that would be a disaster. We owe it to everyone - not just the Chinese ambassador - to tackle this chronic problem once and for all. This report provides a cleaner, more sustainable pathway to achieving just that.

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Executive Summary

Commercial waste management is failing our high streets.

Many of London's high streets are dirty, as are those on many of our city and town centre high streets up and down the country. A common sight is a pile of unsightly rubbish bags tipped on the pavement competing for space with pedestrians. This is not due to careless fly tippers. It is the system operating normally. On our town centre high streets, businesses have little choice but to leave their waste on the street as they await collection.

If we want to clean up our act and our streets, and help our town centres bring us together, not drive us apart, then we need to understand why and how to fix it.

This report delves into the unglamorous but important reality of English commercial waste management. It focuses on London but also examines Manchester. There will be helpful read-across for many if not all our cities and towns. The report makes a series of international comparisons. It highlights the problems our system causes, why it has been hard to fix it and what to do instead.

The Problem

- Rubbish Refuse on High Streets. Take a walk down any historic high street and you will often see piles of uncollected commercial waste. This is a common sight across our busy town and city centres. Why? The nature of Britain's lightlyregulated commercial waste market is uniquely fragmented, with multiple operators the norm. This does not matter so much in lower density areas with less rubbish. However, in more densely occupied town centres, it means that piles of rubbish are commonplace for much of the week.
- Impact on Businesses and Public Perception.
 Businesses are feeling the pinch, reporting that the presence of too much rubbish stops people visiting and dampens income. Surveys reveal that



cleaner streets are a top priority for businesses.

Many are willing to pay for additional cleaning services and cherishing those provided by Business Improvement Districts (BIDs). But not all can and the BIDs are forced to work against the regulated system, not with it.

3. Environmental and Health Concerns. Inefficient waste collection systems also increase traffic, noise, and emissions. The omnipresent waste attracts pests and leads to further littering and fly-tipping, creating a vicious cycle of decline and degradation. The effect is corrosive. It makes other improvements harder to justify; greening or seasonal lighting somehow jar with piles of detritus.

This is all in the context of a changing industry, increasing business costs and cash strapped local authorities. As recently confirmed by the government, the Simpler Recycling rules will start next year, requiring businesses to sort their waste before collection. This could mean more collections, and more bags on the street, and higher costs for businesses. Future plans for a deposit return scheme (DRS) also complicate the picture, and as we demonstrate in the report, there could be unintended consequences. Is it possible to have a system that works for businesses, improves low recycling rates, and keeps our streets clean?

Recommendations

To solve Rubbish Refuse we should:

- Strengthen existing rules and enforcement regimes wherever possible to reduce fly tipping and poor practice, and help local authorities cover the cost of enforcement;
- Spread best practice and help the current system work as well as it can in the short to medium term; and
- Simplify the system for town centre commercial rubbish collection so that the market remains competitive and competed, but with upper limits on the number of providers. A more efficient system should help reduce costs on businesses.

We make three types of recommendations; firstly those that can be implemented immediately; secondly, those that require minor changes to regulations and policy; and, finally, those that would require changes to primary legislation or further research.

	Sharing best practice in the short term				
1	Create more Refuse Buyers Clubs Implement consolidation schemes, like the successful trial on Bond Street in central London. These can drastically reduce the number of waste vehicle movements and the presence of waste on streets. Business Improvement Districts are an ideal vehicle for this.				
2	Create a 'reverse Deliveroo' for commercial waste collections Encourage the use of e-cargo bikes for waste collection. This will reduce emissions and noise, permitting direct waste collection from businesses and helping eliminate bags on the street.				
3	Make consolidation points the norm Create centralised locations where businesses can deposit waste, using a range of solutions and spaces depending on the street's characteristics. We suggest different possible solutions. A national or regional body should run a design competition for beautiful facilities that enhance the streetscape and appear intentional or 'meant.'				
	Improving the current system in the medium term				
4	Push the limits of existing powers Councils could make better use of the powers available to them, namely Section 47 of the Environmental Protection Act 1990, to impose stricter conditions on waste presentation and collection. This could include mandating the use of specific types of waste receptacles and enforcing time-banding restrictions more rigorously.				
5	Make Offenders Pay, review maximum penalty and fine levels We suggest increasing the penalties for non-compliance with waste management regu-lations. This includes raising fixed penalties for fly-tipping and introducing new fixed penalties for failures in duty of care for commercial waste. Higher fines would provide a stronger incentive for businesses to comply with waste management laws and reduce the burden on councils to enforce these regulations.				
6	Reduce the burden of proof on councils and make it easier to take action against businesses who manage their waste poorly The current enforcement system is burdensome and often ineffective. The report recommends simplifying the process for councils to take action against those enterprises that manage their waste poorly.				

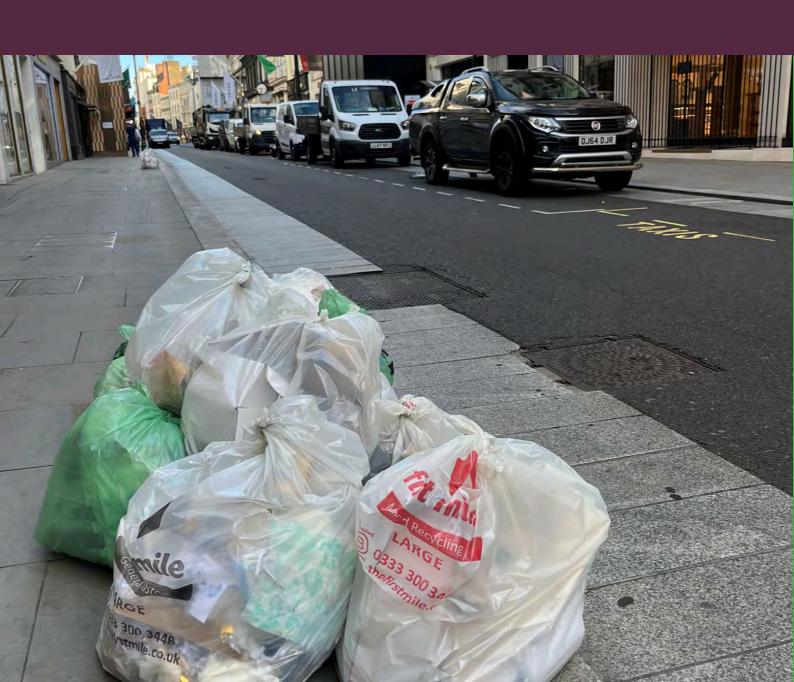
Creating a new town centre commercial waste regime in the longer term Reduce the number of operators through stronger licencing, particularly in town centres We recommend a more stringent licensing system for waste carriers, particularly in town centres. This would also help ensure that only truly competent and reliable operators are allowed to handle commercial waste. The proposed change to the Environmental Permitting regime is a good opportunity for this. Councils should have a say in how carriers are licensed and special requirements for town centre operators could be introduced. Make it easier for those who create little litter by creating a new waste definition of 'ordinary commercial' Recognising that small businesses often generate waste similar to household rubbish, the report suggests creating a new category of 'ordinary commercial' waste. This would 8 allow small businesses to use municipal waste collection services for a small fee, simplifying waste management for these businesses and reducing the likelihood of improper disposal. Move away from the' free for all' towards a system of zoning or municipal carriers We propose further work to explore a zoning system for commercial waste collection. This could involve designating specific operators for different areas or creating high 9 street zones with a single operator or municipal service. Such a system would streamline waste collection, reduce vehicle movements, and improve overall efficiency.

The persistent problem of commercial waste management on the nation's high streets demands urgent attention. This report highlights the detrimental effects of uncollected rubbish on businesses, public perception and the environment. By implementing a combination of regulatory changes, innovative waste management solutions, and community engagement, we can help make our high streets cleaner and more attractive. The proposed recommendations offer practical steps towards achieving this. A cleaner, more efficient waste management system will not only benefit businesses and residents but also enhance the overall appeal and prosperity of our town centres.

It is time to take decisive action to 'banish the bags' and tackle the blight of Rubbish Refuse.



1. Rubbish Refuse



What's the problem in our high streets?

Let us take a walk down one of London's most glamourous and central streets one summer's morning or late afternoon.

Let us make it Bond Street, which has been fashionable now for over three centuries. Named after its first developer, Sir Thomas Bond, (who has achieved a curious fake fame in modern Britain, as the real-world ancestor of Ian Fleming's fictional spy, James Bond), Bond Street has always been reassuringly expensive as a place to live, shop and saunter. So-called 'Bond Street loungers' strolled down the street and, at one time or another, Jonathan Swift, Edward Gibbon Laurence Sterne, James Boswell, William Pitt the Elder and Lord Nelson all lived upon it.¹ Today it is lined, as it has been for centuries, with some of the highest-end brands and boutiques in which money can be spent: Mappin &

Webb, Dolce & Gabbana, De Beers and Cartier occupy the first few yards alone. But many a morning or afternoon stroll will encounter not just shops and shoppers but heap after heap after heap of piled and tumbling rubbish.

Nor is the problem of 'rubbish refuse' confined just to Bond Street. Almost any central London high street with any degree of commercial or retail activity is frequently subsumed by uncollected commercial refuse and waste, sometimes odourless and unnoxious but often oozing, rotting in the slow heat or torn open and scattered by people, rodents or foxes.

And things could be worse. Bond Street is a rare street that benefits from a so-called 'consolidation scheme' to reduce the number of collections, and the times at which rubbish is present. It is a rare city centre street where commercial rubbish collection is working





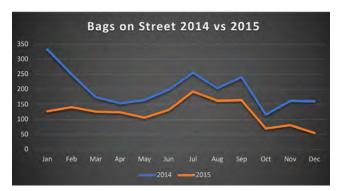






Bond Street is frequently lined not just with luxury brands, Edwardian excess and modern minimalism but also with pile after pile of 'rubbish refuse.'

relatively well. Before the consolidation scheme (an initiative of the New West End Company business improvement district (BID) and Transport for London) was implemented in 2015, there were hundreds of incidents recorded every month of waste bags being left on the pavement at inappropriate times.²



Monthly counts of 'bags on-street' along Bond Street¹¹

Elsewhere, problems are even worse as the images below show.





Other examples of 'rubbish refuse' in Deptford (above) and Covent Garden (below)

These examples are all busy shopping areas. The presence of rubbish bags on the street is not limited to closing time or early mornings. There is almost always rubbish present. For example, using Google Street View we can go back in time and show that these were not one off incidents. Going back to 2008, rubbish is present at these locations on the following dates:

- Southampton Street: June 2022, June 2021,
 September 2018, May 2015, July 2014, July 2008
- Deptford High Street: February 2023, October 2022, August 2021, April 2021, September 2020, August 2020, May 2017, April 2012, September 2009, June 2008.

Go to any busy high street and you're almost guaranteed to find a small pile of bags awaiting collection. They are omnipresent.

There are few hard statistics available that readily allow us to quantify the problem, mainly due to the presence of these waste bags on our streets being a feature of the system, not a bug. We look past it, accept the casual degradation. However, we should not need or have to.

We can infer the scale of the problem through publicly available data on enforcement notices. For example, between April and July 2024 Islington Council issued 255 so-called Section 47 'Waste Receptacle Notices' to businesses due to incorrect handling of commercial waste. This equates to 765 annually. The Section 47 notices are most commonly issued when a business does not put waste out on the street in the correct bag or at the correct time. It is one of the few enforcement powers that councils have at their disposal. (This is discussed in further detail below).

In the year to April 2023, Islington Council also issued 597 fly tipping penalty notices, and a total of 12,531 were issued across London, an average of 380 per borough.³ And the experience of walking around many central London streets implies much of it is going unpunished.



Rubbish on Southampton Street over the years. The phone box appears to have found a new purpose as a handy refuse store.

