

Waste Transport and Fly Tipping in the South London FQP area



Prepared by



on behalf of:



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Waste Transport and Fly Tipping in the South London FQP area

Survey report

Prepared by



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Consultants' statement

The views expressed within this report are those presented by stakeholders consulted during the study and of the consultant team, which undertook the project.

Similarly the conclusions and recommendations presented within this report are those developed by the consultant project team.

EXECUTIVE SUMMARY

This study was commissioned by the South London Freight Quality Partnership at the request of the Transport for London Freight Unit as part of its activities for 2007/08, to investigate the issue of waste transport and fly tipping from a South London perspective. The study was conducted during the second half of 2007/8 with a view to producing recommendations to the Boroughs on how waste transport could be developed, and fly tipping and its impacts minimised.

The key objectives of the project were to:

- Understand and analyse how waste transport was managed in the South London FQP area,
- Assess the number of fly tips and their locations,
- Determine the key drivers that would lead to a reduction in the number of vehicles transporting waste and the required changes for developing a multimodal system to transport items of waste.
- Identify potential barriers to facilitate / improve waste management.
- Identify the reasons why fly tips are a more common occurrence at one location than another,
- Determine the factors that could influence and encourage a reduction in fly tipping in the South London FQP area.

Primary aspects of this research involved analysing and summarising how waste transport was organised in the South London FQP area, what the local policies were and to obtain key data about waste in the South London Boroughs. The second element of this research consisted of identifying the main fly tipping hotspots.

Telephone and face-to-face interviews were undertaken to discuss key aspects relating to waste issues with local authorities, London Waste Action and the Environment Agency. In consultation with these bodies, it was admitted that the term 'fly tipping' means the illegal dumping of waste. It can vary in scale significantly from a bin bag of rubbish to large quantities of waste dumped from trucks. Fly-tipped waste may be found anywhere, such as roadsides, in lay-bys or on private land.

Local authorities are responsible for arranging the provision of civic amenity sites for residents to deposit their waste and they are responsible for arranging the transport and disposal of the waste received at these sites, except for the waste that the Boroughs recycle. Regarding fly tipping issues, Boroughs are in charge of 'managing' them and to make efforts to limit their number in their area. Responsibilities of local authorities regarding waste issues generate costs. In 2005, estimated costs spent on contracts were up to £363 million.

London Boroughs have chosen different ways to organise the management of waste. The Greater London area is composed of 21 local authorities, which are grouped into one of the 3 regional waste authorities. In December 2007, in the South London FQP area, two Boroughs were part of the regional waste authorities, whilst the other six Boroughs were unitary waste authorities whereby they were responsible for their own waste collection and disposal. In 2005 the previous Mayor of London has made

repeated attempts to bring the different waste authorities together, to form a single waste authority in London.

In the South London FQP area, all Boroughs have civic amenity sites but only three have a landfill site. Waste facility sites are spread around the South London FQP area, and even though the number of vehicles accessing those sites may be significant at the local level, the proximity principle should be respected to avoid an overall traffic increase throughout the area.

In 2007 most of London's waste was disposed of by landfill (57%) with the rest being either incinerated (22%) or recycled (20%). Many of the landfill sites used are located outside of Greater London and the Mayor of London wants to encourage that all landfill sites are located inside of the Greater London area by 2020. The Mayor of London encourages recycling using targets for each London Borough. However, recycling rates are still lower than the targets set by both local and national government, with a recycling rate less than 20% in 2005, compared to a Greater London target of 25%.

In 2007 in Greater London, there were 229 waste transport vehicles worth an estimated £15 million. 5 million waste journeys were made by waste vehicles on London's roads which represented 8% of freight traffic and 2.4 million tonnes of CO₂ emissions. A short analysis of the types of vehicles used to transport waste shows that there are many different types. It was noted that generally three-axled vehicles were more efficient than two-axled ones but local authorities want to reduce the use of three-axled vehicles due to their visual aspects when on waste collection. The use of rail or river systems is low in the South London FQP area (and generally in the Greater London area). Therefore, there is a real need to develop alternative modes for the transportation of waste.

Regarding fly tipping hotspots, TTR analysed data from the Environment Agency (2004/07), which showed that the London Borough of Wandsworth was the Borough with the highest frequency of fly tips, and that Croydon was the least affected. Costs regarding the clean up of streets affected by fly tips vary from one Borough to another, with the cost per resident reflecting the number of incidents recorded (from £0.18 per resident in 2006/07 in Croydon to £14.72 in Wandsworth). Correspondingly the feelings regarding the impacts of fly tipping vary between the Boroughs. For example, the London Borough of Richmond expressed a lack of concern regarding this issue as they are not really concerned by fly tips, whilst Wandsworth is working to try to find solutions. All Boroughs have a different approach to reducing fly tipping in their area. Some of them use the Internet, a dedicated telephone hotline or an email address to inform the local authority of fly tipping occurring in their area.

Despite this, the research revealed a lack of interactive communication with residents as to informing them about the risk that fly tips represent for health and the solutions under development by local authorities. This lack of interactive communication should be reduced in order to allow co-operation with responsible citizens on the fly tipping issue.

Some sites were recognized as potential fly tipping hotspots:

- In **Lewisham**:
 - Brocklehurst Street.
 - Ermine Road.
 - Hazelbank Road.
 - Ladywall Road.
 - Lareham Street
 - Manor Lane, Manor Terrace and Manor Park

- In **Wandsworth**:
 - Garratt Lane.
 - Mitcham Road.
 - Tooting Common.

- In **Croydon**:
 - Bensham Manor.
 - Norbury.
 - Selhurst.
 - South Norwood.
 - Thornton Heath.
 - West Thornton.

- In **Merton**:
 - Behind London Road.

Some recurrent observations were made regarding the identified fly tipping hotspots. In the majority of sites, signage was inefficient. Generally these spots were located:

- In a residential area:
 - Fly tips were put at the front of the houses, just beyond the front yard. It was observed that generally people left those items there when they were refurbishing their houses.
 - Generally those items were put on site by hand. No cars were used to dispose of them.
 - They were mainly recorded in areas with a small amount of traffic, passers-by or cars.
 - At junctions between two streets, where it is easy to be not seen by anyone.
 - They were in areas that suffered from low level street lighting,
- At the back of retail stores:
 - Most of the time, fly tips were items disposed by retailers
 - They were located in dark and narrow streets, generally with low traffic
 - They were not visible from the busiest parts of the street.

Some Boroughs charge a payment for collection of fly tips on private land, as those areas are not covered by the waste contract with the waste company in charge of cleaning the streets for the local authority. Because of this, some people ask 'private waste operators' (including individuals) to collect and dispose of these fly tipped items. The risk of such behaviour is that those 'private operators' then fly tip the collected fly tipped items to make a large profit, rather than legally disposing of them

in the correct manner. This point was made by Local Authorities, particularly referring to illegal unlicensed waste disposal operators.

Recommendations to reduce the number of fly tips in the South London FQP area include:

- Inform all retailers and businesses about the WEEE (Waste Electrical and Electronic Equipment) directive, and the importance of producer responsibility.
- Better communication is needed regarding the topic of waste, and in particular a list of the legal licensed waste disposal operators to explain to people what they have to do with fly tips that occur on private land possibly through the creation of a leaflet or newsletter.
- Include management of waste into the planning process
- Better enforcement, and successful prosecution of offenders on the less frequented streets
- Better signage to explain the risks to fly tippers if they do not respect the rules
- Create good partnership between local authorities, businesses and residents with MetPolice, VOSA...
- Regarding recycling, we recommend that an analysis of the environmental impact of transporting the waste and recycled materials should be made, as this is not often taken into account.

1 INTRODUCTION & BASELINE

Since September 2006, the South London Freight Quality Partnership (SLFQP) has been working to develop solutions for improvements to loading and unloading conditions in the South London FQP area in conjunction with local stakeholders. To date the main activities developed by the project have been the Legal Loading Initiative, an Improvement of the Penalty Charge Notices (PCNs), the setting-up of trials of night-time deliveries, and a Retail Freight Consolidation Centre feasibility study.

For the first time since the launch of the SLFQP the issue of waste management has been considered as a key element in improving urban freight.

Within the TfL Freight Plan, two key measures relate to this area; the promotion of using a modal shift for waste movements, and an investigation into the potential of consolidating waste shipments between the public and private sectors. A study of these issues was carried out during the second half of 2007/8, with a view to producing recommendations to the Boroughs on how transportation of waste could be developed, and fly tipping impacts minimised in line with the recommendations of the TfL Freight Plan and the activities of the waste sector Industry Action Group.

The potential benefits of a better waste management system include a fewer number of waste vehicle movements on the roads of South London, as a result of the consolidation of vehicle movements or a shift of waste from road to other modes of transport, where either option is considered viable. This could lead to a reduction in congestion, fewer accidents and less pollution in strategic areas where freight movements are a cause for concern.

2 METHODOLOGY

2.1 Project Management

A methodology was proposed by TTR and validated by the client group at the start of the project. The project client group consisted of Croydon Council, Transport for London (Freight Unit) and the SLFQP Borough members. The project officially started in September 2007 and was agreed to be finished by the end of March 2008.

Project updates were given at the South London Freight Quality Partnership steering group meetings which took place on September 3rd 2007, January 16th 2008 and March 26th 2008. In addition, monthly management reports were sent every month to the client manager.

2.2 Methods Used

The method used for this research is a tried and tested mixture of observation, consultation, survey and analysis leading to recommendation and implementation. The work involved collaboration between the SLFQP, its Borough members, where applicable other private sector “players” in the waste sector and the waste sector co-ordinator within the TfL Freight Unit. The incorporation of commercial FQP partners’ data in the selection of sites adds weight to the process. For the initial part of this research, the South London FQP planned to understand how waste transport worked throughout the SLFQP area, and in particular, between the different Borough members. In this research only recycled material, household, waste and biodegradable materials are included. This means that clinical and hazardous wastes are not considered.

The other side of this research consisted of understanding and estimating the importance of fly tipping, the number of incidents and their locations in order to be able to identify fly tipping hotspots. After the hotspots had been identified, the aim was to understand why some locations became ‘hotspots’. This resulted from the client group needing to further understand the origins of fly tipping hotspots throughout the South London Freight Quality Partnership area.

