

Borough Delivery and Servicing Plan (DSP) Scoping Study - Croydon

Report



Prepared for

**South London
Freight Quality
Partnership (SLFQP)**

by



Version 4.0 January 2009

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EXECUTIVE SUMMARY

As part of its work programme for 2008/9, the South London Freight Quality Partnership, managed by TTR, obtained funding to conduct a detailed scoping study in three of its member boroughs – Bromley, Croydon and Sutton, looking at the Councils' own freight and delivery generation. Transport & Travel Research Ltd (TTR) has been working with Croydon and Bromley Councils since July 2008 to conduct the DSP scoping study. Ecolocal has been working with Sutton as part of the overall programme managed by TTR. This report presents the findings of the data analysis and recommendations regarding progress towards implementation of DSPs in Croydon.

A project inception meeting was held with the Environmental and Sustainability Team (EaST) Croydon Council in July 2008 where the approach to the work was discussed and the next steps for obtaining information about deliveries to Council Buildings were agreed. It was agreed that a review would be carried out of; Council buildings information; the Council Travel Plan; the Council Environmental Policy and procurement data. In addition, it was agreed that TTR would conduct delivery surveys.

The Council is responsible for 360 buildings, structures and open spaces in the Borough. However it was agreed that the DSP Scoping Study would only focus on the main buildings which form a dispersed Civic Complex in Central Croydon including Taberner House, The Fell Road Building, Croydon Registry Office, the Town Hall, Crosfield House, the Mint Walk Building and Davis House.

The Croydon Council Staff Travel Plan (2007 to 2010) was approved by cabinet on 12th November 2007. Whilst the Travel Plan does not currently contain any specific actions to reduce the impact of deliveries to Council offices, action number 13 to 'Work with partners and key contractors to reduce emissions from vehicles used to carry our work on behalf of the council' could be applied to delivery companies and other suppliers. Croydon Council agreed that the DSP should be integrated into the Croydon Council staff travel plan.

The Croydon Council environmental policy (the Green Commitment) was published in June 1999 and sets out Croydon's environmental aims and objectives for improving the Borough's environment. Interserve is Croydon Councils' Facilities Management contract provider and also has an environmental policy. The concept of a DSP would support Croydon Council's Green Commitment, as part of their pledge to 'reduce the impact on the environment from transport use'.

In order to obtain information about deliveries to the Council offices, it was agreed that copies of delivery notes would be obtained from Interserve. However, as it was not possible to obtain this information, TTR staff conducted onsite delivery surveys on 1/12/08 and 3/12/08. The findings of the delivery survey data analysis are summarised below.

- The majority of vehicle movements were associated with Taberner House (65%) and the Town Hall (15%)
- The majority of vehicle movements (74.31%) were associated with deliveries rather than collections to the Council buildings.
- The majority of deliveries/collections to the site are made by van (41%) with the second most commonly used vehicle being lorry (2 Axle Rigid up to 7.5 tonnes and 2 axle rigid over 7.5 tonnes) (28%)
- The majority of vehicles (89%) accessed only one building with 11% of vehicles accessing multiple buildings.

- 90% of deliveries/collections took less than 30 minutes and of these, 67% took less than 10 minutes.
- The majority of the activity was for couriers (19%), parcels (18%), packages (8%) and packets (8%).
- Most deliveries/collections were made up of only one item (44%) or two items (13%).
- The most commonly used packaging type was 'packet' accounting for 29% deliveries/collections. Boxes were used for 14% of deliveries and parcels accounted for 9%. Roll cages were only used for one delivery / collection during the survey period.
- The surveyors asked delivery drivers for information about the items being delivered and in 28% of cases; the delivery drivers did not know the content of the deliveries. 14% of deliveries were documents and 12% were tender documents. There was a wide variety of items being delivered / collected including tender documents, books, medicine and catering supplies.
- A total of 58 different companies carried out deliveries, collections or services to the Council buildings.
- The most frequent deliveries and collections were made by DHL, Interserve, Fed Ex, APC, Royal Mail and Medical Assistance. A number of these companies visited the sites more than once a day.
- Couriers accounted for over 44% of delivery / collection activities during the survey period. There were 28 different courier companies recorded. The majority of courier activity is made up of deliveries to the site (92%) rather than collections from the site.