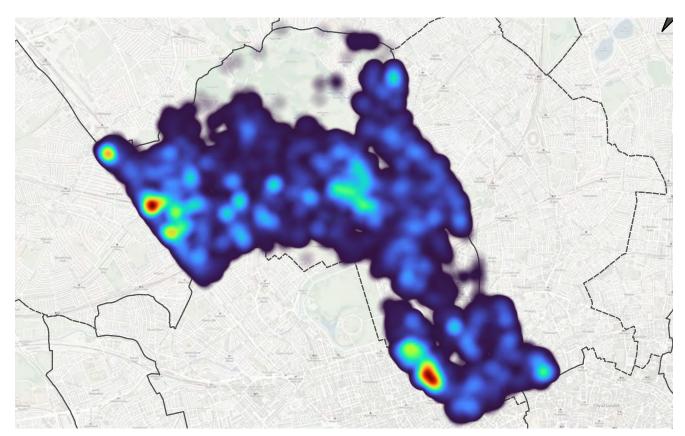
The neighbouring borough of Camden tells us more. The council encourages people to report fly tipping using their 'Love Clean Streets' app and website. This is simple to do and leads to many incidents being recorded. In 2022, there were:

28,971 incidents of fly tipping reported but4

... only 463 fines issued or 1.6 per cent of those reported. ⁵

Does this mean that Camden is very dirty and is just letting fly tipping go unpunished? Absolutely not. The

borough actually scores well on surveys by Keep Britain Tidy, and many people we have spoken to find that Camden is very responsive to littering and fly tipping. So the problem is not actual fly tipping and littering being ignored, it is instead one of perception. What most of us would think of as litter or fly tipped waste is just commercial or household waste awaiting collection, or opportunistic dumping next to it. It is the system working as intended. Much of the 'fly tipped' waste will just be collected with legitimate waste by the council's contractor, Veolia, on their regular collection rounds.



A heat map of reports of presumed fly tipping in Camden in 2023. Several of the hotspots are on busy shopping and dining streets, such as Charlotte Street.

Nationally, fly tipping data is a useful indicator of how well the system is functioning. Councils record 'black bag' fly tipping incidents, referring to dumping of waste from businesses on the street, either intentionally or due to missed collections. In 2022-23 there were 43,669 incidents recorded, 34,691 of which were in London, a surprising 79 per cent of England's total.

The statistics paint a picture of London's waste management that is very poor. The city has the highest per capita rate of fly tipping in England. The rate per 1,000 is 47.9, compared to 19.0 for the whole country. What is going wrong?

Despite London's high relative prosperity in most global rankings, high streets and local commercial centres appear to be unable to maintain their commons to an acceptable state. This has often been noticed by visitors, surprised to see the sad state of streets and squares they know from films or books.

A 2012 survey of tourists by the travel website Tripadvisor ranked London's streets at 26 out of 40 in terms of street cleanliness. This was behind Tokyo, Singapore, Munich and Vienna. Is this just cultural squalor? In 1605, the Spanish noblewoman Luisa de Carvajal was appalled at London's filth, the lack of sanitation, the crime and...the quality of the food. The last 200 years were meant to fix this. London can create and curate word class culture and enterprise, places and buildings but sometimes seems to tolerate pre-modern levels of heaped waste. Portions of London risk becoming, to apply JK Galbraith's

American epithet to the UK, areas of 'private luxury' and 'public squalor.'

To the untrained eye, this might look like fly tipping or carelessness. However, this is normally intentional policy not an illegal flouting of it. This is, as a matter of fact, how we have chosen to deal with commercial waste in this country from shops, cafes, restaurants and businesses generally. It is ugly and smelly, a modest risk to public health and a near constant offence to civic pride and dignity.

As 'misery loves company,' and on the 'broken window' theory whereby antisocial behaviour (even if state-endorsed) encourage more of the same, rubbish refuse also encourages the opportunistic and illegal dumping of more waste. In our approach, with dozens of companies vying for trade, there is a constant flow of waste in our public realm.

This report examines the problem of 'rubbish refuse,' attempts to quantify the consequence of poor waste management on our local economies and suggests practicable solutions. It is the third of our trilogy of reports into problems in our public realm hiding in plain sight. Along with ugly street scars ruining our streets, phone box blight and seemingly immortal utilities' works, all our streets would be improved by the more rapid removal of heaped commercial waste awaiting long-delayed collection.10







Street scars, box blight and rubbish refuse: a needless trilogy of self-harm



2. Does rubbish refuse matter?



Does this really matter? Bond Street, for example, still thrives despite being regularly assaulted by heaps of rubbish refuse. People do still shop there. But the evidence, alongside common sense, strongly suggests that rubbish refuse does matter.

Business believes that rubbish refuse depresses income and economic activity. In the latest perception survey undertaken by the Central District Alliance Business Improvement District (BID) in April 2024, 430 businesses across the BID area were consulted. A resounding majority of respondents raised cleanliness as an issue and valued the additional cleansing services that the BID provides.

- 76 per cent of respondents said 'cleaner streets' were one of their highest priorities; and
- 78 per cent rated the additional cleaning services provided by the BID as either important or very important.¹²

One central London landowner added:

'The rental market depends on how lovely we can keep the streets. When we see rubbish on the street, particularly when it has been left for any length of time, it has real impact for us. [...] I can say that we have lost potential tenants because they have visited the area at a moment in time when refuse was littering the streets.' 13

The wider evidence suggests that these concerns are not misplaced.

More traffic. Badly run waste collection systems create more traffic. This is a common complaint about the current system. Multiple operators and multiple waste streams will inevitably lead to more vehicles serving the same street. While this might only be a handful of vehicle movements a day, most of these vehicles are large, noisy heavy refuse vehicles. Reducing traffic has been a key motivation for consolidation schemes, as on Bond Street and zoning schemes as in New York. 14 15 On Bond Street, the consolidation scheme resulted in refuse vehicle

movements reducing from 144 to just nine per day, a 94 per cent reduction. Further details of this scheme are provided below. In 2016 the Department for Sanitation in New York undertook detailed analysis into the impact of their current, unregulated, system on vehicle movements and emissions. They found that:

- Waste collections contribute 23.1 million vehicle miles travelled to the street network.¹⁶
- The implementation of a zoned system would reduce this by 50 to 70 per cent.¹⁷

Further modelling estimated that miles driven per day could fall from 79,000 to 29,000, a reduction of 63 per cent and in line with the earlier analysis. ¹⁸ Currently, some blocks in the city endure up to 400 visits from refuse vehicles per day. The scale of the change is clearly demonstrated on the maps below.





Existing (top) and expected (below) density of refuse vehicle movements in New York

As far as we are aware, no similar analysis has been undertaken for a UK city. Further details on the New York proposals are set out in our case study below.

More vehicle movements also means more noise, and often at anti-social hours. Rather than a short window with one vehicle collecting waste, those streets served by multiple operators ensure multiple disturbances. As we are all aware, loading refuse vehicles is not a quiet activity. This creates psychological and physiological wellbeing costs for residents. ¹⁹

More emissions. Unsurprisingly and in direct consequence, badly run waste collection systems can increase polluting emissions. The New York study concluded that a zone-based system of rubbish collection would:

- Reduce carbon monoxide (CO) by 59 per cent;
- Reduce particulate matter by 56 per cent for PM2.5 and 51 per cent for PM10 and;
- Reduce nitrous oxides (NOx) by 62 per cent.²⁰

These emissions are directly linked to numerous respiratory diseases, including asthma and lung cancer, as well as cardiovascular diseases. ²¹ The study also found a 64 per cent reduction in carbon dioxide emissions (CO₂e). Even with improving vehicle standards, there is still a need to reduce emissions. Many urban areas do not comply with legal air quality annual limits, including Greater London, Greater

Manchester, the West Midlands and Bristol.²² Even legal limits are not necessarily safe. For instance, they are much higher than the current World Health Organization (WHO) standard.²³

At a time when cities are trying hard to tackle the twin issues of traffic and air quality, a significant reduction in the miles driven by large, polluting refuse vehicles should certainly be welcomed.

More litter. Badly run waste collection systems also encourage more dumping and rubbish. 'Misery loves company.' Bags of waste attract others. This isn't that unreasonable: if you see waste being placed on the street, it is natural to assume that is just how things work before adding to the pile that will be collected by the council. Unfortunately, commercial waste collection companies are under no obligation to collect any additional waste that might have accumulated, and many are unaware of these rules.²⁴

According to research undertaken by Keep Britain Tidy, commercial waste can act as a 'beacon' of litter and attract fly tipping behaviour. ²⁵ Other research by the same organisation suggests that the presence of litter 'beacons' (not necessarily commercial waste) at a site, attracted four times the amount of littering compared to a control site with none. This aligns with the findings of other researchers, long standing concepts such as the 'broken windows theory,' and our own observations. ²⁶







Legitimate waste attracts fly-tipping and littering

Commercial waste often includes a high proportion of food and organic waste from pubs, restaurants, cafes and retailers. This makes it particularly attractive to birds and beasts. A neatly tied bag of food waste can quickly become litter spread over the street once foxes and seagulls have attacked it.

Clearly, we cannot achieve cleaner streets without first addressing the issue of commercial waste management. It is a gateway to further littering, and perhaps other anti-social behaviours such as graffiti and vandalism.

Creating unpleasant street stains. Expensive new paving is not just at risk from utility companies as we set out in our previous report on *Street Scars*. The piles of rubbish on top of new paving can also take their toll. Natural stone is porous, particularly sedimentary rocks such as sandstone. It is susceptible to staining from grease, oil, and other unpleasant substances that can leach out of bin bags. Concrete and clay pavers are also not immune to these problems.

Rubbish bags tend to split and leak, and attract over rubbish, so over time stains build up and add a further, permanent, blemish to the street. The continuous presence of bags on the street means that it is hard to keep removing stains. They just reappear as soon as they are cleaned. The photographs below were taken on Lower Marsh, Lambeth and Lavender Hill, Battersea. Both streets were repaved recently at the cost of millions.²⁷ Sadly, councils are almost powerless to stop this happening.

Reducing visits and tourism. Unsurprisingly, these myriad issues are likely to put people of visiting their local high street and can put tourists off visiting a city. Many people are put off by litter. A survey by Keep America Beautiful (the equivalent of Keep Britain Tidy) found that 89 per cent of respondents felt that litter negatively impacts tourism and business. Singapore has long recognised the importance of keeping its streets and public spaces clean in a bid to attract business and tourism, and while this is not the city's only selling point, it has certainly helped.

Putting people off their high streets – the results of our national poll. It is not just businesses that care about rubbish. The general public are put off by bags of waste on the street as well. As part of our research,

in November 2024 we commissioned Deltapoll to run a visual preference survey to quantify the impact of waste on the perceived pleasantness of a street.





Street stains on Lavender Hill (above) and Lower Marsh (below)

Our approach was simple. We used a photo of a typical British high street and digitally altered it to include a realistic number of waste sacks carefully placed for collection. Deltapoll then ran a survey of 1,749 people across UK using the split sample method. This means that half the participants saw the image with no waste, and half saw the image with waste:





Photos used for polling. Without rubbish (left) and with rubbish (right)

All participants were then asked the question:

'Here is a photo of a typical high street. If you were to mark the look and feel of this place out of ten where 10 means it's 'really pleasant' and 1 means it's 'really unpleasant,' what score would you give?'

The results were very clear. Where there was no rubbish, 82 per cent of respondents rated the street at six or above and the median pleasantness score was eight. With rubbish, 72 per cent rated the street at five or below and the median pleasantness score dropped to four.

In other words, in our poll the level of perceived pleasantness was halved due to the presence of rubbish bags on the street. This result was repeated across demographics, age groups, and political alignments. In other words, unsurprisingly, nobody likes rubbish. Everyone agrees that it is rubbish to see it on the streets. From this research, we cannot say for absolute certain that this dislike puts people off visiting high streets, but the results indicate that it certainly will not help.

A full copy of the results is available in Appendix B.

Polling Results Mean 'pleasantness' score (1,749 respondents) Really pleasant Mean pleasantness score: 7.25 Mean pleasantness score: 4.24 Really unpleasant 0 **High Street without** High Street with rubbish rubbish bags bags



3. Not just shops



The problem of 'FLASH' waste

What is 'FLASH'? We cannot consider the challenges of commercial waste collection without mentioning the associated challenge of waste from flats above shops. ReLondon, which is a partnership between the Mayor of London and London's boroughs to improve resource management, has termed this 'FLASH' from FLats Above SHops.