The consultative element of the work with local authorities and waste transport operators has emphasised to business the importance of proper delivery practices and the significance of freight transport to the functioning of the urban area. Not all local authorities gave a positive feedback to the consultation.

The methodology used to meet the requirements of the study was based on five main stages:

- **Desk-based research**

There was a specific request from the client group to ensure that the desk based research element of the study remained focused and streamlined in order to avoid researching and presenting excessive amounts of background information. The

information obtained from the desk-based research was to deal with waste management issues for local authorities and fly tipping issues.

TTR also made effort within the research to obtain information about the different contracts which exist between local authorities and waste operators. The release of these contracts allowed TTR to have a better knowledge as regards how waste issues were managed in the South London FQP area, where the waste facilities were located and the strategies developed by local authorities to reach Greater London targets and decrease the impact of waste in the South London FQP area. Desk based research and literature review was simply expected to provide brief context for the final report.

- **Consultation with identified stakeholders and data analysis**

The main focus of the consultation consisted of questioning all South London Boroughs, more specifically Environment, Waste and Fleet managers¹. In conjunction with this, the Department of Environment, Food and Rural Affairs, the Environment Agency and the London Waste Action Group were consulted by emails and with face-to-face interviews.

Amongst the main questions asked of the stakeholders consulted were:

- How was waste transport managed in each Borough?
- What did the waste contracts mention?
- Where were the waste facilities located?
- What were the current problems with waste transport and management?
- Where were the main fly tipping hotspots?
- What types of items were disposed of in the fly tipping hotspots?
- What were the stakeholders' main hopes and fears regarding an improvement of the waste transport system, and a decrease in the number of fly tipping incidents?

Responses to the consultation activity were analysed in detail to identify key issues, drivers and barriers.

The Environment Agency sent to TTR a document including:

- A spreadsheet with the total number of fly tipping incidents in the Greater London Area.
- The estimated clearance costs recorded for cleaning up the fly tipping incidents.
- The number of prosecutions taken and the success rate regarding fly tippers.

This database was then analysed with the aim of estimating the trend regarding the number of incidents, estimated clearance costs and prosecution rates between 2004 and 2007, and to know the degree of importance that fly tipping represents in the South London FQP area, in comparison with the other boroughs throughout the Greater London.

¹ The whole contact list is contained in the Appendix.

In parallel, some Boroughs sent to TTR data which had been extracted from the Fly capture system², which were also analyzed.

TTR established a list of the main contacts in the South London Boroughs working on 'waste' issues and this was complemented by a list of stakeholders implicated in 'waste' management in London.

- **Reporting and recommendations**

Following the analysis phase of the study, recommendations were developed and incorporated in this study report.

² The Fly capture system is a database provided by the Environment Agency and has to be filled by local authorities.

3 THE NATIONAL, REGIONAL AND LOCAL CONTEXTS REGARDING WASTE ISSUES

3.1 Waste Management in the United Kingdom and Greater London

3.1.1 The Wider Context

The **1975 EU Waste Framework Directive** aimed to co-ordinate waste management within the European Union in order to limit the generation of waste and to manage its treatment and disposal. Article 7 of this Directive requires the preparation of waste management plans which shall relate particularly *to the type, quantity and origin of waste to be recovered or disposed of, including general technical requirements, any special arrangements for particular wastes and suitable disposal sites or installations.*

In the United Kingdom, local authorities are responsible for arranging the provision of civic amenity sites for residents to deposit their household waste. Some of these civic amenity sites also take in trade waste and Borough-collected waste. Boroughs are also responsible for arranging the transport and disposal of the waste received at these sites except for the waste the Boroughs recycle. Recently the British Government Guidelines outlined proposals in Planning Policy Statement 10 '*Planning for Sustainable Waste Management*' (PPS10). These proposals require that the Mayor of London's Plan for reducing the impact and quantity of waste will have to be managed by a Waste Planning Authority (WPA), or a group of WPAs, if multiple WPAs agreed to work together.

Waste Strategy 2007, the government's most recent strategy, set targets to recycle or compost at least:

- 40% of household waste by 2010,
- 45% by 2015,
- 50% by 2020.

Despite these targets regarding increased recycling and reducing the amount of waste produced, there would still be a need for waste disposal. The government strategy is to reduce the use of landfill, with the Landfill Tax as the driving mechanism; and to promote energy recovery, through Mechanical Biological Treatments (MBT) and Energy from Waste (EfW) plants, for example through Combined Heat and Power Technology in Lewisham (DEFRA, 2000).

Regarding fly tipping issues, the Clean Neighbourhoods Act 2005 gives to Councils the power to seize a vehicle involved in a fly tipping incident and to issue fixed penalty notices to offenders caught fly tipping.

3.1.2 Waste Management in the Greater London Area

Throughout Greater London, the private sector provides the majority of the waste collection and disposal services and the estimated costs spent on contracts are

£363m per year³. This budget is for the full range of services available including the transportation of the waste, provision of household compost bins, and composting schemes on an industrial scale.

Even if different parts of waste management activities are provided under contract by different providers, the fact still remains that the local authority are the coordinators to a fully integrated contract, in conjunction with an in-house Direct Service Organisation (DSO). The Mayor of London has powers in relation to waste planning conditions, however, recycling and disposal of waste are under the responsibility of the Waste Authority, and the collection service remains under the control of the Borough or the Waste Authorities.

In 2005, the Mayor of London proposed to create the London Single Waste Authority (LSWA) which would have been responsible for all of London's municipal waste (treatment and disposal), and would have operated as a functional body of the Greater London Authority. In addition, the Mayor of London proposed that London's local authorities be required to work in partnership with stakeholders, especially Primary Care Trusts, to reduce the occurrence of fly-tipping of clinical waste. However, at present, the LSWA has not been set up.

Currently the responsibility for waste and fly tipping management has been given to the 32 London Boroughs and to the City of London Corporation. Following from this, 20 of the London Boroughs, and the City of London Corporation have been grouped into one of 3 regional waste authorities, whilst the remaining 12 individual Boroughs are responsible for their own waste collection. Disposal in these Boroughs is controlled by a joint committee of Members from the constituent Boroughs.

During 2007/2008, the Boroughs were working towards the UK Landfill Allowance Trading Scheme (LATS) targets. LATS, which came into effect in April 2005, set each local authority annual landfill allocations – the maximum amount of biodegradable municipal waste (BMW) they are able to landfill until 2020. The financial penalty for non-compliance with requirements to divert BMW from landfill under LATS was set at £150/tonne in 2006.

3.1.3 Waste in figures in the Greater London area

In 2005, London⁴: produced approximately 17.5 million tonnes of waste and had about 10 million tonnes of annual waste management capacity; i.e. approximately 60% capacity to deal with the waste it produces. Around a third of this (by weight) came from construction and demolition. There are also smaller quantities of more hazardous waste (e.g. chemical and medical).

In 2006/07, in the Greater London area, 57% of the total waste was sent to landfill, 22% was incinerated through Energy from Waste plants, and 20% was recycled or composted. It is worth noticing that during the last 7 years, there has been a constant decrease in disposal using landfill and an increase in the use of incineration

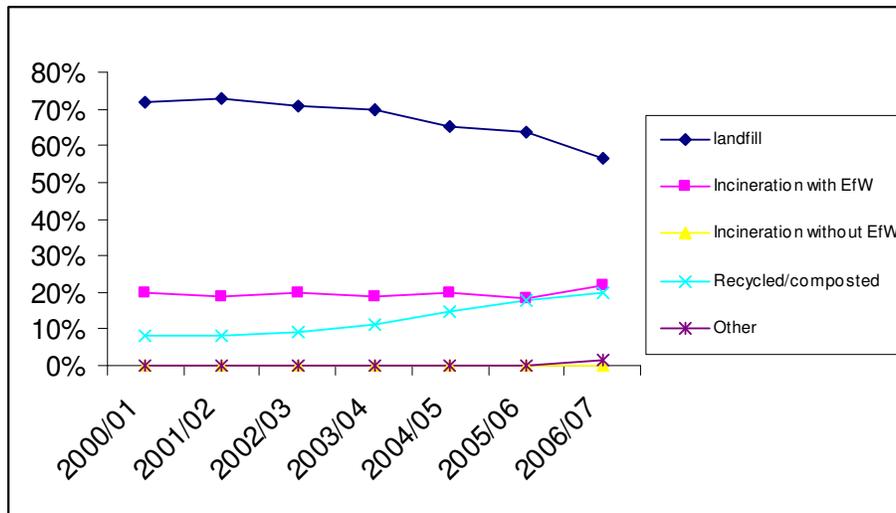
³ DEFRA, 2006.

⁴ London Councils, 2005.

and recycling/composting solutions⁵. (For comparison in 2002, only 9% of all of this waste was recycled, 20% was incinerated and more than 70%⁶ sent to landfill.)

London exports a large proportion⁷ of its municipal waste out of the capital for treatment and disposal, but there are four landfill sites in London. However, three of these will be full in a few years, with the last due to run out in 2012. As a result, the restrictions on landfill space, coupled with the level of consumption, are driving the demand for better and more appropriate methods of waste management.

Figure 3.1: Trend of the Waste treatment in the Greater London area



Most of the tonnage of municipal waste incinerated was taken to the Edmonton Solid Waste Incinerator at Enfield and the South East London Combined Heat and Power plant (SELCHP) at Lewisham. The latter received household waste from the London Boroughs of Lewisham, Bromley, Greenwich and Westminster.

3.1.4 Waste Transport and Targets

In 2001, the former Mayor of London published his draft Municipal Waste Management Strategy. This confirmed the hierarchy; set more ambitious targets for waste reduction and recycling; and confirmed a presumption against incineration. He proposed the following targets for recycling and composting:

- 25% by 2005
- 50% by 2010
- 60% by 2015.

The question which has to be raised with these targets is how recycling might increase the mileage generated by waste transport vehicles. Indeed transport chains

⁵ DEFRA, 2007.