Croydon Council Central Procurement team coordinates all contracts. However, purchasing is managed by the individual departments and so there is also some independent ordering. Council policy is to use Office Depot for all stationery orders; however departments do make ad hoc stationery orders too. Office Depot provides Croydon Council with a quarterly report, providing information on the quantity of stationery orders and an estimate of the environmental impact of the processing and delivery of these orders. These reports provide information about; the number of orders placed; the carbon dioxide emissions associated with the warehouse processing and packaging; the carbon emissions associated with the delivery process and the method used to place the order.

Based on the analysis of the delivery survey data, procurement data and review of policy documents, a number of recommendations related to supply chain management have been proposed, for example, consolidating suppliers and deliveries. Other recommendations include demonstrating the business case and increasing storage facilities within the Council buildings. Recommendations regarding the survey duration, the data recording sheet and the vehicle classification system used for the surveys were also suggested.

A progress meeting was held with Croydon Council in January 2009 and the recommendations and proposed 'Pathways to Implementation' were discussed and agreed. At this meeting Croydon Council indicated that they were keen to progress further with the work towards developing a DSP should further funding be agreed. It was agreed that because Croydon Council is developing new Civic Offices over the next few years, there is good potential for working on a DSP as the new developments take place.

Croydon Council indicated that some elements should be given more priority than others and it was agreed that priority next steps would include; the development of a business case; knowledge sharing and dissemination, integration with existing policies and the establishment of a DSP working group. Actions of a lower priority are; the identification of a DSP Champion, identification of staff resources and integration with existing networks / wider policies and use of existing resources.

1 BACKGROUND

Delivery and Servicing Plans (DSPs) provide the opportunity to manage goods and commercial vehicle activity to and from both proposed developments and currently operating sites. This consists of a range of tools, actions and interventions aimed at reducing and retiming deliveries, redefining building operations and ensuring procurement activities also account for vehicle movement, including emissions. It links to the Travel Plan process and is effectively a Travel Plan for freight.

The adoption of Freight Travel Plans is already allowed for within national policy guidance, for example within Planning Policy Guidance Note 13 (PPG13) where paragraph 88 refers to “more environmentally friendly delivery and freight movements” in the context of delivering sustainable transport objectives. The implementation of DSPs has yet to be widely taken up, however, the London Freight Plan, published by Transport for London (TfL) in November 2007 identified DSPs as one of four key projects through which it aims to achieve an increase in sustainability for goods movements in London. Furthermore, the TfL publication ‘Guidance for workplace travel planning for development’ (2008), states that ‘All travel plans should include a provision for the development of Delivery and Servicing Plans, which incorporate a legal loading plan and where necessary a Construction Logistics Plan to manage movements associated with a development’s construction phase’.

The main objectives of a DSP are to reduce the number of trips, particularly in the peak period, promote safe and legal loading, to assist in promoting best practice through TfL’s Freight Operator Recognition Scheme (FORS) and reducing congestion on the road network and to reduce the number of PCNs. Benefits of introducing a DSP include; reduced emissions, reduced congestion, improved safety and security, improved business efficiency, potentially reduced costs and demonstration of enhanced Corporate and Social Responsibility.

As part of its work programme for 2008/9, the South London Freight Quality Partnership, managed by TTR, obtained funding to conduct a detailed scoping study in three of its member boroughs – Bromley, Croydon and Sutton, looking at the Councils’ own freight and delivery generation. Transport & Travel Research Ltd (TTR) has been working with Croydon and Bromley Councils since July 2008 to conduct the DSP scoping study. Ecological has been working with Sutton as part of the overall programme managed by TTR.

This report presents the findings of the data analysis and recommendations regarding progress towards implementation of DSPs in Croydon.

2 METHODOLOGY

2.1 Approach

The main point of contact for the project is the Head of Environment and Sustainability at Croydon Council.