Many high street flats lack dedicated bin stores or access to a rear service yard. Their waste therefore needs to be collected directly from the street. While waste is collected by just one provider, the root problem is similar; the acute lack of space for waste storage. As Shelley Holmes, an advisor for ReLondon, puts it, 'waste and recycling services are challenging to deliver to residents who live in FLASH.' A related problem is that these two waste streams interact and can lead to tensions. Residents who are not aware of their responsibilities may place their waste next to commercial waste, expecting it to be collected. Businesses can sometimes also misuse the residential waste facilities. There is also a third stream: council street cleaners leave their waste bags on the street for later collection, further adding to confusion about what is allowed and where waste goes.30 Chaos reigns.

Residents are rarely informed about how to manage their waste. Landlords and agents neglect to inform them, or just do not know themselves. Official communications are often lost in the mass of junk mail or do not arrive at all. Street signage is outdated or non-existent.³¹ Residents are most likely to follow the behaviours they observe around them. They cannot follow specific rules of which they are unaware. Most will not know that commercial and residential waste are collected separately. As well as further undermining the streets, this also makes correct waste sorting harder, resulting in lower recycling levels from such properties. The problem is further confounded by the fact that many flats above shops are likely to be

rented out. In areas with high student accommodation (such as parts of central London), the unwanted contents of apartments are placed on streets for disposal followed a few days later by all the packaging materials of the new occupant.





Residential waste challenges. Courtesy of 'Revealing Reality' (c/o ReLondon)

Bringing order to the chaos on Upper Street.

ReLondon, previously known as the London Waste and Recycling Board, is a partnership of the Mayor and London's boroughs to accelerate London's transition to a low carbon, circular city. They are running a project to tackle this problem. This is now more important than ever due to the introduction of the 'simpler recycling' rules, requiring councils to collect recycling and food waste from all properties.

ReLondon is currently running trials in three London high streets in Hammersmith and Fulham, Waltham Forest and Islington. One of the most challenging is Upper Street in Islington from Highbury and Islington station to Angel. On this busy main road, which is a Transport for London 'Red Route' carrying nearly 12,000 vehicles a day, the organisation is running a trial to see if they can bring an element of order to the chaos of waste collections.³²

This stretch of the street has the challenges of its own success: people want to live and shop there. But there are few yards or service alleys where bins can be stored, and the pavements, while reasonably wide, are congested and contested. 'The pavement is the bin store for businesses.' Although local authority operated refuse vehicles can stop on red routes, private contractors reported to ReLondon that they had received fines for stopping. Waste operators can be fined if they do. The same characteristics that make the street challenging, such as the fine grained urbanism of many small shop fronts, the age and character of the buildings and the 'connectedness' and associated traffic and footfall, make it both very popular, successful and resilient.33 A recent study found it to be the most resilient area shopping area in London, with much higher than average footfall (1.5 million on an average month), low vacancy rates and high levels of new businesses.34



Figure 13 - The fine grained, varied urbanism of Upper Street 35

The solutions that ReLondon have been trialling aim to boost recycling rates, but also bring some order and clarity to the system of residential waste collection. Their solution is surprisingly simple: they

have repurposed a common piece of street furniture, one that we barely notice, the common grit bin. This is used for residents to deposit their recycling ahead of collection, keeping it out of sight. ReLondon explain their reason:





The black grit bins on Upper Street. There are 15 in total serving 193 households in the pilot scheme. (c/o Shelley Holmes, ReLondon)

'Containerisation really, really helps. We decided that smaller is better. Smaller bins don't attract dumping. This was also coming out of Covid. Small businesses have had it tough so we didn't want to place massive unsightly bins outside cafes and hairdressers. They were concerned it would affect businesses. We would have liked to do something beautiful, like an integrated planter, but it was just too expensive. The good thing about a grit bin is that it's common infrastructure and doesn't look out of place. People just don't notice them.'

So small is beautiful when it comes to waste, and it is not just the size of the on-street container. Care was taken to find the 'Goldilocks' size for a waste bag that is best for users. On the one hand, residents do not want to make too many trips to the bin, often down and then up several flights of stairs. On the other hand, nor do they have space to keep a large bin. They settled for a 30-litre bag, compared to the typical 90 – 120 litre bags. Most high streets have daily collections. Little and often is therefore key.

Normal, or residual waste is still left in bags on the street. However, the key difference is that there are now agreed, and clearly marked collection points, on the pavement next to the grit bins. These are marked with a vinyl sticker on the pavement, displaying

information of collection times. These are not perfect. They are sometimes covered accidently and wear off. However, they arguably form a functional and effective temporary solution. This approach does not remove bags from the street. However, it is an improvement from the *status quo*. As ReLondon point out:

'Residents like that it's clear and controlled. Having bags concentrated in spots is seen as better. People understand that waste is actually managed rather than randomly strewn.'

This is an approach that has long been used in Japan, a country known for its cleanliness. It has the advantage of not relying on expensive or high-tech infrastructure for waste collection. The scheme has been running since early 2024 and the initial results are promising. By the end of the project, over 90 per cent of the recycling bags on Upper Street were being placed in a grit bin. The feedback from businesses has been overwhelmingly positive. There were no complaints about the pilot scheme; it has not negatively impacted the street and is seen as an improvement. Some noted that the recycling was better contained, with less of it blowing about on windy days. Feedback from the other sites is positive too.

While this sounds simple, getting to this point has been immensely complex. It took months to find the right person in Transport for London who could sign off the installation of the grit bins. Even then, they were not permitted to fix them to the ground. In other locations, the police had to be consulted as there were

Great infrastructure, but a failure of operations leaving people no choice but to dump waste.

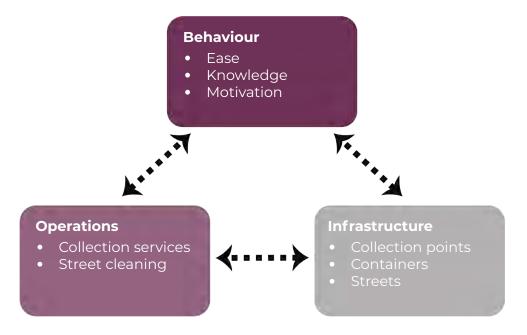
concerns that bins would be used for storing drugs and weapons. These fears have not, so far, come to pass. Each site had to be carefully selected, taking into account everything from other street furniture, utility access and drainage. (Ponding is common on the pavement and these areas had to be avoided). The bins and consolidation points were generally placed within 20 to 30 metres of households en route to a common destination such as the station or shops. They were also positioned in areas judged to be safe and well lit. The waste bags needed to be delivered, and packaged to fit through a narrow letter box as there were no convenient collection points. Libraries were a possibility. However, they were not always open at the right times or convenient for residents to reach.

The biggest challenge was public communication. This required much door knocking, dropping of flyers and other 'on the ground' engagement. Efforts were made to advertise on bus stops, and to create information and bag collection points in the tube station. This was, however, not successful. The lack of places consistently used by most residents, be it local library or church, made life harder. Gradually, word spread and the uptake and reception has been excellent. ReLondon will be publishing the results shortly and are continuing to trail innovations, from collapsable bins that fit through your letter box to on-street composting bins. Others are following suit. Camden are now rolling out grit bins in four busy high street locations, including Goodge Street which shows up brightly on our fly tipping heat map above.36



A lack of infrastructure that depends on good behaviours and operations

The Three Pillars of waste management. It is not normally effective to just put new bins on streets and see what happens. We need to understand how people will use them, ensure users are informed of the facility and be confident about future maintenance. ReLondon described the three pillars model for managing waste:



Three pillars of a functioning waste collection system, as suggested by ReLondon.

This is a useful concept for understanding waste management in our streets. Superlative physical infrastructure fails if it does not meet public needs, if people are ignorant of it or if it is not cleaned and maintained. When one pillar is lacking, the others must work very hard to pick up the slack of the system.

Small steps can make a big difference. However, implementation is not necessarily easy. It remains to be seen how easily this approach can be replicated and how expensive communication could be managed more efficiently. Behaviour change normally takes time, but that is not a reason not to try. Hopefully, in future it will seem curious that we ever put up with people's rubbish bags on the street.

4. How does Britain manage its commercial rubbish?



In 2021, the UK spent an estimated 0.28 per cent of its GDP on commercial and industrial waste collection services.³⁷ The whole industry, including domestic waste, from collection to transport to processing, has a turnover of 23.5£ billion (1.09 per cent of GDP). Where does this go? What do we get for it? Is it more or less than other countries?

The current approach: a regulated private market. Any rubbish produced by a business is classified as commercial waste. Unlike household rubbish, local councils do not collect commercial waste for free. Instead, businesses must dispose of their waste through a registered commercial waste carrier. In England, the Environment Agency is responsible for managing this system; issuing waste carrier registrations, maintaining a searchable register of authorised carriers and revoking registrations in limited circumstances.³⁸ The relevant authorities in Scotland, Wales and Northern Ireland are the Scottish Environmental Protection Agency, the Natural Resources Body, and the Northern Ireland Environment Agency, respectively.

The key word here is 'registration.' It is neither a licence nor a permit and it has much lower requirements. A business or individual can register as a *lower tier* carrier if they wish to handle their own waste, or certain types of exempt waste. The application consists of a brief online form and the licence is free of charge. Most other individuals and businesses must register as an *upper tier* carrier for the cost of £154. Again, the registration is simple,

consisting of an online form and only requiring the applicant to fill out contact details and declare any criminal convictions. There is no need to be a registered business or other incorporated entity. By some estimates, there are around 5,000 carriers in England.³⁹

The Environmental Protection Act 1990 (EPA) and the Control of Pollution (Amendment) Act 1989 (CoPA) form the core primary legislation that govern the system for commercial waste collection, transfer and processing.⁴⁰ The relevant regulations are set out in the following statutory instruments:

- The Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991 (SI 1991/1624); and
- The Waste (England and Wales) Regulations 2011 (SI 2011/988).

These regulations impose very few restrictions on how carriers operate, only requiring registration with the regulator, and giving the regulator little power to refuse applications.⁴¹ The process is incredibly easy. Almost anyone can register.

Unsurprisingly therefore, there are an enormous number of operators in the UK. The Environment Agency register contains 141,801 'upper tier' carriers, 6,532 of which have a central or inner London postcode. 42 However, it is not possible to say how many of these provide commercial waste collection services. From 2019-2021, there were 140,000 applications to the Environment Agency for waste carrier licences. Only 19, or 0.01 per cent, were rejected. 43 Maybe these might be an issue with quality control?

Upper tier	Lower tier
Transports waste for other people.	Only carries waste produced in the course of carrying out everyday business.
Transports demolition or construction waste.	May be charity or voluntary organisations.
Acts as a dealer or broker of waste and waste services.	May only carry certain kinds of waste transport (such as agricultural or office).

Upper and lower tier waste carriers

Duty of Care. Section 34 of the EPA outlines the commercial waste duty of care, the responsibilities the Act places upon businesses and individuals who 'hold waste.' It lists what constitutes an offence under this section and gives the Secretary of State powers to publish a code of practice setting out responsibilities.⁴⁴ This applies to those that produce waste, carry waste, or process waste (known as waste holders). In accordance with this code, businesses must 'prevent the escape of waste' by:

- Storing it in sealed containers;
- Limiting access to waste to prevent theft, vandalism, accidental escape;
- Stopping people adding to the waste to prevent fly tipping; and by
- Classifying waste.

Whether they are dealing with their own waste or passing it off to an authorised carrier, businesses are legally required to take all reasonable steps to ensure that their waste is handled safely and legally from transport to final disposal. Businesses must complete a waste transfer note to document every load of waste that leaves their premises and keep these records for two years. ⁴⁵ Failure to comply with these requirements is an offence. Those doing so can face an unlimited fine or a fixed penalty notice (FPN) issued by the local authority.