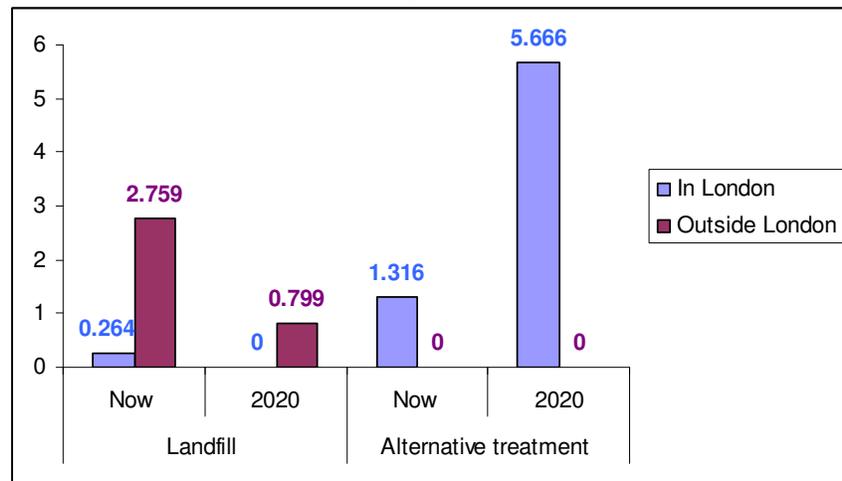
⁶ DEFRA, 2002.

⁷ DEFRA, 2002.

and servicing requirements are becoming more complex and costly with short journeys to landfill replaced by multiple journeys involving the collection, transfer and treatment of different materials within the supply chain. The treatment of some materials will involve greater transportation, increasing the overall costs of reprocessing. As a result, the proximity principle has to be adhered to.

Figure 3.2 shows the Greater London strategy, which consists of reducing the amount of waste sent to landfill sites, with the target of zero waste going to sites outside of the Greater London area, and increasing alternative treatments such as incineration and recycling within the Greater London area.

Figure 3.2: Municipal Waste Management targets in the Greater London



Data from the Environment Agency, 2007

Within the strategy, it is highly recommended that all strategies and policies include a 'transport impact analysis' at the start of the feasibility study of such policies. In fact, recycling and the transport of waste to a waste facility further than a local site may generate an increase in the impact of the transport. In the case of recycling, it is estimated that the collection is on average 11km/t and the associated environmental impacts are estimated at 0.8 to 2.6kg CO₂ per km⁸. As such, transport impacts have to be considered from the outset, and incorporated into a recycling strategy.

As a result of the associated emissions from road transport, it is essential to encourage local authorities to integrate alternative modes in their waste contracts. Some are involved but the promotion of water and rail alternatives is crucial. This idea is shared by the 2007 London Freight Plan which states that '*consideration should be given to locating new facilities where there is established or easy to deliver rail/water access to help prevent a proliferation in recycled material vehicle shipments being moved across London by road*'.

These targets, both national and local have to be reached in the coming years. As a result, multimodal journey legs have to be taken into account as soon as local waste policies are considered.

⁸ Data from the *Bureau de Recherche Géologiques et Minières* (French Government-owned company) in a study called '*Consequences of transport on the Environmental Assessment of Recycling*', June 2007.

3.2 Waste and fly tipping policies in the South London FQP area

On a South London perspective:

- 2 boroughs are grouped in a Waste Authority
- 6 are Unitary⁹ but are planning to create a Waste Authority (the South London Waste Authority)

While a new one is now being set up in the South London FQP area, only two Boroughs have currently joined a Waste Authority, namely:

- Richmond-upon-Thames
- Wandsworth (despite the fact they are a part of Waste transport authority, they are in charge of the collection of their waste goods).

The Western Riverside Waste Authority operates two waste transfer stations situated on the River Thames in Wandsworth. They also run civic Amenity sites at both these sites, which may also be used by residents of the City of Westminster.

Waste Authority	Local authority involved in
Western Riverside Waste Authority ¹⁰	Wandsworth
West London Waste Authority ¹¹	Richmond
South London Waste Authority (being created)	Croydon, Merton, Sutton and Kingston-upon-Thames
Joint Waste Planning Group (negotiating)	Bromley and Lewisham (plus Bexley, Greenwich and Southwark)

Waste competences in the South London FQP area

Local authority	Waste collection	Waste Disposal	Waste Planning
Bromley	✓	✓	✓
Croydon	✓	✓	✓
Kingston-upon-Thames	✓	✓	✓
Lewisham	✓	✓	✓
Merton	✓	✓	✓
Richmond-upon-Thames	✓		✓
Sutton	✓	✓	✓
Wandsworth	✓		✓
Waste Authorities			
Western Riverside Waste Authority		✓	
West London Waste Authority		✓	
South London Waste Authority	n/a	n/a	n/a

Data: London Waste Action, 2007

Regarding the West London Waste Authority, there are three waste transfer stations accepting waste from the Boroughs before transport to disposal sites.

⁹ By 'Unitary' it is meant that the borough is responsible for both collection and disposal of waste.

¹⁰ The London boroughs of Hammersmith & Fulham, Lambeth, Wandsworth and the Royal Borough of Kensington & Chelsea are included.

¹¹ The London boroughs of Brent, Ealing, Harrow, Hillingdon, Hounslow and Richmond-upon-Thames are included.

South London has one large incineration plant: the SELCHP at Lewisham opened in 1994 which operate for the London Boroughs of Lewisham, Greenwich, Westminster and Bromley. Landfill and incineration activities are subject to Best Practical Environmental Option procedures (BPEO).

3.3 Waste Contracts in the South London FQP Area

3.3.1 The Different Waste Contracts

Waste disposal from London waste disposal authorities is generally the result of private/public contractors (local authorities may have ownership in partnership with the private sector). Several local authorities have signed long-term (e.g. 20 year) contracts through the Waste Disposal Authorities. Most industrial waste, especially from construction and demolition, is transported by road.

Table 3.2: The South London Waste contracts¹²

	Contractor	Disposal contract	Collection contract	Contract details
Bromley	Onyx	2016	2008	Landfill
Croydon	Cleanaway	2008		Landfill
Kingston-upon-Thames	SITA / Cleanaway	2007	2008	
Lewisham	n/a			
Merton	DSO	2008		
Richmond¹³	n/a			
Sutton	DSO	2014		
Wandsworth¹⁴	Biffa / MRS Environmental Ltd / Connaught Environmental Ltd		2012	

In 2008 the Boroughs of Croydon and Merton will renew their waste contract. Boroughs have two types of contracts (collection and disposal) which can be operated by different contractors. For example of Kingston-upon-Thames which has 2 contracts for waste collection (one for waste collection and recycling and another one for street cleaning services). But generally, local authorities tend to integrate the different 'waste activities' in only one contract.

¹² Data from 2007.

¹³ Richmond is a member of a Waste Authority, then their contract is linked to the West London Waste Authority.

¹⁴ Wandsworth is a member of a Waste Authority, then their contract is linked to the Western Riverside Waste Authority.

Table 3.4: Household and municipal waste arising (2005/06)

	Waste arising (tonnes)					
	Household (HH)	Municipal (MSW)	Σ	Population	HH (tonne) per head	MSW (tonne) per head
Bromley	150,821	175,086	325,907	295,532	0.51	0.54
Croydon	79,468	189,924	269,392	330,587	0.24	0.71
Kingston	66,299	79,155	145,454	147,273	0.45	0.54
Lewisham	115,365	141,510	256,875	248,922	0.46	0.55
Merton	73,076	96,143	169,219	187,908	0.39	0.57
Richmond	n/a	n/a	n/a	172,335	n/a	n/a
Sutton	86,080	100,027	186,107	179,768	0.48	0.54
Wandsworth	n/a	n/a	n/a	260,380	n/a	n/a
Average	95,185	130,308	225,492		0.31	0.37

Data: Waste data flow, 2007

Table 3.4 shows that the average weight of waste per head differs significantly between Boroughs. Regarding household waste, weight varies from 510kg per head in Bromley to 240kg for Croydon. In contrast, the average municipal solid waste weight is 710kg per head in Croydon to 540kg per head in Sutton. The average weight per head in the South London FQP area is 310kg for Household waste and 370kg for Municipal Solid Waste.

These figures show the diversity of the nature of the waste which is transported to landfill or incinerator. They are essential to identify the potential benefits of potential consolidation of waste management between the public and private sectors.

3.4 Waste Transport in the Greater London Area

3.4.1 Key Regional Figures

Throughout the Greater London area, collection authorities¹⁶ use, between them, approximately **460 vehicles** and unitary authorities¹⁷ **535 vehicles**, to collect all of their municipal and some commercial waste; as a result almost 1,000 vehicles operate throughout the Greater London to transport waste goods. According to DEFRA, **43 million miles** and **5 million journeys** are travelled every year by waste vehicles on London's roads. 8% of freight traffic carries waste and waste freight traffic is 14% of the capitals traffic flow and contributes for 2.4 million tonnes of CO₂ emissions.

A variety of vehicles operate due to the different collection regimes in the authorities and the different types of waste produced and collected. There is also a complex combination of ownership. Operational decisions are taken by different authorities and they each work differently to each other:

- Some authorities **own the vehicles but lease them** to the operating contractor

¹⁶ Collection authorities are the collection of municipal waste.

¹⁷ "Unitary Authorities" are Councils which are responsible for almost all local government functions within their areas.

- Some authorities **own some vehicles** and lease others
- Some access all vehicles through **direct leasing agreements** or integrated contracts.

In 2006, throughout the Greater London, **229 vehicles were owned** with an estimated value of **£15m** as they were usually depreciated over the 7/8 years of their expected working life, and the rest was either leased directly or accessed through integrated contracts¹⁸.

There is variation in the approaches taken to replace vehicles, in some instances whole fleets are bought at one time and in others individual vehicles are replaced as necessary producing a mixed aged fleet. Across London this has led to vehicles and fleets in a wide range of conditions from relatively new to approaching the end of their useful life.

In 2007, none of the four prospective South London joint waste disposal authorities owned or operate vehicles. Collection authorities either deliver directly to disposal sites or disposal authorities have contracts in place for the transport of waste from transfer stations. Rail and water are sometimes used as methods of transport to disposal sites situated some distance away

Table 3.5 shows that the variety of vehicles used to transport waste is quite high This observation raises a fundamental problem which is the risk of the multiplication of the number of vehicles on the road and then the increase of local pollution. The table also shows that most of the time Refuse Collection Vehicles (RCVs) are used to transport waste goods.

Table 3.5: Vehicles used to transport waste in the South London FQP area¹⁹

Waste ↓		Bromley	Croydon	Kingston	Lewisham
Dry recycling	<i>Households waste</i>	RCV ²⁰	Purpose-built vehicle with troughs (main scheme) split bodies vehicle (plastic bottles & card collection)	Compartmentalised collection vehicle	RCV
Organics	<i>Green garden waste collected separately</i>	RCV		Split bodied	
	<i>Food waste collected separately</i>				
Waste & recycling	<i>Commercial waste</i>			Dustcart (RCV)	

¹⁸ DEFRA, 2006.

¹⁹ This list is not exhaustive but results from information

²⁰ Refuse Collection Vehicle (RCV)

Waste ↓		Merton	Richmond	Sutton	Wandsworth
Dry recycling	Households waste	Top loader vehicle (RCV for trial)	Compartmentalised vehicle	RCV	
	Bring system				
Organics	Green garden waste collected separately	RCV	RCV		
	Food waste collected separately		Compartmentalised vehicle (pod with compaction rear)		
Waste & recycling	Commercial waste	Top loader mostly			

Generally, it is observed that three-axle vehicles are more efficient than two-axle vehicles because they cause less damage on road and less pollution by weight transported. This is contrary to the local arguments on the visual aspects of waste collection. Indeed, Boroughs seem to prefer smaller two-axle vehicles. Some Boroughs mentioned they were concerned by the costs and payback of trip planning systems for urban waste logistics.

3.4.2 Waste Transport in South London - Key Information

Consultation undertaken within the framework of this research showed some variation across local policy strategies:

In **Lewisham**, waste disposal is carried out using local transfer stations, namely *Hinkcroft Transport Ltd* and *Economic*, which both recycle and bulk up the waste for disposal at landfill sites. Green waste is currently transported to a composting facility outside the Borough. In the short term there is no immediate need for additional waste sites within the Borough.

In **Kingston**, the PPS10 requires that the Borough maximize its self-sufficiency in waste management, while factoring in the sustainable transport of waste to nearby areas where a Borough has limited opportunities to develop facilities. The Plan takes into account land required for housing.

In **Wandsworth**, any waste that cannot be reused or recycled would be disposed of in accordance with the requirements of the Environment Agency and other relevant legislation, in particular the Environmental Protection Act 1990 and the Duty of Care Regulations 1991. Waste would only be deposited at authorised waste treatment and disposal sites, and **transported by licensed waste carriers**.

3.5 Overview of Fly Tipping in the Greater London Area

3.5.1 What is meant by 'fly tipping'?

The Environment Agency defines '*Fly tipping*' as the illegal dumping of waste. It can vary in scale significantly from a bag of rubbish to large quantities of waste dumped from trucks. Fly-tipped waste may be found anywhere, including at roadsides, in lay-

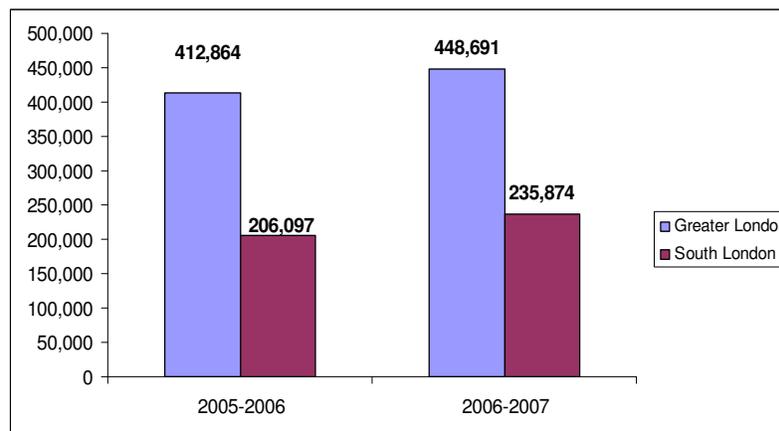
bys or on private land. Fly tipping can also be associated with the dumping of waste from vehicles. In that context, the person controlling the use of the vehicle can be prosecuted. However, a prosecution can only occur when the vehicle is identifiable.

According to the Environment Agency, 'Fly tipping' is the illegal dumping of waste. It can vary in scale significantly from a bin bag of rubbish to large quantities of waste dumped from trucks. Fly-tipped waste may be found anywhere, such as roadsides, in lay-bys or on private land. The introduction of new legislation, for example through restricting the commercial disposal of newly defined hazardous wastes, also has the potential to increase fly-tipping.

3.5.2 Fly Tipping in South London - Key Information

In 2005/06, 49% of the fly tipping incidents recorded throughout the Greater London area were located in the South London FQP area. In 2006/07, the ratio was 52% while the South London FQP covers 8 of the 33 London boroughs.

Figure 3.5: Total number of incidents in the Greater London area



Data: DEFRA, Fly Capture, 2007

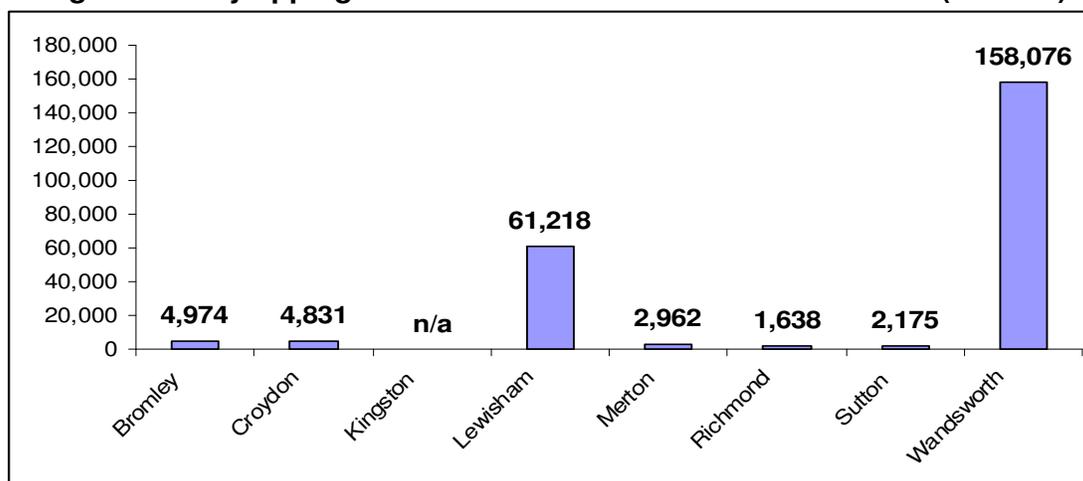
Figure 3.5 shows an increase of +8% between 2005/06 and 2006/07 of the number of fly tipping incidents in the Greater London and +12.6% for the same period in the South London FQP area.

On a purely South London FQP perspective, Wandsworth is the Borough that is most affected by fly tipping incidents; their incidence number is 96 times higher than in Richmond and nearly 2.6 times higher than the second highest Borough, Lewisham. This situation can be partially explained by the fact that it is the Borough with the highest population density in the South London FQP area. According to the local authority, the method they use to count fly tips is also different from other Boroughs. A cause and a consequence of this high number of fly tips is that allegedly, people make money by driving round in vans and offering to remove any large items for a cheap price. They then go and dump their loads on an estate where there are frequent collections organised by the local authority. In this respect, they are operating as Illegal Unlicensed Waste Disposal Operators.

In comparison with these figures which show an extremely large number of fly tipping incidents, the number of prosecutions for fly tipping in South London has been in the

range of 90-100 for each of the past 3 years, meaning that approximately only one in 2300 fly tipping incidents results in a prosecution across the area as a whole, although there are significant variations between Boroughs.

Figure 3.6: Fly tipping incidents in the South London FQP area (2006/07)



Data: Environment Agency, 2007

The evolution of the number of fly tips is quite varied around the South London Boroughs with Croydon being the Borough where the number of fly tips was reduced the most (-72%) and Lewisham being the Borough where the number of fly tips increased the most (+68%) in the same period. In parallel with this, costs to the London Boroughs increased by 2.72 in the South London area compared to 1.84 in the Greater London area.

Table 3.6: Estimated clearance costs recorded due to fly tipping

Local authority	2004/05	2005/06	2006/07
Bromley	£157,848	£342,798	£371,432
Croydon	£427,877	£372,734	£60,475
Kingston-upon-Thames	n/a	n/a	n/a
Lewisham	£1,441,300	£941,536	£1,811,646
Merton	£272,769	£190,121	£167,910
Richmond-upon-Thames	£39,911	£95,709	£93,027
Sutton	£13,319	£152,555	£131,005
Wandsworth	n/a	£3,655,746	£3,767,964
Total South London (without Kingston)	£2,353,024	£5,751,199	£6,403,459
Total Greater London	£9,116,000	£14,054,973	£16,748,311
<i>South London / Greater London</i>	<i>25,8%</i>	<i>40,9%</i>	<i>38,2%</i>

Data: Environment Agency, 2007

In 2005/06, the South London FQP area represented more than 40% of the annual cost to clear streets due to fly-tipping. This ratio is very high because the South London FQP only covers one quarter of the boroughs of the Greater London. But the most interesting thing to highlight is the fact that not all of the Boroughs are homogenous regarding fly tipping. It is very hard to explain why some are more

concerned than others and it is also hard to explain all the reasons why fly tippers operate in some areas and not in others.

Table 3.7: Estimated cost clearance per head (£/head)

	<i>Density (pers/ha)</i>	2004-2005	2005-2006	2006-2007
London Borough of Bromley	19.68	£0.53	£1.16	£1.25
London Borough of Croydon	38.21	£1.30	£1.14	£0.18
London Borough of Lewisham	70.81	£5.85	£3.82	£7.35
London Borough of Merton	49.96	£1.46	£1.02	£0.90
London Borough of Richmond upon Thames	30.02	£0.23	£0.56	£0.55
London Borough of Sutton	41.00	£0.07	£0.85	£0.74
London Borough of Wandsworth	76.00	n/a	£14.28	£14.72

Data: DEFRA, 2007

From table 3.7, it can be seen that the estimated cost to clean streets due to fly tips is increasing throughout the South London FQP area. However, these costs vary and show a divide between the amount spent per head on clearing fly tips between some Boroughs, such as between Croydon and Wandsworth (from £0.18 to £14.72). A more-in-depth analysis Borough by Borough is made in Section 4 to understand differences existing between Boroughs.