Local Authorities can also provide a service to collect commercial waste and are obliged to provide such a service under the Environmental Protection Act 1990. These services can be efficient as they are able to offer 'co-collection' and collect commercial and domestic waste at the same time. However, they are also obligated to use municipal processing and disposal facilities which have relatively high charges 'on the gate' for processing commercial waste. The service they provide is therefore typically uncompetitive.

How does this work in practice? On a typical residential street, it is easy to spot when it is 'bin day,' even if you do not live there. Rows of often lurid wheelie bins appear on the street the night before, are loudly collected early in the morning, and often left until dusk before they are returned home. It is not

pretty but at least it is over a confined time and only once a week. Normally, one or at most two separate vehicles collect all of the waste within a few short hours. ⁴⁶ This is a quick, clean and efficient operation, one that we barely need think about beyond remembering when bin day is.

For businesses it is a little more complicated. Under the duty of care, each business has an obligation to ensure their waste is collected by a commercial waste service provider. Normally, the time at which companies collect waste can vary throughout the day and week, potentially creating an almost constant flow of refuse vehicles and waste. On a typical high street however, with many different businesses and owners, it is entirely possible for every business to be served by a different operator, and to have multiple operators depending on the waste stream. For example, recycling and food waste might be collected by different providers, and there may be specialist services. This inevitably increases the number of vehicle trips required. On London's Bond Street, before a voluntary scheme was introduced to consolidate collections, there were as many as 144 refuse vehicles serving the street per day. 47 This is neither efficient nor pleasant.

If you're a business occupying a large, modern premise such as a supermarket, the impact of this waste collection can be minimal. Service yards and refuse stores can keep the waste out of sight and larger containers can be used to minimise the number of collections. Unfortunately, a traditional high street has no such luxury, space is at a premium and often the only vehicle access is on the public street frontage,



Rubbish awaiting collection during the day

and the only option available to businesses is to place waste in bags on the public highway. In an ideal world, this waste would be very transient and would be placed out just before collection. However, reality is often different. Unless time banding is in place, there is often no set time at which a carrier collects waste. Even if there is, it is normally at a convenient time for the business rather than for the passer-by. Bags are therefore often left overnight and sometimes over the weekend, not through active negligence but because collection cannot be arranged at a suitable time. This inevitably leads to rubbish being spilt onto the street and attracts further blight.

'Sometimes collections don't take place on weekends but businesses can only put waste out on Fridays. The bags inevitably get attached by seagulls and we have rubbish strewn all over the place. It's very difficult to take action as we have to prove that it's causing detriment to local amenity.' Senior Local Authority officer in central London.

The commercial waste industry. The industry is large but most of its players are tiny. It has a 'long tail,' with six major firms providing the bulk of services and many thousands of smaller operators. 48 Overall, the industry in England collects and processes approximately 25 million tonnes of commercial waste a year. However, this is only about 14 per cent of the total waste generated from all sources.⁴⁹ The entire sector, including collection, transfer and processing of all types of waste, is valued at £23.5 billion. Commercial and industrial waste collection services account for £6 billion of this, twice the size of the household waste collection industry, despite volumes being roughly similar.50 In short, the industry is a potentially lucrative one with high turnovers and at a scale that should make investment and innovation attractive. This is evident by the size of the six major players in the London collection market.⁵¹

Future regulatory change. The commercial waste industry already faces two major regulatory changes. This will oblige considerable investment and adaption and is taking time. Some might say too much time.

Firstly, the Environment Act 2021 will soon require more consistency in collection between domestic and commercial waste. This is known as 'Simpler Recycling.'52 From 2025, this will require all businesses with ten or more full time equivalent employees to separate their waste into separate streams for collection: dry mix recycling, organic waste, and residual waste.53 This is to increase recycling, however it is not without consequences. For while some providers can collect different waste streams in one vehicle, not all can. This will inevitably lead to more commercial waste collections, to more bags on the street and to potentially increasing business costs.

Secondly, Section 54 of the Environment Act 2021 is also introducing a Deposit Return Scheme (DRS) which requires businesses to charge a returnable deposit on containers such as aluminium cans and bottles, to facilitate their return. UK-wide implementation has been delayed until at least 2027. A similar scheme for Scotland was originally proposed in 2018 but was mothballed last year leading to the collapse of the operating company.

The waste management company Biffa invested over £55 million in the scheme and are now suing the government for this and for the loss of earnings from the scheme, totalling a claim of £200 million. 54 Waste collection is big business.

Provider	Turnover	Staff
Veolia	£1.7 bn	14,000
Biffa	£1.6 bn	10,800
Suez	£0.9 bn	5,700
First Mile	£40 m	266
Bywaters	£36 m	~200
Recorra	£24 m	~200

Largest six London commercial rubbish carriers

In the world of rubbish, change tends to be slow.

Waste collection can also be difficult to improve. Ireland recently implemented a deposit return scheme similar to that proposed for the UK. The law of unintended consequences kicked in with ironic aplomb. When bags are placed on the street for collection, according to the Mayor of Dublin 'people have also begun to rip open these plastic bags in search of containers that can be brought to machines as part of the deposit return scheme. '55 There must be a real risk of this happening in the UK once the deposit return Scheme is introduced, another reason we must try to tackle rubbish refuse before these schemes come into force.

Enforcement and oversight. Local councils and the Environment Agency are responsible for enforcing commercial waste laws and regulations. Typically, residents can report observations of fly-tipping or improper waste disposal to the council through an online form, app or by email. Councils employ waste or environmental enforcement officers to investigate possible illegal waste handling or dumping. Violations of the Environmental Protection Act can carry an unlimited fine and/or a prison term of up to five years. However, instead of bringing businesses to court, councils will more commonly issue a warning followed by a Fixed Penalty Notice if the problem remains unresolved. Notices can carry fines in the range of £100 to £1,000.

The main enforcement mechanisms are:

- Control of Pollution (Amendment) Act 1989

 Section 1 (1). This makes it an offence for unregistered people or companies to transport controlled waste. It is a summary offence (i.e. no trial is required) with a potentially unlimited fine (Level 5 on the standard scale). It is enforceable by the Environment Agency.
- Control of Pollution (Amendment) Act 1989

 Section 5. This makes it an offence to fail to provide evidence of a registration. Again, it is a summary offence with a potentially unlimited fine (Level 5 on the standard scale). It is enforceable by the Environment Agency.
- Environmental Protection Act 1990 Section
 33. This relates to the unauthorised dumping of

waste, from industrial scale down to small scale fly tipping. Section 33ZA gives local authorities the power to issue Fixed Penalty Notices (FPNs) for some offences, but the Environment Agency deals with more serious breaches. Fines are set by the authority and vary between £150 and £1,000.

- Environmental Protection Act 1990 Section 34. This section imposes a duty of care on anyone producing, transporting or handling waste.
 Section 1(a) makes it an offence to 'lose control' of waste. Subsection 1(b) makes it an offence to fail to ensure proper transport of waste.
 Under subsection 6, this is an offence with a potentially unlimited fine. It is enforced by the Environment Agency. Section 34ZA gives local authorities powers to issue Fixed Penalty Notices between £150 and £600 for offences relating to household waste only. These are not applicable to commercial waste.
- Environmental Protection Act 1990 Section 47. This section provides local authorities with their most important tools for managing dayto-day commercial waste collection. Subsection 4 allows them to impose conditions on the collection, namely the type of 'receptacle' that the waste must be presented in and the time that waste must be presented on the street for collection. This is known as 'time banding.' This power is regularly used to prevent collections between certain times of the day, freeing the pavement of bags and the streets from refuse vehicles during busy shopping hours. Enforcement powers are provided to councils by Section 47ZA and 47ZB, allowing them to issue Fixed Penalty Notices with a fine of up to £100. If the case has to be taken to court, the maximum fine rises to £1,000 plus expenses (Level 3 on the standard scale).

Highways authorities also have the power to close roads to traffic at certain times of the day through Traffic Regulation Orders, thereby practically preventing waste collection throughout the day. This needs to be coordinated with time banding under Section 47 of the EPA to prevent waste being presented when vehicles cannot collect it.

Is enforcement working? There are two clear

problems with the current enforcement system. Put simply, the fines using the fixed penalty notice system are too low and the burden of proof is too high to pursue many cases. Let us take two examples: one on a street subject to time banding restrictions, and a second without time banding restrictions in place.

- Too little, too late. How enforcement works when time bandings restrictions are in place. If a bag is left on a street outside the time banding restrictions it should be clear that the business is in breach of the laws. However, enforcement is convoluted and toothless. Firstly, the council must issue a notice to ensure that the business owner is aware of their obligations. Only then, may the council issue a Fixed Penalty Notice and this many only be up to £100. If this is ignored, the council may pursue a summary conviction in which the maximum fine is up to £1,000. Given the low chance of receiving a fine, sadly some businesses often take their chances. The burden of proof required means that penalties, and even the full fines, are too infrequently levied and are often below costs saved.
- Very hard to prove. How enforcement works when time bandings restrictions are not present. Where businesses may take out their waste for collection at any time, it is very hard to prove that waste is being left out inconsiderably. In these situations, a council has two options:
 - Firstly, they can attempt to fine the business for failing to comply with the requirements of a notice under Section 47 of the Environmental Protection Act 1990. This requires the council to demonstrate waste is causing a nuisance or is detrimental to amenity. This is hard to prove and action is often not taken.
 - Secondly, they may fine the business for fly tipping under Section 33 of the Environmental Protection Act 1990. To achieve this, they need to be able to demonstrate that the business knowingly fly tipped, rather than putting bags out for collection. They must also link the waste to the business in question. Again, this is burdensome and very few incidents result in a fine or prosecution.

For example, in England last year there were 1,082,673 'fly tipping' incidents reported, of which:

- 531,595 (32 per cent) were investigated by the local authority; and
- 68,570 (6 per cent) resulted in a Fixed Penalty Notice.⁵⁶

As one council officer said:

'We really need to improve enforcement, penalties aren't enough, the fixed penalty notices aren't enough. There's no incentive and lots of people get away with it.'

Some success stories. Despite our system's challenges, some innovative authorities, businesses, landowners and BIDs have managed to improve commercial waste collections.

Bond Street was selected by the New West End Company (NWEC) and Transport for London (TfL) as the location for a voluntary waste consolidation trial. The aim was to sharply reduce both the number of vehicle movements and the presence of waste bags of waste left on the street. Surveys carried out in 2014, before the scheme's implementation, unearthed 47 different waste providers serving Bond Street, leading to an average 144 waste vehicle movements per day.⁵⁷ However, as it was not possible to mandate businesses to use a particular provider, carrots were needed instead of sticks.

Working with TfL and consultants Arup, the NWEC consulted hundreds of the street's shops and businesses. The NWEC then used its coordinating power to negotiate a 25 per cent discount for two major waste providers and then persuade businesses to sign up to the scheme. The results were compelling. By the end of 2015, the first year of the scheme's operation, 73 per cent of businesses on Bond Street had signed up to the scheme. Waste vehicle movements dropped dramatically, from 144 a day to just nine, a 94 per cent reduction. The number of bags left on the street at inappropriate times also dropped by 67 per cent and the increased efficiency led to average savings of around £400 per business.

As we have seen, however, matters could still be much

better. There are still many bags piled on the street before collection time. While less problematic first thing in the morning, waste starts to build up again in the evening, causing issues for those wishing to enjoy a meal or drinks al fresco. As the NWEC put it:

'Nobody wants to sit outside next to smelly piles of rubbish, we have to find a solution.'

Fortunately, they may have found one in the combination of smart phone apps and e-cargo bikes. Working with Veolia, the NWEC is now launching a system that allows businesses to prebook a commercial waste collection by a quiet, clean and efficient e-cargo bike. Much like popular food delivery services, the business will know exactly when the waste will be collected and they can even request a collection on demand, meaning that there is no need to leave bags on the street. The aim is to eventually eliminate 'bags on the street' and the problems this entails.⁵⁸

Positively Putney are another BID that were keen to tackle this issue. They were probably the first to trial the use of e-cargo bikes for waste consolidation, launching a scheme in 2021. The BID covers Putney High Street, one of the most congested high streets in London with over 23,000 vehicle movements a day.