4 WASTE AND FLY TIPPING MANAGEMENT IN THE SOUTH LONDON FQP AREA

4.1 London Borough of Bromley

4.1.1 Waste in Bromley

Bromley is one of the highest producers of household waste in the SLFQP area, which is continuing to grow in average at 5% per year. An integrated collection and management contract was let in November 2001 to Onyx giving them the responsibility for collection, disposal and recycling. The waste collection contract element is for 7 years, and waste management components run for 14 years from February 2002.

Table 4.1: Facility locations in Bromley

Amenity site	Churchfields Road, Beckenham BR3 4QY
	Bromley Depot, Waldo Road, Bromley, Kent, BR1 3UH
Construction & demolition²¹	Churchill Way, Biggin Hill, Westerham, Kent, TN16 3BN
	Sports Pitch, Goddington Dene, Goddington Lane, Orpington, Kent
	Saltbox Hill Biggin Hill
Transfer station	Waldens Road St. Mary Cray Orpington BR5 4EU
	Central Depot, The Avenue, Bromley, Kent, BR1 2BS

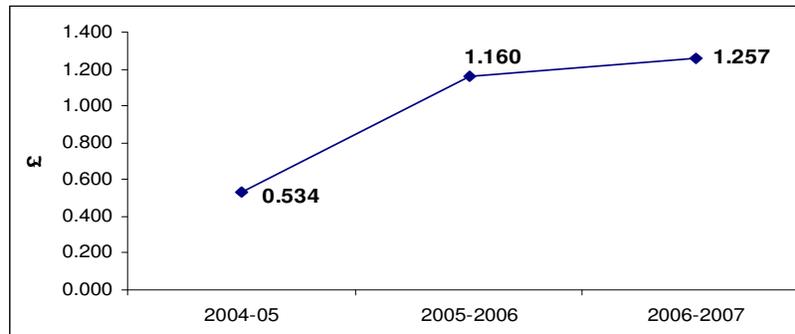
4.1.2 Fly Tipping in Bromley

In Bromley, fly tipping is considered as a criminal offence and anyone witnessing fly tipping in progress should call the police on 999. In addition, the Council's Environment Reward Scheme mentions that if anyone gives enough information to the local authority and a successful prosecution is issued to fly tippers, they could receive a reward up to £500.

Waste of any type must only be disposed of by a registered waste carrier. To get rid of non-domestic waste legally and safely, skip companies or the Council's bulky waste collection service can be used. Individuals are responsible for checking that any third party disposing of their waste is licensed to do so.

From figure 4.1, it can be seen that from 2004 to 2007, the estimated cost per head to clear streets (due to fly tips) increased (it doubled between 2004 and 2007).

²¹ Construction and demolition waste consists of all waste originating from construction, renovation and demolition activities, such as rubble, bricks and tiles.

Figure 4.1: Estimated clearance costs (per head) in the LB of Bromley

The picture below was taken in a street behind High Street, in Bromley. This area consists of stores with the back of the stores being used by retailers to receive goods and to store their skips and rubbish. Such usage raises the issue that they often put on-street items other than legal waste.

Here it is again observed that the areas behind retail stores, which are often narrow streets, rarely used by passers-by are blighted by fly tips more than other streets. Because this kind of street is mainly used by delivery and store staff, they dispose of items without really risking being prosecuted because that space is not controlled or enforced, except for parking. In short, they are not afraid of being spotted or accused either by their neighbours or by passing pedestrians.

Figure 4.2: A fly tipping spot in Bromley, behind High Street

TTR, 2008

4.2 London Borough of Croydon

4.2.1 Waste in Croydon

In 2005/06, the Best Value Performance Indicator (BVPI) 82 indicated the following ratios regarding the waste recycled and waste composted targets:

- Recycling rate: 14.63% (target: 30%)
- Composting rate: 5.48%

Table 4.2: Facility locations in Croydon

Civic Amenity Site	- Purley Oaks CAS Purley Oaks, Brighton Road South Croydon Croydon Surrey CR2 CR8 1DG - Factory Lane S W T S, Factory Lane, Croydon, Surrey, CR0 3RL
Construction & demolition	26 Selhurst Road SE25 5QF
Transfer station	- Purley Oaks CAS Purley Oaks, Brighton Road South Croydon Croydon Surrey CR2 CR8 1DG - Factory Lane S W T S, Factory Lane, Croydon, Surrey, CR0 3RL - 54 Northwood Road, Thornton Heath, Croydon, Surrey, CR4 8HQ CR7 8HQ - Sam Smith, Peartree Fm, Addington, CR0

4.2.2 Fly Tipping in Croydon

People are invited to report any fly tips throughout the Borough using two different ways:

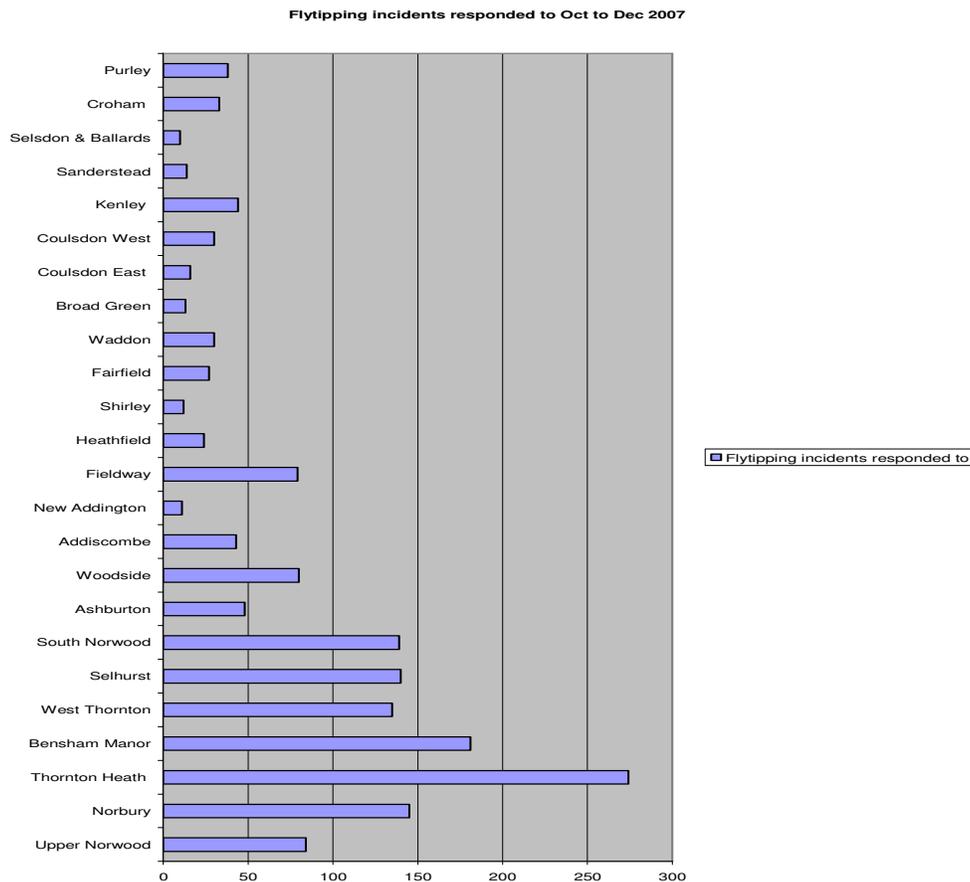
- If fly tips are on a public highway, they can contact the 'Streetscene²²' (or by filling a fly tipping form).
- If fly tips are in a park or open space, they can contact the Parks and Open Spaces of the Council.

In Croydon, the largest volume of fly tipping incidents is concentrated in the North of the Borough with Thornton Heath and Bensham Manor leading the way. For the last two years, they have issued over 400 fixed penalty notices each year for litter/ fly tipping (bags dumped on the public highway). The Borough have noticed a definite upward trend in fly tipping with furniture (mattresses, sofas, etc) being the main items being dumped. Although surveillance is being carried out to identify perpetrators, their success has been minimal thus far. The Borough is carrying out joint stop and search exercises with the Police at specific locations and have been asking selected vehicle drivers for evidence of a waste carriers licence. The last such exercise was at the end of January 2008 with 14 vehicles being stopped near the Reuse and Recycling Centre in Factory Lane Croydon. Three fixed penalty notices were issued.

The list of locations where patterns of fly tipping have been identified (figure 4.3).

²² A branch of the Council.

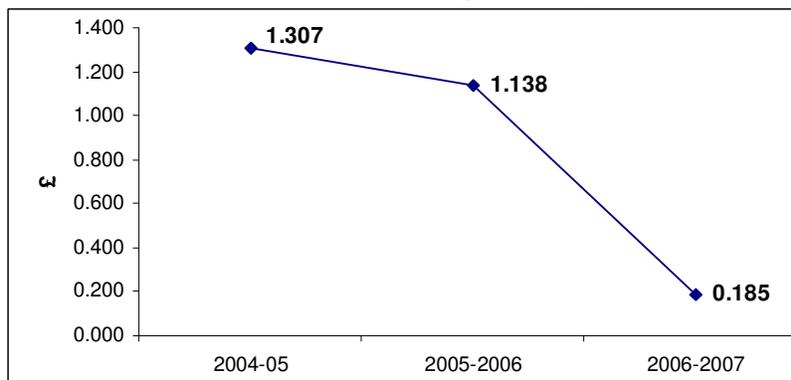
Figure 4.3 The list of locations where patterns of fly tipping have been identified



Croydon Council, 2007

Since 2004, the cost per head to clear the streets has fallen because the number of fly tips has been cut by a factor of approximately 7.1 (figure 4.4).

Figure 4.4: Estimated clearance costs (per head) in the LB of Croydon



The sites highlighted by the local authority are mainly located on small roads, close to a junction and generally in housing areas. However information provided by the local authority does not allow identification of the nature of the fly tips or their size.

Figure 4.5: Behind Croydon High Street

TTR, 2008

Figure 4.5 was taken during a weekday at lunch. This street is quite narrow and rarely used by passers-by or vehicle but has a good access. It is generally mainly used by retailers who park their car at the rear of their store and have a direct access from the back. The mattress in the picture on the left was disposed there at morning (before lunch). This picture is a good example of a 'fly tipping area' as this street is not a busy street and not enforced by CCTV, it is ideal for fly tippers as they can operate without being disturbed in their operation. The mattress stayed in the street less than 24hours.