The street had a system of 'time banding' meaning that waste collection could only be undertaken during certain times in the morning (09:00 to 11:00) and evening (21:00 to 23:00). Due to congestion, however, it was not feasible for all waste to be collected during these time slots. Many businesses were therefore struggling to find providers or were being continuously fined by the council for uncollected waste. At the same time, there was also an ambition to improve the low rates of recycling by businesses.

Working with ReLondon, a public body tasked with improving waste and resource management in the capital, the BID developed a solution.⁵⁹

 Firstly, the BID identified a consolidation point for commercial waste where local businesses could store their waste away from the pavement. They used a large metal storage container, owned by a local business and surplus to their requirements, and invested in some greening up measures





Putney Pedals in Action (c/o of ReLondon)

to hide it. A competitive tender was run for a waste provider to collect the bulk waste from the consolidation point, allowing the BID to secure a good deal for local businesses.

 Secondly, the BID encouraged the use of e-cargo bikes to help businesses to use the service and get their waste to the consolidation point. The BID owns the bike and runs a collection service, known as Putney Pedals, which collects waste from businesses at times that suit them and drops waste off at the consolidation point. There is now no need to put waste bags on the street, leading to a much-improved environment.

It appears to have worked. Vehicle movements have been drastically reduced. There are now 290 fewer waste collections a month. Recycling rates are up from 47 per cent to 72 per cent. Businesses are still free to use alternative waste providers. However, the high convenience and lower cost of the Putney Pedals service means that participation remains high. Where there is no stick, you have to make the carrot quite appealing.

The Cadogan Estate, as one of London's 'great Estates', has a unique responsibility and wide opportunity to be involved in neighbourhood stewardship, including better management of waste.

While the Estate would not usually mandate the use of specific waste collection companies, it can require businesses to use particular facilities such as fully managed service yards via their leases (stick) and include waste collection in their service charges (carrot).

Where such facilities do not exist, the Estate has less control but can leverage its land and clout to encourage better waste management. One such example is Sloane Street, a busy mixed use street with limited space for waste storage. The Estate owns the majority of the street's properties and is therefore motivated to ensure the streetscape is well managed and clean in order to protect its own rental income, and in keeping with the Estate's aesthetic and objectives. Working with a major waste services provider, Cadogan created a waste consolidation point in a side street garage. The Estate has the advantage of being able to mobilise such spaces, but this is not without an opportunity cost, as the garage could otherwise be leased out.

Waste is collected regularly from Cadogan occupiers on Sloane Street, the King's Road, and the surrounding streets, and brought to the consolidation point using an e-cargo bike, so that bags spend very limited time on the pavement. The hub can also respond to specific waste issues logged via an app. Furthermore, the consolidation point also operates as a local distribution hub for bin bags and a bike charging point. The service has been well received; it is reliable and reactive, rapidly dealing with any unsightly rubbish. The scheme reduces the number of vehicle movements, along with associated emissions - at 36% less compared to average HGV collections - thereby also improving air quality. As the Estate's Sustainability Coordinator told us:

'The e-cargo bike system is a strong one. It's a very Chelsea thing to see a bike merrily whizzing around rather than a big truck beeping and belching fumes."

This is absolutely not just a London problem. Many places across the UK are trying to tackle this problem

through a mix of private initiatives and action by councils.

Hereford, a compact and mostly flat city with historic streets, is particularly well suited to bikes. In 2022, the council approved the country's first e-bike food collection service for the city centre. ⁶¹ The city also has one of the first commercial waste providers that exclusively uses cargo bikes, Hereford Pedicargo. ⁶² The company offers 'first mile' recycling collection service and has even developed its own deployable bins that be carried on a standard cargo bike trailer, as well as offering a per bag collection service. This is not a luxury or niche service. The efficiency of cargo bikes means that the service is competitive.

It is used by hundreds of businesses and public sector organisations in Hereford. The company is now helping to provide services in other cities.





Hereford Pedicargo recycling collection service (c/o Hereford Pedicabs)

Manchester: a growing city with growing waste problems.

Manchester's city centre has experienced impressive growth in recent years. Around 20,000 people have moved into the city centre over the last decade and the wider city's population has increased by 200,000 over the past 20 years. The city has more jobs and more going on than for nearly a century. Annual footfall is around 40 million people. By 2040 city centre employment is expected to reach 315,000.⁶³ But, of course, this growth creates challenges. What to do with all that waste?

CityCo is a non-profit membership organisation that represents city centre businesses that was founded in the 1990's after the city's terrorist bombings. Their Managing Director, Alex King Bryatt explains that, 'we're focused on creating a classic green, safe, clean environment in the city centre.'

Currently, the city suffers from similar problems to those in London including inefficiencies and congestion. One difference is that about half the waste is presented in rather colourful paladin bins, as well as in bags. While these avoid some problems, they also lead to very visible street clutter.

In 2018, CityCo started a pilot programme with Transport for Greater Manchester (TfGM) and Manchester City Council to consolidate collections. Inspired by the Bond Street project, they selected the area around the historic St Ann's Square for a pilot consolidation service. This is a particularly tricky area, right in the heart of the main shopping district. It has high footfall and limited space for waste storage, and happens to be in a conservation area. The scheme had three main aims:

- Improve the neighbourhood by removing unsightly bins from the street;
- Reduce the number of refuse vehicles accessing the city centre; and
- Increase low recycling rates.

The first part of the process was to engage deeply with businesses and show them what was possible. The team produced before and after images of the





Waste bins in central Manchester, Barton Square (above) and College Lands (below) (c/o Arup).

street, which generated interest and enthusiasm. Waste providers were also supportive as it increased their efficiency. According to CityCo, under the previous (and, as we shall see, present) arrangement, many waste providers stated they would prefer to go to a consolidation point to collect recyclable materials.

Following a detailed tender process, CityCo selected a preferred supplier and launched the scheme in mid-February 2020. Unfortunately, that was only weeks before the COVID pandemic effectively shut down the city centre and the pilot had to be abandoned. CityCo are now looking to start again with a different pilot, this time without TfGM, and focusing on a slightly different area around St Ann's Square and Half Moon Street, where the problem is particularly acute.

Based on their experience, CityCo suggest that one action that could be 'transformational' would be the provision of consolidation points. They are keen to test this. Opportunities for this are limited in the

city centre. Unlike areas such as Sloane Street, there are no large landowners in Manchester city centre who could provide one and incentivise their tenants to use it. Landowners that could offer space, and are interested in doing so, are too distant to offer a practical solution for the pilot projects.

The situation in Manchester shows that while there is appetite for change from businesses, residents, and even the collection companies themselves, it can be hard to move on from the current process.





Before (above) and After (below): Transforming Half Moon Street from bin alley to a green and pleasant place. (c/o Arup)



5. Is our approach normal or exceptional?



Waste around the world. We have examined the waste collection system in three global cities; New York, Barcelona and Singapore.

New York: reform is possible, but will it work? In New York City, the Department of Sanitation (DSNY) handles household rubbish, whilst private 'carters' provide waste collection services for businesses. The private carter system has been plaqued by inefficient wastefulness. In 2019 there were over 80 private carter systems operating in the city. Neighbouring businesses usually have contracts with different carters, meaning that on some blocks, dozens of trucks from different companies drive by every night. In such a competitive market, and despite oversight from the Business Integrity Council (BIC), a commercial waste industry regulatory body, private carters sometimes cut corners when it came to labour practices. 'Union busting' and wage theft were common, and long overnight shifts increased the risk of accidents. There are parallels with the challenges in the UK.

In 2018, in partnership New York City and the Business Integrity Council began the slow process of establishing a commercial zone system. The new system divides the city into 20 zones. Each is to be served by two to five carter companies. In exchange for the right to operate within a zone, private carters must agree to strict standards for employment, sustainability, transparency, and customer service. Carters are required to charge less for recycling and compost than for refuse to incentivise wastereduction practices. By allowing multiple carters to work within each zone, the industry is incentivised to remain competitive although within tighter boundaries. Trucks may no longer drive long routes across the entire city. The Department of Sanitation estimates that the new system will cut private carter truck traffic by 63 per cent, the equivalent of 18 million fewer miles driven every year. The required new local law was finally passed in 2019. After some delays, the first zone, Queens Central, went live on 3 September 2024.65 At the time of writing (October 2024) data is unavailable on the consequence. Nor is it known when the remaining 19 zones will be implemented.

Barcelona. Spain's second largest city is increasingly cited as a global leader in waste management reduction. The system of collection is a mixed economy of public and private provision with a clear incentive to use the public system. In 2022, Barcelona became the largest city in Europe to commit to

	London	New York	Barcelona	Singapore
Average cost per tonne (general waste)	~£200	~£200	£78 ⁶⁴	Unknown
Total expenditure	£342 million	£1.14 billion	£35 million	£465 million
Per cent of city's GDP	0.067	0.087	0.060	0.025
Type of system	Deregulated, duty of care on business, limited licensing	Zoning system with limit on operators. Strict licencing	Mainly pub- lic, with some licenced public operators	Zoning system with strict licensing requirements.
Regulatory authority	Devolved to 32 boroughs. Licensing managed nationally.	Department of sanitation New York	Ajutament de Barcelona (city council) and Catalan government	National Environment Agency

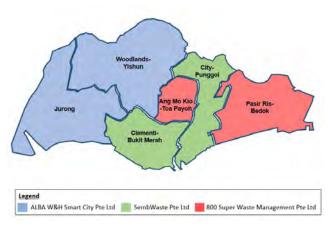
a zero waste plan.⁶⁶ The strategy aims to reduce non-recyclable waste by 53 per cent and double the proportion of waste which is separated for recycling or reuse by 2027. Key projects to achieve this include:

- A network of 221 communal pneumatic drop boxes, which use vacuum suctioning to transport the waste to management facilities on the city's outskirts, serving an estimated 200,000 people.⁶⁷ This system has sharply reduced odours and truck traffic associated with commercial rubbish, making it especially well-suited for historic districts with narrow streets.
- A piloted system of mobile waste collection.⁶⁸
 Each area within the neighbourhood has been assigned a rubbish collection day. On the designated day, the city's waste service delivers a platform with large communal bins. Residents can discard their rubbish at any point during the established time frame, after which the bins are taken to another part of town.

As in London, businesses in Barcelona are responsible for managing the waste they produce. Businesses are divided into different categories depending on where they are based and how much waste they generate. This in turn determines how the city's municipal commercial waste service collects the refuse and how much businesses pay for the service. Businesses are eligible for a 10 per cent reduction in waste collection fees if they implement an action plan aligned with Barcelona's Resident Commitment to Sustainability. If a business wants to arrange for its waste to be collected by a private carrier, it must apply to the city council for approval and continue to pay a reduced public charge. ⁶⁹

As part of its approach to managing commercial waste, Barcelona tries to help businesses understand their responsibilities and how they can better handle their rubbish. The city offers a free commercial waste helpline as well as targeted training and consultations for business owners. In 2022, Barcelona recruited 40 information officers who had over 40,000 conversations with business owners and employees about proper waste management and the penalties for illegally dumping waste. Description Last year, the city also tripled its budget for waste monitoring and enforcement.

Singapore. In Singapore, the entire waste collection is privatised, including household collection. There are two separate designations for waste carrier companies: public waste collectors (PWCs) that handle household waste, and general waste collectors that handle commercial waste. The public waste system is divided into zones, similar to New York. There is a competitive open bidding process to win a contract to operate in a zone.



The six sectors and the public waste collectors serving them

There is no zoning system for general waste collectors. Instead, any company that wishes to make money by collecting commercial waste must apply for a licence through the National Environment Agency. The application process is more rigorous than it is in the UK. Every prospective waste collector must submit evidence that it meets demanding criteria for equipment quality, training, workplace safety, and employee wages. There are additional requirements for collectors to handle organic waste, cooking oil, or sewage. Licences are only valid for 12 months. Waste collectors must reapply every year to ensure they continue to meet the standards. There are currently 382 licensed general waste collectors in Singapore, far fewer than the thousands of private waste carriers operating in London. The National Environment Agency maintains a searchable spreadsheet with names and contact information of all licensed collectors.72

Paris. Like London, Paris is a historic city with streets and buildings laid down long before the invention of the refuse lorry. It is also twice as dense as central London, with an average density of 20,025 inhabitants per square kilometre compared to central London's

11,144 inhabitants per square kilometre. ⁷³ We might expect it to have a similar problem with commercial waste collection. However, this is not the case.

The French system is, superficially, not vastly different to the British one. Under the French Environmental Code (Title IV) businesses are responsible for the waste they produce.⁷⁴ They must:

- Ensure waste is properly managed, right up to disposal;
- Ensure recycling is sorted into five relevant streams;
- Keep a register for three years of their waste, including nature, origin quantities, and transport and final disposal; and
- Ensure that any third party, such as a broker or collection agency, is properly authorised to carry waste.⁷⁵

Collection companies need to be registered to the local prefecture. This is the administrative centre of a *département* which is roughly equivalent to a county or metropolitan area in the UK. In this respect the system is not dissimilar to the registration system in the UK, although it is managed at the local level rather than by a national agency. The French equivalent of the Environment agency, known as ADEME (*Agence de l'environnement et de la maîtrise de l'énergie*) also runs a non-statutory online register of companies.

On the surface the system therefore seems quite similar. However, there are two significant differences. Firstly, smaller companies can manage their waste differently. Up to the threshold of 1,100 litres, businesses are entitled to use the local municipalities collection services, allowing waste to be combined with household waste and collected at the same time.⁷⁷

The services offered differ between municipalities. Not all of them agree to collecting commercial waste. Others, such as La Rochelle, have an allowance of up to 3,300 litres a week included in the basic charge and can collect up to 30,000 litres a week subject to additional fees. The standard fee is known as the TEOM (*Taxe d'Enlèvement des Ordures Ménagères*), literally 'Household Waste Collection Tax.' It is paid

by all homes and businesses unless they use a private collection company.

The second distinction is that there is a significant difference between Britain and France in the severity of penalties for not managing waste correctly. ⁷⁹ For example:

- Failure to manage waste: an administrative fine of up to €15,000 (€75,000 for a business);
- For abandoning or dumping waste: up to four years' imprisonment and a fine of €150,000 (€250,000 for a business);
- For failing to sort waste adequately: a fine of up to €750 (€3,750 for a business) for contraventions.
 For serious offences, the penalty is €150,000 (€750,000 for a business) and four years in prison;
- For failing to keep a register: a fine of up to €750
 (€3,750 for a business) for contraventions. For
 serious offences, the penalty is €150,000 (€750,000
 for a business) and four years in prison; and
- Illegal collection, transport, brokering or trading of waste: up to four years imprisonment and a fine of €150,000.

These are significantly more severe that the equivalent punishments in the UK.

In Paris, the municipality does collect commercial waste for a flat fee. However, the allowances are slightly less generous at 330 litres per day (2,310 litres a week). Beyond that, a volumetric charge applies. Companies sign up to a 'non household waste' contract, or DNM (*Déchets Non Ménagers*) for three months at a time. ⁸⁰ The basic free is € 140 per quarter, and waste additional waste is charged at €2 to €3 per litre thereafter.

Waste must be presented in bins. There are strict rules governing where they must be placed and when, as set out in the local waste regulations and the city's Public Health Code. 81 All waste must be placed in containers provided by the city, or on-street shared facilities must be used. Bags are very clearly not permitted. The city provides special grey bins for businesses. The bins must be stored on private

property, placed out no more than one hour before collection, and returned no more than 15 minutes after collection. The must also not block pavements. There are clear rules on where they must be placed depending on the width of the pavement. Failure to comply with these requirements results in a fixed fine of €75 for individuals and €150 for businesses.



Waste bins are a regular feature on Parisian streets. Not attractive, and not always used well, but perhaps better than bags on the street. Note the access to the courtyard (above).

These bins are possible thanks to the classic Parisian Hausmannian courtyard block. Most buildings have a shared courtyard that can be accessed from the street through large doors. Both residents and businesses can have access to this courtyard. This permits bins to be stored at the rear and only brought out when required, sometimes by a building supervisor.

These bins are a regular feature on Parisian streets. However, they are not inescapable in the fashion that rubbish bags are on British highstreets. Nor do they appear to attract opportunistic dumping in the same way as perpetual British bags on pavements. Parisian density also permits more regular collections with residual waste being collected seven days a week with set times on each street, preventing a waste build-up and avoiding a situation in which bins may go uncollected for days in error.

However, the need to sort waste means three separate bins are required. Few homes or businesses have space for this. It is estimated that one in five Parisian homes lack the additional bins required for recycling. The city has therefore introduced the 'Trilib' system of on-street bins, in emulation of the popular 'Velib' cycle hire scheme. These are carefully designed on-street bins, intended (not completely convincingly) to be attractive additions to the street as well as practical, easy to use and easy to empty and clean. ⁸² Most of the new Trilib units have been installed in parking bays, supporting the city's ambition to reduce city-centre parking and traffic. There are now over 400 'Trilibs' with more planned. ⁸³ However, they are only





The Trilib system in situ

available to residents. Businesses must use wheeled bins if they rely on the municipal system.

Systems compared. Five key themes emerge from these comparison between different national systems.

- Systems may be predominantly public or private. Commercial waste collection may be private sector (as in New York or Singapore) or predominately public sector (as in Barcelona).
- Private sector participation is normally necessary. All systems have a role for the private sector, recognising the diversity of specialist requirements that business have.
- 'Low end' commercial waste is similar to residential rubbish. There is also clearly an overlap between business and household waste. Some systems fail to draw strong distinctions between the two.
- Too much competition creates chaos. Too many commercial waste carriers in town centres leads to chaos, traffic and mess.
- Some regulation is necessary. Particularly in town centres, some level of regulation is required

to improve standards and curtail chaos, though this need not preclude competition or choice. Where the systems seem to be working well, these regulations are stronger than in the UK.



Underground bins in Seville, Spain

6. Recommendations



How do we end rubbish refuse?

What do we want to achieve? The current system is clearly not ideal for town and city centres.

It is delivering neither convenient services for businesses nor clean high streets for people. Frequently it is creating filth, sometimes is engendering blight and pollution. Enforcement of the current rules is often burdensome for our resource strapped councils. In short, we need to:

- Strengthen existing rules and enforcement regimes wherever possible to reduce fly tipping and poor practice;
- Spread best practice and help the current system works as well as it can in the short to medium term; and
- Change the system for town centre commercial rubbish collection for the medium to long term.

As we have shown above, the issue of commercial waste collections is complex and cuts across different departments in both national and local government. The industry is already adapting to requirements of the Environment Act 2021. Any additional changes will doubtless take time.

We propose three sets of recommendations;

- Sharing best practice in the short term: steps that can be taken now by councils, business and BIDs;
- 2. Improving the current system in the medium term via regulatory change; and
- 3. Creating a new town centre commercial waste regime in the longer term via statutory change.





Piles of rubbish on London high streets

Short term Recommendations

Sharing best practice in the short term: what can councils, businesses and BIDs do now? The good news is that, by sharing the best practice, there is

much that we can now that does not require changes to either legislation or regulation.

Recommendation 1: Create more Refuse Buyers Clubs

Summary

Areas covered by BIDs or those with a single landlord, have been able to take collective action and use their combined purchasing power to negotiate a good deal with one or two waste pro-viders to consolidate services. This is an unambiguous win-win: the collective purchasing power achieves a better deal for businesses, saves them money and improves services. Waste collection companies can also run a more efficient service by increasing the number of collections on a street.

BIDs might even use their own funds directly to subsidise the waste collection service, providing a clear incentive for businesses to use the preferred supplier. This could be linked to the provi-sion of collection services and consolidation points. Councils may not do this as they are restrict-ed by procurement and competition rules.

Based on research undertaken for the Bond Street waste consolidation project, TfL have pro-duced a detailed guide and toolkit for BIDs and Landowners.⁸⁴ This should be updated and pro-moted more widely.

There are nearly 350 BIDs in the UK and an unknown number of high streets with prominent landowners or estates. ⁸⁵ Much of central London is covered by BIDs or estates. Many London streets and town centres might therefore benefit from consolidation schemes. There is also the potential for parish councils and neighbourhood forums to implement such schemes.

Advantages

- BIDs and landlords can implement these schemes now.
- Does not restrict businesses' freedom to choose supplier, only offers an incentive.
- Reduces vehicle movements, and time that bags are left on the street.
- Potentially saves costs for businesses. cost savings for Businesses.

Disadvantages

- Predominantly limited to areas within BIDs, or with single landlords.
- Does not reduce the number of bags on the street, just the efficiency and consistency of collection.
- It is 'carrot only,' no stick. It is not possible to oblige businesses to sign up to the scheme.
- It favours wealthier areas which are statistically more likely to have a BID.

Precedents

- Bond Street waste consolidation project, as described elsewhere.
- Copeland Park, Peckham. The landlord of this popular business park for creatives and artists implemented a consolidation scheme to reduce vehicle movements and improve air quality. After an investment of £100,000, the landlord successfully reduced vehicle movements from 30 to just five per month, an 83 per cent reduction. The initial investment costs were offset by costs savings for tenants. 86
- Kings Road Partnership BID have implemented a preferred supplier scheme to reduce collections and improve services. The BID, created in 2021, identified waste as a key issue affecting the quality of the public realm. Through this service they have saved over 100 businesses an average of £500.87

Relevant laws and policies

• Local authorities may struggle to implement such schemes due to competition and procurement requirements.

Next steps and further research

- The opportunity to create such schemes beyond BID or estate areas might be investigated. What might local authorities achieve without breaking public sector procurement and competition rules?
- An appropriate national body such as British BIDs, the Local Government Association (LGA), DEFRA
 or the Environmental Service Association (ESA) should adopt and update the Transport for London
 (TfL) guidance and toolkit and roll it out across the UK.

Recommendation 2: Create a 'reverse Deliveroo' for commercial waste collections

Summary

It is possible to use the power of e-bikes and smart phones to facilitate instant pick-ups, removing the need to leave bags on the street at all. This might be linked to the provision of facilities such as consolidation points to facilitate local collection. This would reduce both the presence of bags on the street and the number of large vehicle movements, improving the streetscape, traffic and air quality.

Provision of such services would benefit from strict time band restrictions. These restrictions limit the times at which bags can be placed on the street and would make collection services a more attractive option.

The main challenge would be the need to provide waste consolidation points. The e-bike would take waste to a nearby storage facility, and then a large conventional refuse vehicle might collect the waste from there to the nearest handling facility, probably many miles away. Space is often at a premium, although the amount required is not significant compared to that required by, for example, parking or deliveries.

A service could be delivered by existing waste service providers. It might also be created and operated by a local BID, parish or other company or organisation, paid or voluntary.

Advantages

- BIDs and landlords can implement these schemes now.
- Largely removes the presence of bags on streets.
- Tried and tested
- Reduction in vehicle movements and emissions, replacing large noisy trucks with clean and quiet e-bikes.

Disadvantages

- Potentially limited to BID areas and estates.
- Not possible to mandate use of the scheme.
- There may be higher costs that would be passed on to businesses although consolidation may result in some efficiency savings. Currently, the schemes that have been implemented are provided at no extra cost, or are subsidised by a BID. It is difficult to quantify what the difference would be.
- Requires consolidation facilities such as waste storage.

Precedents

- Putney Pedals, a joint project between the local BID and ReLondon, as described above in the report.
- Sloane Street scheme implemented by the Cadogan Estate, as described above.
- Westminster and the New West End Company BID, following on from the success of their consolidation scheme on Bond Street, have recently implemented an e-bike collection scheme with Veolia.⁸⁸ This allows on demand and pre-booked collection and is already having tangible benefits. Waste from the area's many sushi and seafood restaurants was irresistible for seagulls who would attack any bags left out on the street. According to the BID, 'no amount of waste bags would solve it' but bags are now collected instantly, and the birds have had to source their urban fish elsewhere.