4.3 London Borough of Kingston

4.3.1 Waste in Kingston

In 2005/06, the Best Value Performance Indicator (BVPI) 82 indicates the following ratios regarding the waste recycled and waste composted targets:

- Recycling rate: 18.37% (target: 30%)
- Composting rate: 23.9%

In **Kingston** in 2005/06 Kingston produced about 78,000 tonnes of municipal solid waste (MSW). Approximately 50,500 tonnes of this waste was sent to landfill, putting increasing pressure on landfill capacity and the environment. The 2nd Waste Strategy Implementation Plan has largely been successfully delivered and 'in principle' agreement has been reached with the Council Leaders in Merton, Croydon, Sutton and Kingston boroughs to enter into a joint procurement project. Final contract agreement and commencement of building the Dano Drum plant at Beddington Lane Farm in Sutton with these Boroughs will offer the possibility to treat 10,000 tonnes of the Council's municipal waste annually, thanks to this joint project. Broadly they are content that the modelling exercise and the resulting apportionment is consistent with the key planning objectives of PPS10 as it requires Boroughs to maximize their self-sufficiency in waste management, while factoring in the sustainable transport of waste to nearby areas where a Borough has limited opportunities to develop facilities. The interests of communities and waste authorities have been invited through a stakeholder event and through public consultation.

Table 4.3: Facility locations in Kingston-upon-Thames

Civic Amenity Site	Kingston WTS, Villiers Road, Kingston, Surrey, KT1 (aka Athelstan rd) KT1 1BW
Construction & demolition	- Tolworth Court Farm,, Kingston Road, Tolworth, Surrey - Kingston Central, Surrey Basin, Richmond Road,, Kingston Upon Thames, Surrey, KT2 5HZ
Transfer station	- Kingston WTS, Villiers Road, Kingston, Surrey, KT1 (aka Athelstan rd) KT1 1BW - Galsworthy Road, Kingston upon Thames, Surrey, KT2 7QB

4.3.2 Fly Tipping in Kingston

The Borough removes all fly tips from public highways and Borough-owned land, but if fly tipping occurs on private land the responsibility lies with the landowner to ensure the appropriate steps are taken to clear up. Generally the Council encourages people to use the Civic Amenity for disposal of non-standard refuse. If no specific request to the council is made and then if fly tips are left on streets, as a consequence a direct contravention can be issued, incurring a fine of up to £2,500.

4.4 London Borough of Lewisham

4.4.1 Waste in Lewisham

Lewisham is practising sustainability by generating energy from the combustion of its domestic waste. The Borough's streetlights are all powered by South East London Combined Heat & Power Ltd (SELCHP), energy from waste power station with a 30 megawatt capacity, producing enough electricity for 35,000 homes through the incineration of approximately 420,000 tonnes of waste per year.

In 2005/06, the Best Value Performance Indicator (BVPI) 82 indicated the following ratios regarding the waste recycled and waste composted targets:

- Recycling rate: 15.49% (target: 21%)
- Composting rate: 0.26%

The incineration of 80% of its waste is helping Lewisham Council to exceed the national recovery and landfill directive biodegradable waste diversion targets in advance of the target years.

Table 4.4: Facility locations in Lewisham

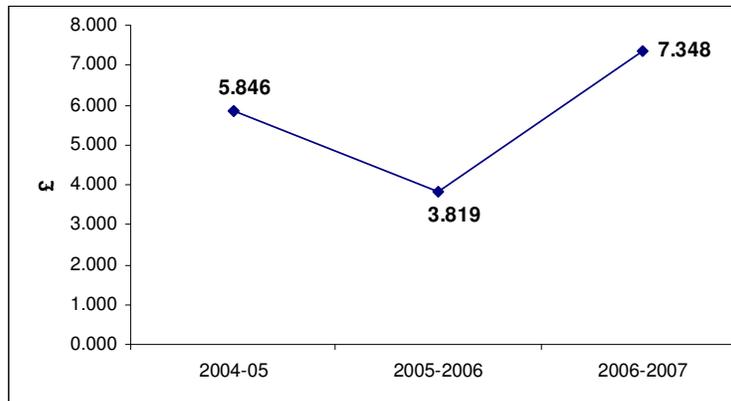
Civic Amenity Site	Landmann Way, Off Surrey Canal Road SE14 5RS
Construction & demolition	Granville Park, London, SE13
Transfer station	7 Mercury Way, New Cross, London, SE14 5RR
Incinerator	SELCHP, SE14 5RS

4.4.2 Fly Tipping in Lewisham

In order to reduce the number of fly tipping incidents, the Borough provides a special collection for big items. Those who do not respect the rules can be fined up to

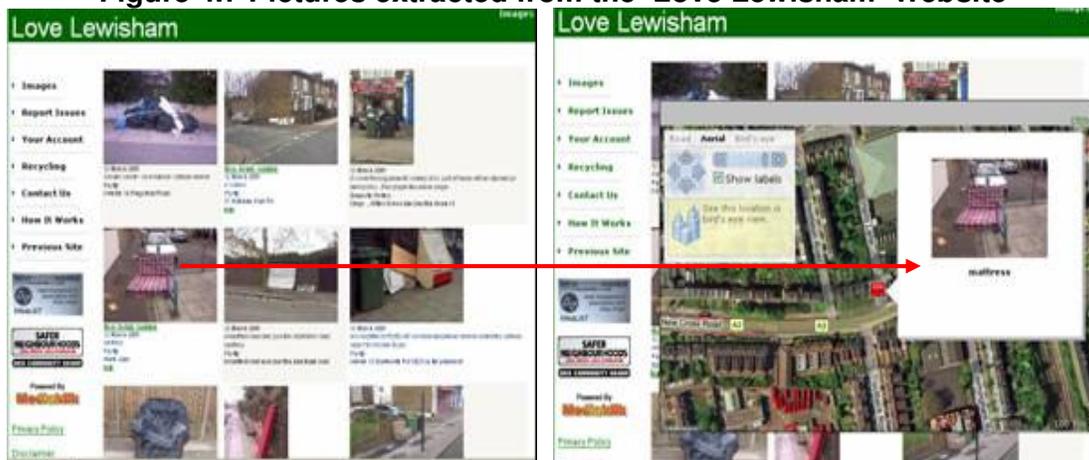
£20,000 or sent to prison. The police also have powers to seize vehicles used for fly tipping. From figure 4.6, it can be seen that from 2004 to 2007, the estimated cost per head to clear streets (due to fly tips) has varied significantly but the overall trend is towards an increase of the cost per head.

Figure 4.6 Estimated clearance costs (per head) in the LB of Lewisham



The most innovative step in their fight against fly tips is the creation of a dedicated website (www.lovelewisham.com) within the 'Love Lewisham' program. Indeed this program consists of alerting the authorities when fly tipping is in progress or has occurred. This scheme was launched nearly 3 years ago and seems to be a success according to the local authority. The 'Love Lewisham' website offered the opportunity to identify exactly where fly tips were recorded.

Figure 4.7 Pictures extracted from the 'Love Lewisham' Website



Pictures: www.lovelewisham.com, 2008

After an analysis of the fly tipping spots recorded on this website over a period of 2 weeks, some hotspots were identified as having potentially more problems with fly tips than others:

- Brocklehurst Street
- Ermine Road
- Hazelbank Road.
- Ladywall Road
- Lareham Street

- Manor Lane, Manor Park and Manor Terrace

It is interesting to notice that generally items left in the street and constituting fly tips are household waste and very rarely are from offices.

As it was not possible to visit each site, an urban design comparison between the different sites was made using satellite maps²³. It revealed that generally, the fly tipping hotspots were located in residential areas, on highways, and frequently on street junctions and then on residential roads or paths. Less frequently, from information gained on-site and from the satellite pictures, it can be deduced that fly tipped items were put on street by residents who cleaned or refurbished their houses and who did not take time to call the local authority to dispose of them. Generally, they are left not far from their origins.

4.5 London Borough of Merton

4.5.1 Waste in Merton

In 2005/06, the Best Value Performance Indicator (BVPI) 82 indicated the following ratios regarding the waste recycled and waste composted targets:

- Recycling rate: 21.33% (target: 27%)
- Composting rate: 3.72%

Table 4.5: Facility locations in Merton

Civic Amenity Site	Garth Road CAS, Garth Road, Morden, Surrey, SM4 4NJ
Construction & demolition	- 41 Willow Lane, Mitcham, Surrey, CR4 4NA - Riverside Road SW17 0HB - Abbey Industrial Estate 24 Willow Lane Mitcham CR4 4NA
Transfer station	- 71 Wier Road, Wimbledon, London, SW19 8UG - Benedict Wharf, Mitcham, Surrey, CR4 2BQ CR4 2BQ - Station Goods Yard, Mitcham Junction Railway Station, Mitcham, Surrey, CR4 4XR - Garth Road CAS, Garth Road, Morden, Surrey, SM4 4NJ
MRF	- Benedict Wharf, Mitcham, Surrey, CR4 2BQ CR4 2BQ
Landfill site	- Beddington Corner, London Road, Mitcham, Surrey, CR4 CR4 3BQ

4.5.2 Fly Tipping in Merton

The Council can remove fly tips from public roads and pavements. A dedicated enforcement team operate in Merton and patrol throughout the borough. Prosecutions can be issued if fly tippers did not make a request to the Council to get their items collected. Anyone can also report fly tipping (or any waste, which is dumped without authority) using their on-line street scene enquiry. Offenders can be prosecuted with a fine of £50,000 and imprisonment. The Council charge for removal of fly tips on private land with a minimum of £82.25 inc. VAT up to 1 tonne (and £70.50 plus VAT for each additional tonne).

Between 2004 and 2007, the costs per head to clear streets constantly decreased and are the South London FQP average.

²³ This analysis was made on a 3-week recorded data on the Love Lewisham website.

Figure 4.8: Estimated clearance costs (per head) in the LB of Merton

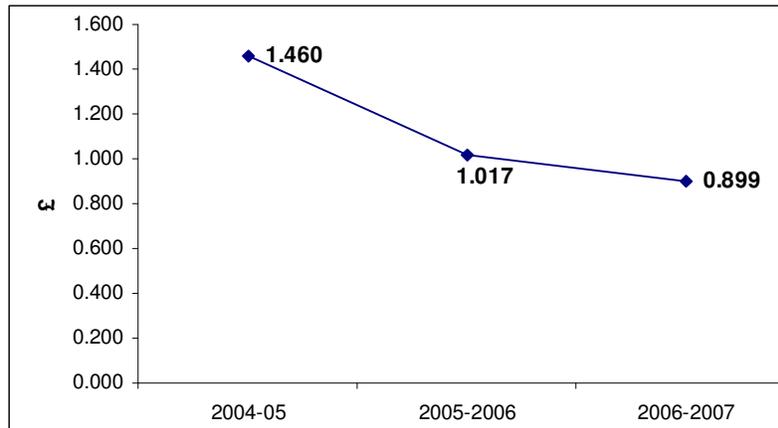


Figure 4.9: London Road and fly tipping hotspots



One specific site was identified by Merton Council which is located behind London Road in Morden. Morden London Road is on the A24 and the site that was being focused on in this survey was the area between Crown Lane and Aberconway Road. Many retail activities take place on London Road and retailers use the back of their store to receive goods.

The problem regarding the street which is behind the stores is that it is quite often badly used by store staff depositing waste behind their stores, by a few professional freight operators who, as they load and unload, leave rubbish on the street and pavements. To avoid such behaviour and to encourage people not to put up with fly tips along the pavement, the council has put easy-to-see signage in place to clearly explain the risk undertaken by offenders. Apparently, since the new signage was put in place in 2007, the Borough seems to have observed a reduction in the number of fly tips (at the same time, better enforcement has also been promoted).

Figure 4.10: Behind London Road, Merton

TTR, 2007

4.6 London Borough of Richmond

4.6.1 Waste in Richmond

In 2005/06, the Best Value Performance Indicator (BVPI) 82 indicated the following ratios regarding the waste recycled and waste composted targets:

- Recycling rate: 22.78% (target: 30%)
- Composting rate: 8.93%

Table 4.6: Facility locations in Richmond

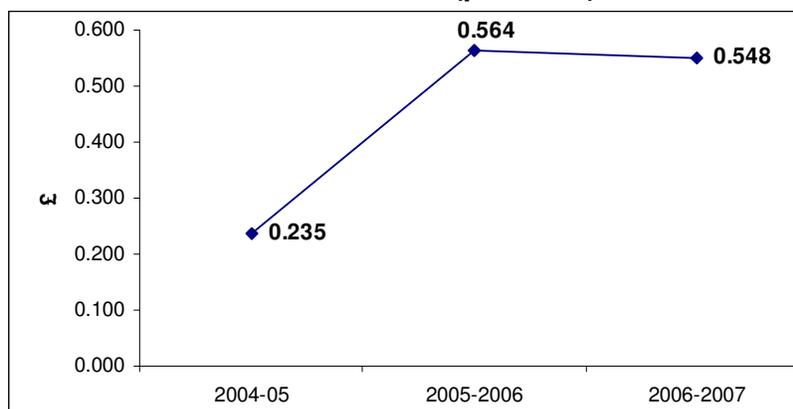
Civic Amenity Site	Garth Road CAS, Garth Road, Morden, Surrey, SM4 4NJ
Construction & demolition	- Hampton Water Treatment Works, Lower Sunbury Road, Hampton, Middx, TW12 2ES - Between Echo and Dukes Head Bridges, Bushy Park, Teddington, Middx, TW11
Transfer station	- Arlington Works, 21 Arlington Road, Twickenham, Middx, TW1 2BB
Landfill site	- Ham House, Richmond, Surrey, TW10 7RS

4.6.2 Fly Tipping in Richmond

When they were consulted, the London Borough of Richmond mentioned that they has worked with the London Borough of Ealing²⁴ and although, they noted numerous problems with fly tipping; they did not report fly tip problems in Richmond. Regardless of this, in Richmond, fly tipping is considered as a serious criminal offence; a fine up to £50,000 can be issued (and imprisonment of up to 12 months).

²⁴ The London Borough of Ealing is a member of the West London Freight Quality Partnership.

Figure 4.11: Estimated clearance costs (per head) in the LB of Richmond



4.7 London Borough of Sutton

4.7.1 Waste in Sutton

In 2005/06, the Best Value Performance Indicator (BVPI) 82 indicated the following ratios regarding the waste recycled and waste composted targets:

- Recycling rate: 20.81% (target: 30%)
- Composting rate: 9.45%

Table 4.7: Facility locations in Sutton

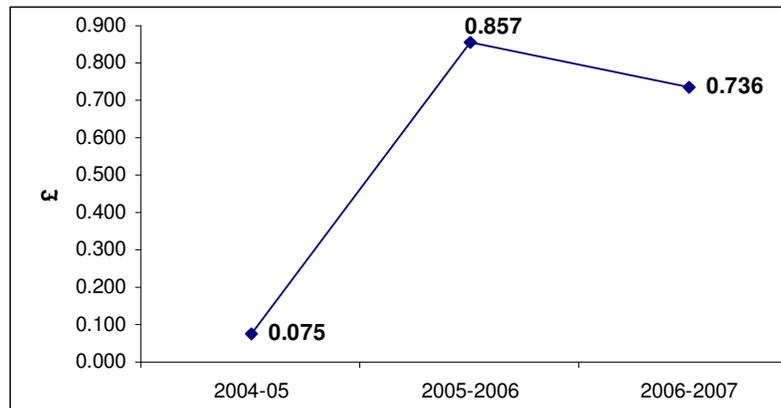
Civic Amenity Site	Oldfields Road SWTS, Oldfields Road, Sutton, Surrey, SM1 2NS
Construction & demolition	- Beddington Lane Landfill Site, Beddington Lane, Beddington, Nr Croydon, Greater London CR0 4TA - Sewage Treatment Plant, Green Lane, Worcester Park, Surrey, KT4 8AS - 51 Woodmansterne Lane, Wallington, Surrey, SM6 0SW - Land At End Of Jessops Way,, Off Beddington Lane,, Sutton,, Surrey, CR0 4TS - Oldfields Road, Sutton, Surrey, SM3
Transfer station	- Orchard Hill, Fountain Drive, Carshalton, Surrey, SM5 4NR - Oldfields Road SWTS, Oldfields Road, Sutton, Surrey, SM1 2NS London Road, North Cheam, Cheam, Surrey, SM3 9DW - Croydon Transfer Station, Endeavour Way, Sutton, Surrey, CR0 4XB
Treatment	- Plot 8, Beddington Farm, Beddington Lane, Croydon, Surrey, CR0 4TH

4.7.2 Fly Tipping in Sutton

There were 3,180 reported fly tipping incidences in Sutton between April and September last year, compared to Kensington and Chelsea, the worst London Borough for fly-tipping, who reported an overwhelming 16,779 fly-tipping incidences.

Nearly 40% of Sutton fly-tipping offences are of household rubbish totalling 1,236 offences, followed by construction waste and white goods such as refrigerators and washing machines. The council has been working hard to keep fly-tipping down. Last year Sutton Council spent an estimated £150,000 removing dumped rubbish and have instituted a new zero tolerance policy for fly-tipping. Sutton Council has warned people that they will potentially be classed as fly-tippers and will be fined if they fail to produce evidence that they hired a registered waste carrier to remove their rubbish. Fines can run up to £5,000 for failure to ensure waste is transferred by an authorised person.

Figure 4.12: Estimated clearance costs (per head) in the LB of Sutton



4.8 London Borough of Wandsworth

4.8.1 Waste in Wandsworth

As a Waste Collection (but not Disposal) Authority, Wandsworth Council lets a contract for the collection of household waste (currently awarded to Biffa). In fact, Wandsworth is a part of the Western Riverside Waste Authority (WRWA).

In 2005/06, the Best Value Performance Indicator (BVPI) 82 indicated the following ratios regarding the waste recycled and waste composted targets:

- Recycling rate: 22.6% (target: 24%)
- Composting rate: 0.27%

Biffa collects commercial waste upon request but have not recently received any such requests due to their comparatively high charges. They deploy 823 tonne refuse collection vehicles (RCV's) to collect household waste in sacks and from dustbins from low-rise premises, 7 similar vehicles fitted with bin lifts to collect from high-rise premises with communal wheeled bins, 5 RCV's to collect mixed recyclables in orange sacks from low-rise households and 3 RCV's to collect mixed recyclables in orange banks from high-rise households. A 3.5 tonne van is used to collect clinical waste and a 7.5 tonne cage vehicle is used for bulky collections. There are six area based collection days (Monday to Saturday).

All collected household waste is delivered to the Western Riverside Waste Authority's waste transfer stations in Smugglers Way, Wandsworth & Cringle Street

Battersea with the exception of "orange"²⁵ recyclables which are delivered to Cremorne Wharf across the river in the Royal Borough of Kensington & Chelsea. WRWA's contractor, Cory, sends waste for landfill disposal by barge to Mucking in Essex and bulk loads of recyclables are sent by road to Grosvenor Waste in Crayford, Kent. This will switch to incineration with energy recovery once the new facility at Belvedere, Bexley is operational.

The Council is not really aware of particular locations where waste transport is a problem, other than the problem with queues of vehicles outside local Civic Amenity sites on bank holiday weekends. As a result, the current waste management system generates many movements of goods that were not estimated in the present research due to a lack of information.