Relevant laws and policies

Anyone handling and storing waste using an e-bike will need to be a registered waste carrier, under the Control of Pollution Act 1989 and be subject to the Code of Practice. As we have seen, this is currently rather easy. However, future changes may make it harder, potentially throttling off the lower costs and capacity individual e-biker from this potential market.

Next steps and further research

- An appropriate body, such as British BIDs, the Local Government Association (LGA), DEFRA or the
 Environmental Service Association (ESA) should review schemes currently being implemented and
 draft a guidance and toolkit for other councils, BIDs and landowners wishing to implement such a
 scheme.
- Grant or loan funding could be made available for organisations wishing to invest in an e-cargo bike waste collection vehicle. The cost of these is modest, at between £5,000 to £15,000, especially when compared to the cost of conventional refuse vehicles.

Recommendation 3: Make consolidation points the norm

Summary

Lack of space on the traditional high street is a key reason for bags on streets. Finding a place to store waste is simply difficult on traditional high streets. Permanent, ugly and smelly large wheelie bins are arguably worse than piles of bags for a few hours at a time.

Consolidating waste is therefore crucial. Much as a modern block would incorporate a refuse store, a conveniently located space for businesses to leave their waste can make all the difference. This might be a range of several consolidation points close to all shops, or a more centralised consolidation point using e-bikes or the like.

BIDs and landowners should work together to identify underused spaces, such as garages or service yards, where consolidation points could be located. Alternatively, councils could provide on-street facilities in locations carefully selected to be convenient but not too prominent.

Controlling access is a challenge. A communal bin for commercial waste cannot be open to anyone. All businesses need to be issued with a key, tag, or code with similar access rights for waste collection companies. This could be open to abuse, but these risks could be mitigated with the use of technology. Some systems could provide full tracking, with customers scanning a tag on a waste bag (using RFID or QR code tags) to gain access to a container which could then weigh, or measure the volume of, the waste and then bill the business accordingly.

Restricting access to the bins to certain waste providers can also help reduce the number of operators and lead to fewer vehicle movements.

If on-street consolidation points are provided, there is the potential for councils to mandate their use through existing powers under Section 47 of the Environmental Protection Act 1990 (subsection 4(b) & 4(e)). However, such an approach would need to be trialled and may be challenged under reasonableness grounds (subsection 7).

Advantages

- Can easily be implemented within the current system.
- Removes bags from the street
- Can reduce the number of collections and vehicle movements.
- Can be linked to smart waste tracking and billing systems.

Disadvantages

- Requires space, either on or off street, that will not be available in many areas.
- Potential for higher costs of operation that need to be passed on to businesses.
- Need to manage and control access to prevent abuse and misuse.
- On-street facilities may not be popular as they are often ugly (they need not to be).
 They would also be subject to planning rules, and there will be difficultly in installing them in conservation areas.

Precedents

- Putney Pedals, a joint project between the local BID and ReLondon, included the provision of a waste consolidation point, as described above.
- The Cadogan Estate operates a waste consolidation point on Sloane Street from a garage on a side street. This is provided rent free for businesses to use, as described above.
- Barcelona has pioneered the use of mobile waste collection platforms that can be left overnight in a parking space. (See examples of consolidation points below)

Relevant laws and policies

- Highways Act 1980. Councils can place facilities on the street for purposes or amenity or services under Section 115B of the Highways Act 1980.
- Environmental Protection Act 1990. The use of consolidation points could potentially be mandated under this

Next steps and further research

- An appropriate body, such as British BIDs, the Local Government Association (LGA), DEFRA or the Environmental Service Association (ESA) should publish guidance on how to create consolidation points on private land. This would be aimed at BIDs, landowners and businesses. This could include guidance on how empty shops could be turned into consolidation points.
- Any future high street funding grants should include money for schemes that create consolidation points, either on or off street.
- An appropriate body, such as DEFRA, TfL, the GLA or a council should trial technology for on- street waste consolidation points.
- MHCLG should prepare design guidance for on-street facilities that Local Planning Authorities can
 integrate into their area wide design codes. They should also investigate running a competition for
 on-street facilities that are attractive yet modular and economic to produce.

Potential waste consolidation systems.

Off street consolidation points. Any space can potentially be used for waste consolidation, but it is in the gift of landowners to provide such spaces. The two examples below have been provided at no cost to businesses or waste collection companies. Otherwise they might not have been viable. This could be challenging in areas of high value and distributed ownership of land. Typical options include:

- Underused garages and loading bays.
- Containers on private land, such as in a rear service yard.
- Railway arches, as suggested by CityCo in Manchester, or areas under highway structures would be an ideal location.
- Refuse stores on adjacent large commercial developments. Some businesses rent space in these. For example, Gordon's Wine Bar on Villiers Street near London's Embankment Underground Station uses the space in an adjacent office block basement. New developments could be required to provide this service through a Section 106 agreement.

One potential option is to use vacant shops as refuse stores, providing that the shop front is made attractive, so it does not have the appearance of a refuse store. There may be options to facilitate this thanks to the Levelling Up and Regeneration Act 2023 which can be investigated.

Examples





Sloane Street. Garages repurposed for waste and storing e-cargo bies. As the landowner, the Cadogan Estate has the advantage of being able to leverage its spaces for uses such as waste storage.

On-street consolidation points. As far as we are aware, on-street facilities are not used in the UK for commercial waste, but they are common overseas. One of the reasons is our separate, deregulated commercial waste system. Multiple operators would need access to a consolidation facility, and there would be no way of distinguishing between commercial and domestic waste. Simple solutions available in other countries, include large municipal bins or underground bins.





The great and the ugly. Two ways of providing communal bin storage in Valencia. Elegant underground bins (above) and less elegant on-street facilities (below). Is the latter still preferable to endless bags on the street?

However, with improving technology it should be perfectly possible to provide some on-street facilities where there is space. Any solution would need to meet the following criteria:

- Controlled access. Only businesses and waste operators should be able to use it.
- Operator agnostic. It needs to be accessible for more than one operator.
- Multiple waste streams. It must allow separate storage of different waste steams namely; dry mixed recycling, organic waste, residual waste.
- Attractive. Any solution should not be detrimental to the street scene.

We recommend that the following solutions should be trialled:

• Waste lockers. The idea would be to create an enclosed space where bin bags could simply be placed and hidden away. This could be in the form of an enclosure serving a whole street, or multiple smaller containers along the street. Just as councils are installing bike hangers to allow secure bike storage on the street, or private companies are installing parcel lockers. Unfortunately, many of these systems are far from attractive. But they could be.





On-street cycle lockers, while not particularly attractive, these are simple and robust. There is no reason why the design could not be less functionalist and more attractive.





A larger cargo bike locker next to a busy high street in London (above) and a more attractive timber bin store with a green roof in east London (below).

Access would need to be controlled through conventional or digital locks, with the opportunity to incorporate systems that allow waste tracking. For example, tags could be provided for waste bags with a barcode, QR Code, or RFID tag, that both granted access to the correct waste locker, and then allowed the collection company to identify and weigh the waste in order to charge the customer accordingly. Some places go further, with one public housing development in Beijing, incorporating facial recognition technology to control access to bins and ensure residents are sorting waste correctly. By We judge that this level of invasive surveillance would not be acceptable in British high streets but it demonstrates that the technology exists.

The French City of La Rochelle is rolling out a smart card known as the Pass dechetes (waste pass) that will control access to on-street communal bins and allow smart billing.⁹⁰





Access control solutions by Adambi and Sensoneo





Recorra's SmartWeigh system to monitor waste quickly permits more accurate billing and encourages more recycling⁹²

Mobile waste collection platforms. This is a solution that has been successfully used in the busy, historic cities of Barcelona and Valencia where there is little room on the street for permanent facilities. ⁹¹ The solution is simple: a mobile platform is placed on the street on certain days at set times. Businesses and residents use them as normal on-street bins, before the unit is carted away and emptied.





A platform in place in Barcelona (top), and a platform being unloaded in Valencia (above)

A variation of this system could be used for commercial waste in the UK, even within our deregulated system. There should be little preventing a collection company, or council, deploying a similar platform, subject to agreement from the highway authority. Councils have powers to deploy such structures, but companies do not. Permission could potentially be provided under a variation of skip licences (Section 139 of the Highways Act 1980), or a sui generis licence. Another option would be trailer mounted skips or bins that can simply be towed away, including small scale trailers that can be towed by an e-bike.



A mobile recycling trailer in Australia93

Ensuring success through design. A key concern for on-street facilities is that they will be necessarily bulky, utilitarian and ugly. But is this inevitable? Should we expect more from our waste infrastructure? Can bins, dare we say it, be beautiful?

Bins don't need to be ugly and heartless. Careful design can ensure that on-street facilities are not too

awful. Paris has somewhat succeeded with their new Trilib on-street waste bins. Could UK cities do even better? Councils legally can and should introduce design requirements through their area wide design codes to ensure any such facilities are sensitively designed. Regional or national design competitions or codes could also develop modular, attractive and easily replicable designs for facilities. Due to the persistent dangers of the 'design disconnect,' the predictable variance in taste between designers and the wider public, wider public preference should axiomatically be taken as the key arbiter in selecting more popular, or at any rate discrete, public bins.





Must bins be ugly? New bins in new streets near Paris

Medium-term Recommendations

Improving the current system in the medium term via regulatory change. Our second category and fourth recommendation is for government to improve the way it uses the current legal regime in

the medium term. This will probably require more evidence 'on the ground' before it is possible without statutory change.

Recommendation 4: Push the limits of existing powers

Summary

Section 47 of the Environmental Protection Act 1990 gives councils powers to put restrictions on when waste can be collected and put conditions on the use of 'receptacles' for refuse collection. These powers could potentially be used effectively to ban bags on the street, and mandate containerisation and other methods of collection, such as on demand collection.

This would require some of the collection consolidation solutions discussed above in (recommendations 2 and 3) to have been proven to be feasible and viable, otherwise it would not be reasonable to impose these restrictions on businesses. This makes it less likely that the requirements could be challenged for being unreasonable under subsection (7).

Some exceptions could apply for non-standard waste streams. For example those outside the main three waste streams (dry mixed recycling, organic waste, residual waste) or bulky waste.

This would, by default, limit traffic and vehicle movements and would probably reduce the number of operators. It could effectively eliminate bags on the street, unless businesses successfully appealed against the restrictions.

Implementing these restrictions is not without costs, and can require resources that councils do not always have. The government could help by providing model Section 47 notices and better guidance.

Advantages

- No change in legislation or regulations is required.
- Would eliminate bags on the street and potentially provide a long term solution.
- Could encourage the use of on demand collections and consolidation systems.
- Would reduce the number of vehicle movements.

Disadvantages

- Not tested and may be open to legal challenge as it limits competition and places additional burden on business (See S47(7))
- Requires consolidation points or on demand collection services. The feasibility and viability of these services would need to be demonstrated beforehand.
- Potential reduction in flexibility and choice for businesses.
- Requires additional resources.

Precedents

- There are no UK precedents.
- Dublin passed a law that effectively bans bags being placed on the street and from the 16th of September 2024 has removed city centre street exemptions. Instead, a system of 'direct collection' is proposed alongside some consolidation facilities.⁹⁴

Relevant laws and policies

- Environmental Protection Act 1990 Section 47.
- There may be implications for competition laws, as such a proposal could limit choice. The principle's practicability would need to be demonstrated first.

Next steps and further research

- Investigate the legal implications of imposing these requirements on businesses through Environmental Protection Act 1990 powers.
- Consult with businesses and operators on the practical implications.

Recommendation 5: Make consolidation points the norm

It is clear that the current enforcement regime is insufficient, despite councils' best efforts. Deterrents are not strong enough, and the money received by fines does not adequately cover the costs to the council for pursuing actions. There is a lack of incentives on both sides of the equation. The following changes are recommended.

- Raise fixed penalties for fly tipping under Section 33ZA of the Environmental Protection Act 1990. The current maximum is £1,000 and the minimum is £150. Both the statutory minimum and maximum should be raised.
- Create a new fixed penalty for a failure of duty of care under Section 34 of the Environmental Protection
 Act 1990. There are currently fixed penalty notices powers for household waste (Section 34ZA) but not
 commercial waste. Creating these would help simplify the process for taking action against businesses
 who transgress.
- Increase fixed penalties for failures to comply with Section 47 notices. Under Section 47ZA of the EPA, the current maximum penalty is £100, and many councils use a lower figure. A statutory minimum should be introduced after the statutory maximum raised.