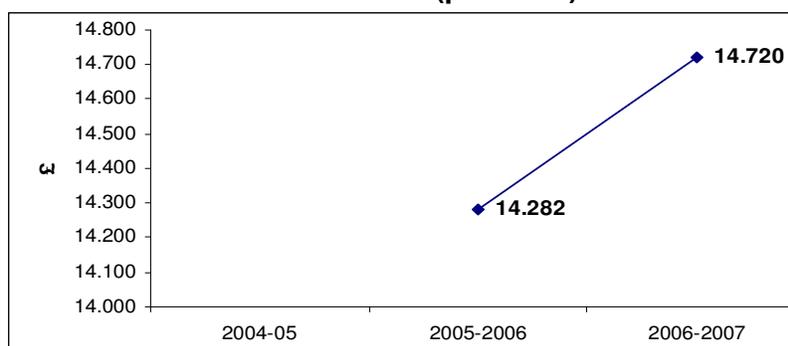
Table 4.8: Facility locations in Wandsworth

Civic Amenity Site	Cringle Dock S W T S, Cringle Street, Battersea, London, SW8 5BX
Construction & demolition	Burntwood Lane, London, SW17 0AT Furmage Street SW18 4DF 150 Falcon Road SW11 2LN Site of Battersea Power Station SW8
Transfer station	- Western Riverside S W T S, Smugglers Way, Wandsworth, SW18 3JU - Wandsworth Goods Yard, Pensbury Place, SW8 4TR - Frogmore depot, Dormay Street, SW18 1HA - 2 Bendon Valley, Tooting, SW18 4LZ
Landfill site	- Cringle Dock S W T S, Cringle Street, Battersea, SW8 5BX - Western Riverside S W T S, Smugglers Way, Wandsworth, SW18 3JU

4.8.2 Fly Tipping in Wandsworth

The Borough reported 158,076 incidents²⁶ which is the highest in the Greater London area. As a result, the estimated costs per head to clear streets due to fly tips are very high in comparison with the other South London FQP boroughs. Between 2005 and 2007, those costs increased.

Figure 4.13: Estimated clearance costs (per head) in the LB of Wandsworth



²⁵ Wandsworth Council provides all 84,000 eligible households with a kerbside collection. Residents put materials together in an orange sack, which is collected on the same day as rubbish.

²⁶ Data from Department for Environment, 2007.

Connaught Environmental Ltd took over as the contractor responsible for cleaning Wandsworth's streets on April 1st 2006. If a fly tipping incident is reported, this should be cleared within two working days although reports of fly tipping may have to be investigated by the waste enforcement team of the Borough before being cleared. A £16 charge was introduced in April 2007 for removing big items of household waste.

In Wandsworth, fly tipping is an issue throughout the Borough. For example, if a resident with a front garden places their waste for collection on the pavement, that would be regarded as a fly tip. A particular current hotspot for more regular, commercial van type fly tipping is the car park on Tooting Common off Dr Johnson Avenue.

During 2006/07 the Borough issued 204 fixed penalty notices and instigated 20 prosecutions for waste related offences. The fly capture data²⁷ sent by the Wandsworth Council shows that fly tipping incidents mainly take place on highways (57%), in majority with household items and black bags of household waste. An analysis comparing the size of items recorded in the fly tipping hotspots shows that they are single items, or small van loads. The fly capture data put in light two main locations where fly tipping are recorded: in Tooting (Garatt Lane and Mitcham Road) and Balham (Balham High Road).

Figure 4.14: Garratt lane, in Tooting Broadway



Garratt Lane is a mainly residential street (of 2 storey houses) with shops located at the South side (close to Tooting Broadway Underground Station) and the North side. Garratt Lane is also one of the main streets in the area. An on-site survey allowed us to understand the main reasons why this area was overrun by fly tips. It is a residential area where many houses are being refurbished and generally people store waste in the front yard of their house. Bigger items were put on the pavement to be collected. As a result these 'hotspots' are often located on the front of the houses in this area.

²⁷ Information taken between March 15th and March 29th 2007.

Figure 4.15 Fly tipping hotspots behind Mitcham Road



TTR, 2008

In Balham, the situation is quite similar. There are highways which generate an intense amount of traffic, and the residential streets have large pavements. However, on street surveys showed that the main hotspot was behind stores on Balham High Road where there were spaces used by fly tippers, where the retail stores should have been storing their rubbish.

Figure 4.16 Behind Balham High road & Balham high road



TTR, 2008

4.9 General Observations about Fly Tips

Local observations and consultation identified recurrent themes regarding location of the fly tipping hot spots:

- There are 2 types of fly tipping hotspots:
 - In residential areas
 - At the back of some stores.
- In a residential area:
 - They are put at the front of the houses, just beyond the front yard. It was observed that generally people left those items there when they were refurbishing their houses.
 - Generally those items were put on site by hand. No cars were used to dispose of them.

- They were mainly recorded in areas with a small amount of traffic, passers-by or cars.
 - At junctions between two streets, where it is easy to be not seen by any one.
 - They were in areas that suffered from a small amount of street lighting,
-
- At the back of stores:
 - Most of the time, fly tips were items disposed by retailers
 - They were located in dark and narrow streets, generally with low traffic
 - They were not visible from the busiest parts of the street.

In both cases, these sites have a high risk of fly tipping due to the following elements:

- No CCTV system = low risk to be prosecuted
- Isolated areas with a low number of passers-by
- Easy access to these sites by car
- Quite dark sites (low lighting).
- Junction with other routes

But sometimes some people became fly tippers due to the fact they create a 'black economy' by collecting items and being paid for this service but who then dispose of the collected items at fly tipping hotspots. Even if it was not possible to estimate the cost of such behaviour within this research, the fact still remains that it generates additional costs to the local authority which has to clean these hotspots located on private land.

5 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusions

- Local authorities are responsible for waste management and in charge of the associated transport. The Mayor of London is encouraging boroughs to increase the use of recycling systems, reduce the use of landfills outside London and trying to encourage new more sustainable treatment processes. The only incinerator operating in the South London FQP area is in Lewisham; in 2007 57% of waste was land filled, 22% incinerated and 20% recycled.
- In the Greater London area, private sector provides the majority of waste collection and disposal services for a cost estimated to £363m in 2006. Collection authorities use approximately 460 vehicles to transport waste throughout the Greater London area and 535 to collect all of their municipal and some commercial waste. DEFRA estimates the number of waste journeys to 5 millions every year (with 2.4 million tonne of CO2 emissions).
- In the Greater London area, 21 boroughs are grouped into 3 regional waste authorities only 2 in the South London FQP area (Wandsworth and Richmond-upon-Thames).
- In the South London FQP area there are:
 - 8 civic amenity sites
 - 25 construction and demolition sites
 - 20 transfer stations
 - 1 Incinerator
 - 4 landfill sites
 - 1 MRF.

All these sites are distributed across the South London FQP area and the number of vehicles on the road and the mileage is dependent upon this distribution and the way that inter-site transport is organised. Incidentally, the types of vehicles transporting waste vary in relation with the types of waste. Local policies and strategies regarding waste issues are quite complex and may result in a larger number of rounds for waste transport vehicles. As a result it could be important to optimise the rounds and then to consolidate waste transport. The development of waste authorities can be a good opportunity to investigate ways of reducing the number of vehicles on the rounds..

- Usage of the river for the transport of waste is only used in Wandsworth.
- In the South London FQP area, estimated tonnage of household waste varies from 240kg (Croydon) per head to 510kg (Bromley) and estimated tonnage of municipal waste varies from 540kg (Bromley) to 710kg (Croydon) per head.
- Generally the hotspots identified in this research are located in quiet residential areas (low frequented areas with poor or missing signage to

explain the local rules), mainly when houses are being refurbished, or at the rear of stores. Regarding the types of street where fly tipping happens, they tend to be streets without CCTV, with an easy access to other streets, dark and quiet.

- Evaluating the different routings made by waste vehicle should be done at a South London scale in order to identify the trend of the mileage made by waste vehicles but also to identify the better locations for transfer stations (idea of consolidating). This is a long term plan which could be undertaken by TfL.

5.2 Recommendations

➤ Better communication is needed regarding the topic of waste, and in particular regarding a list of the legal licensed waste disposal operators to explain to people what they have to do with fly tips that occur on private land possibly through the creation of a leaflet or newsletter.

➤ More communication should be carried out using leaflets or advertisements to explain to citizens' problems generated by fly tips and the penalties for offenders.

➤ Advertisements should also be made in the streets and on the waste vehicles (it should be included in contracts that local authorities have with freight operators).

➤ Encouraging all retailers to collect old items when they deliver new ones. The majority of this falls under the WEEE (waste electronic and electrical equipment) Directive, which was brought into force in January 2007. The Directive is one of the 'producer responsibility' Directives that has been introduced to make EU producers of new equipment pay for the recycling and/or safe treatment and disposal of the products they put on the market when they eventually come to be thrown away. As part of this Directive, retailers have to ensure that their customers can return their WEEE free of charge (Environment Agency, 2008)

➤ Better enforcement on less frequented streets. As it was observed that infractions generally happen in quiet zones, it could be useful to improve enforcement in the quiet areas. Using CCTV would be one of the best options to be sure that enforcement is done well.

➤ It is worth noting that there is a lack of signage in the fly tipping hotspots. Some boroughs are investing a lot in signage which tends to show the importance signage covers on that issue.

➤ Using Civic amenities to dispose of one's waste raise one fundamental problems which is the queue at their entrance the weekends. This fact can discourage some people who will dispose their items on street. To tackle these problems, some South London boroughs have equipped their website with a webcam to allow to people to know if there is a long queue to access

the civic amenity site. As another / additional option, we recommend that local authorities extend the civic amenities opening hours, have a better access design (such as being able to receive more cars in a same time) and in some cases increase the site capacity.

- It was mentioned in this research that the back of stores was sometimes a 'paradise' for fly tippers. This partially due to the fact that waste and fly tips were not considered when building was created. As a result, we propose developers incorporate waste management of the site into the planning process, ensuring adequate provision of storage for waste and recycling. This action should be compulsory.
- It is essential that local authorities, businesses and residents (optional) work in partnership with DVLA, Met Police, VOSA etc. The South London FQP area could be an interesting 'ground' to organise meetings and communication.
- To reduce waste impacts, it is essential that a 'waste transport impact' is thought and waste consolidation developed by the Waste Authorities.

APPENDIX

1. List of stakeholders consulted

Local authorities	Position
London Borough of Bromley	Waste manager
London Borough of Croydon	Transport planner
	Principal Trade Waste officer
	Street Scene Manager
London Borough of Lewisham	Refuse manager
	Fleet manager
London Borough of Kingston	Transitional Head of Waste
London Borough of Merton	Environment & Regeneration Department
	Principal enforcement officer
London Borough of Richmond	Waste Awareness Officer
	Assistant Head of Street Scene
London Borough of Sutton	Transport manager
	Waste & Recycling Manager
London Borough of Wandsworth	Senior policy Officer / Assistant to the Head of Waste Management
Organisations	Position
Environment Agency	Technical Specialist Enforcement Officer
Greater London Authority	Principal Policy Officer – Waste Implementation
London Councils	Principal Policy Officer
London Waste Action	Project Director