Recommendation 6: Reduce the burden of proof on councils and make it easier to take action against businesses who manage their waste poorly

As we have seen, it is hard for councils to prove that businesses have been incorrectly managing their waste, especially outside areas with time banding restrictions. There is a need to prove intent, in the case of suspected fly tipping, or they must prove that the waste is causing a nuisance where waste is being inconsiderately managed. It is also very hard to prove where waste initially came from, without undertaking prohibitively detailed investigations.

Many councils and collection companies require that clearly marked bags are used for collection. For example, The City of Westminster requires that 'All waste must be clearly marked with the name and telephone number of the registered waste carrier collecting the waste.' So Camden require bags to be marked 'commercial' or 'trade waste.' For its own collection services it uses brightly coloured bags (purple for commercial, orange for residential properties above shops). In principle, therefore, a 'normal' black bin bag left out on the street should not be there. It is probably fly tipped or the business is not paying for waste to be collected correctly.

One officer we interviewed told us, 'it's simple when it comes to littering, if we see somebody litter it's an instant fine [via a Fixed Penalty Notice] and it should be like that for waste if we see them put a black bag out.' In other words, anyone placing unmarked bin bags out should be treated like somebody littering. This would require:

- Strengthening the rules over which commercial rubbish bags are acceptable. The primary legislation already allows councils to impose requirements around the type of bag (Section 47 of the EPA), so there should be no need to introduce further legislation. Instead, there should be an agreed standard across metropolitan areas, or across the country, on making commercial waste bags clearly identifiable. This will be more important following the introduction of Simpler Recycling rules as all businesses will have to present three types of waste for collection. DEFRA, with industry consultation, could publish an agreed standard and model Section 47 notice clauses that councils can simply roll out.
- Alternatively, a new clause could be inserted into Section 47 of the EPA that allows the creation of national regulations, or standards, for waste receptacles. Ultimately, local requirements should be allowed to overrule any national standards. One size cannot fit all and there may be local requirements that require a higher standard. This should be about raising the baseline standard.
- A new offence would need to be created, or existing offences will need to be amended. This could be achieved through:
 - Amendment to Section 47 of the EPA, creating a new category of offence.
 - Amendment to Section 98 of the EPA, which sets out the legal definition of litter. This could be amended to include 'waste that is not clearly marked for collection,' thus making placing out bin bags an offence under Section 87 of the Act (Offence of leaving litter).

Long-term recommendations

Creating a new town centre commercial waste regime in the longer term via statutory change. This is our third category of recommendations.

Recommendation 7: Reduce the number of waste collection companies through stronger licencing, particularly in town centres.

The Government via DEFRA has consulted on changing the current system of registration for commercial waste carriers, to one of permits using the Environmental Permitting regime.⁹⁷ It is proposed to replace the existing roles of waste carriers, brokers, and dealers with two new roles:

- Transporter: Responsible for transporting waste; and
- Controller: Classifies waste, decides where it is taken, arranges transporter.

The proposed system will require firms to demonstrate a much higher level of competence, appropriate to the nature of their waste transport operations. Local authorities may also have a greater say in the permit process and enforcement. The proposals were largely supported, but there is no indication of when the new system will come into force.⁹⁸

There is an opportunity to influence the proposed permit system and introduce requirements that would require a higher level of service. The proposed permits will include conditions and a separate consultation will be required for these conditions. We suggest that:

- There should be a separate class of waste transporter for high streets and town centres. Only operators with these permits would be allowed to operate in town centres.
- The permits should require operators to adhere to certain technical standards and provide certain services such as on demand collection or waste tracking.
- Councils should have a greater say in how the permits are assessed and awarded.

Further consultation would be required with councils, operators, and businesses to determine which specific standards should be imposed and how to improve standards with minimum additional cost.

Recommendation 8: Make it easier for those who create little litter by creating a new waste definition of 'Ordinary commercial'

The current system is flexible. However, it is 'one size fits all.' A modest shop, or a coffee kiosk, has similar duties as a supermarket or a giant coffee chain. Both must be responsible for organising their own waste collections. As one small business owner put it:

'We just take it home, I don't want to pay for somebody to not collect it for me, I don't want to leave it on the street. We barely create any rubbish, so we just take it with us. We're not the problem. All the flats around us keep dumping stuff on the street.'

In some sense this seems unfair. This small firm is technically breaking the law even though they are being responsible with their waste and not adding to the problem of waste on the street. So how can we make it easier for small businesses like this?

One solution might be municipalisation. Many shops, offices, and even small bars and cafes, generate small amounts of waste indistinguishable from domestic waste. There appears to be little advantage for these businesses using specialist commercial services. We recommend that:

- Any domestic type waste (dry mixed recycling, organic, and residual) up to a certain volume is classified as 'ordinary commercial' waste.
- Any waste up to this volume is collected by the council for a small fee and can be deposited in communal facilities that are also used by domestic properties.
- Any waste above this volume would fall within the existing commercial system.

Large waste producers would not really benefit from this and should still be incentivised to reduce waste and increase recycling. Smaller producers would find it easier properly to manage their waste.

Recommendation 9: Move away from the 'free for all' towards a system of zoning or municipal carriers

All the recommendations above, such as the creation of consolidation points and the banning of waste on streets, would be easier to implement within a different commercial waste system. It should also make the collection system more efficient, reducing costs to businesses. A system of exclusive zoning (where a single operator has a monopoly for all services in the given zone) was investigated by the Environmental Services Association.⁹⁹

The group analysed the zoning approaches currently in use in the US, such as the Los Angeles' system but not the recent proposal for New York. They explored how they would work within the UK's legal and regulatory systems. They then undertook modelling on a hypothetical exclusive zoning system in Glasgow. The were not convinced of the merits of such as system. However, this is not the only system that could be used. Alternatives such as framework zoning, or a system of co-collection where the municipal provider also provides commercial collection services were not investigated. Others disagree, and as part of DEFRA's 2018 Resources and Waste Strategy for England, zoning was investigated as a potential way of bringing efficiencies to the waste collection system, resulting in reduced costs for businesses if savings were passed down.

The picture is complicated. Further research would be helpful. We suggest that the following systems are investigated further:

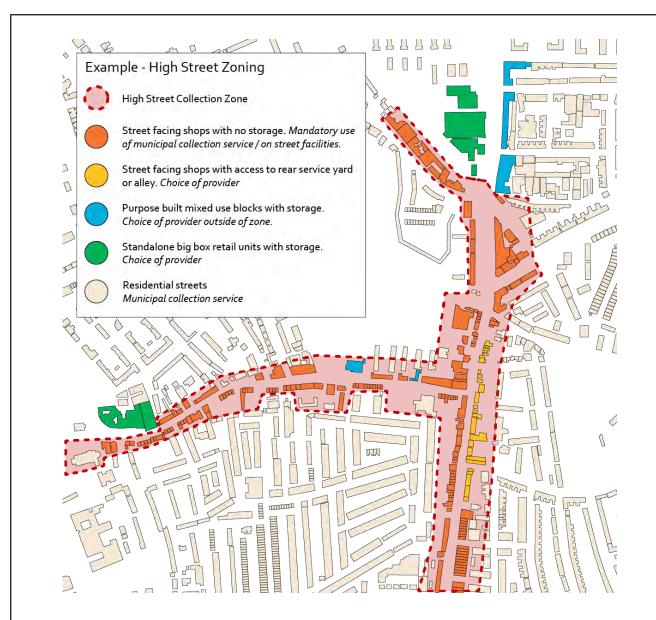
- A zoned system with multiple franchises or licences (framework zoning) such as the systems used in New York and Singapore; and
- A hybrid system with high street and town centre zones each with either a single operator, or a municipal service. We could call this High Street Zoning.

High Street Zoning can be imagined as a flexible approach that provides the advantages of both exclusive zoning and of a deregulated competitive system. The aim is to deal with the very particular set of problems caused by bags on the street in certain locations and maintain a range of options elsewhere. For example, below is a plan of a hypothetical high street zoning system.

In this scenario, there are busy streets with a range of typologies on the street:

- Many small businesses with some flats above and nowhere to store waste (orange);
- The same typology but with access to a rear service yard (yellow);
- Purpose-built mixed-use blocks with modern bin stores (blue); and
- Large 'box land' retail units with service yards and storage (green).

A zone has been imposed on the high streets, meaning that all businesses in this area can only use one provider (or the municipal collection service). This reduces movements and allows the provision of shared bin stores and co-collection with residential uses.



On-street bags would be banished throughout the zone. The boundary of the zone is fine grained and can be adjusted to exclude the box land retail units and some of the mixed used blocks that have adequate refuse storage and collection arrangements. This allows businesses that do have their own facilities to still manage their own waste, thereby supporting a healthy ecosystem of providers, while recognising that street facing properties need to manage their waste differently and benefit less from this competition. We are not aware of this exact system being in operation in other countries. However, given the scale of the zones it would be relatively simple to conduct controlled trials.

We recommend that DEFRA, a government agency or independent organisation, undertakes further research into a variety of zoning systems. This should include the high street zoning option described above.

Conclusion

The challenge of commercial waste on Britain's high streets is significant but not insurmountable.

Many municipalities around the world face the same challenges and have been tackling them. There are few reasons why we cannot do the same. Our research reveals both the scale of the problem and its meaningful effect on business prosperity, visitor experience and environmental quality. Yet within these challenges lie clear opportunities for a transformation in the quality of our hight streets.

The evidence shows overwhelming support for change, with both businesses and the public united in their desire for cleaner streets. This mandate for reform, combined with advancing technologies and changing legislative and policy landscape, creates a clear opportunity to revolutionise how we manage commercial waste in our urban spaces.

Through a range of solutions, from small scale, bottom-up collective action through to top town regulatory changes, we can create high streets that are cleaner, more sustainable and more inviting for everyone. This report provides ideas that businesses, BIDs, and councils can enact now, a blueprint for further research and potential legislative change, and everything in between.

By embracing innovative solutions and learning from successful examples both at home and abroad, we can boost civic pride and create better places to shop and meet our fellow men and women.





Examples of civic pride in waste management in Amsterdam (above) and less so in London (below)

Interviews

Organisation				
Bedford Estates				
Gordon's Wine Bar				
Cadogan Estate				
Camden Council				
Central District Alliance				
Environment Agency				
Environmental Services Association				
London Borough of Camden				
London Waste and Recycling Board (ReLondon)				
Manchester CityCo				
New West End Company BID				
Waste and Resources Action Programme (WRAP)				

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22	Pile of rubbish	Adobe:icsnaps
23	Bins on street and Bag collection sign	ReLondon
24	Upper Street, London	GilPe
24	Black grit bins	Shelley Holmes
27	Man removing rubbish	Adobe:eurostar1977
33	Putney pedals in action	ReLondon
34	Hereford pedicabs	Hereford Pedicabs
35	Barton Square and College Lands, Manchester	ARUP
36	Before and after of Half Moon Street	ARUP
38	Fox by rubbish	Adobe:Adam
40	Six sectors of waste graphic	National Environment Agency, Singapore
42	The Trilib system	Ville de Paris
44	Rubbish bag coffee cup	Adobe:ManuPadilla
51	Man collecting recycling on pedal bike	Cadogan Estate
52	Bike Hangar	Falco
52	Man putting bike in bike hangar	Cycle-Works
52	E-cargo bike hangar	Falco
52	Timber bin store	London Borough of Tower Hamlets
53	Bin sensory tag	Adambi

52	Bin sensor chip	Sensoneo
53	Green bin bags and bag weigher	Recorra
53	Bin collection platform	Ajuntament de Barcelona
54	Bin collection vehicle	AYTO VLC
54	Mobile recycling trailer	Mornington Peninsula Shire

Endnotes

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Rubbish Refuse: Why our commercial waste management system does not work for high streets and how to fix it for people, place and prosperity