The work focussed on the main buildings which form a dispersed Civic Complex in Central Croydon. The Facilities Management function is outsourced to Interserve who provided information about the main stationery contract with Office Depot. TTR conducted onsite delivery surveys for two days during early December 2008. Croydon Council also provided the Council Travel Plan and Environmental Policy which were also reviewed as part of this project.

Alan Lewis and Sarah Clifford of TTR met with Kia Colbeck (Head of Environment and Sustainability, Croydon Council) on 31 July 08 at Taberner House, Croydon. At the meeting, the approach to the work was discussed and the next steps for obtaining information about deliveries to Council Buildings were agreed. Since the meeting, Croydon Council have provided contact details for the Facilities Manager who is the service lead for the Interserve contract (facilities management is outsourced to Interserve) at Croydon Council and the contract lead for the Office Depot contract.

It was agreed that data would be collected in the following ways:

- Buildings information – Kimberley Rolton of the Environment and Sustainability Team (EaST) provided a list of all Croydon Council buildings which is included in section 3.1.
- Council Travel Plan – The Croydon Council staff travel plan was provided by the EaST team and was reviewed by TTR. Reference has been made to the draft travel plan in section 3.2 along with some suggestions and recommendations.
- Environmental Policy – The Croydon Council environmental policy was downloaded from the Croydon Council website:
(<http://www.croydon.gov.uk/democracy/dande/policies/planning/environment>) and reviewed by TTR in section 3.3.
- Delivery surveys – Croydon Council outsources Facilities Management to Interserve. As part of the Facilities Management service, Interserve look after 'Goods Inwards' for the Council. Contact was made with Interserve and it was confirmed that they keep a record of the number of all deliveries and the number of packages but that they do not currently record the types of vehicles making the deliveries. Interserve agreed to make available copies of delivery notes so that TTR could analyse the delivery data. However, as this information was not actually provided to TTR, instead, TTR staff conducted onsite delivery surveys for a period of two days. The data was then entered into Excel and analysed by TTR. The data and the findings are included in section 4.1.
- Procurement data - the procurement department at Croydon Council provided information about the contract between Croydon Council and Office Depot. Office Depot produces 'Green Survey' reports for Croydon Council which were analysed by TTR and are summarised in Section 4.2.

3 OVERALL STRATEGIC REVIEW

3.1 Croydon Council Buildings

Croydon is the largest Borough in London by population with around 350,000 residents. Croydon Council is the largest employer in the borough with a workforce of about 10,500 staff, including teachers in schools. The council provides a large number of services for local people, businesses and visitors to the borough, including services for children and adults, and environmental, cultural, sports, housing, planning and benefits services.

The Council is responsible for 360 buildings, structures and open spaces in the Borough. These also include 163 ponds, woods, parks, recreation grounds, churchyards, subways, milestones, open spaces and public toilets, some of which would not necessarily be associated with deliveries/servicing activities. TTR has refined the list to show only the buildings, structures and open spaces in the Borough that are likely to be associated with deliveries and servicing activity. This edited list is shown in Table 3.1.

Table 3.1: Croydon Council buildings, structures and open spaces associated with deliveries/servicing activities

Department	Types of Services	Number of Locations
Public and Community Services	Clock Towers, Community Centres, Scout Halls	37
Education	Youth Clubs, Sports Clubs, Golf Course, Scout Huts, Centres of Excellence in Teaching (CETs), Pavilions with playing fields,	33
Social Services	Children's Units, Old People's Homes, Support Centres, offices	39
Housing	Various associations and offices	13
Environmental ,Cultural and Sports Services	Leisure Centre	1
Environmental ,Cultural and Sports Services (Env)	Depots, Air Monitoring Stations, Civic Amenity Site and Waste Transfer Station, Cemetery, Offices,	18
Environmental ,Cultural and Sports Services (Libs)	Libraries, Tax Posts	22
Environmental ,Cultural and Sports Services (Parks)	Kennel, Sports Centre	2
Environmental ,Cultural and Sports Services (Rec)	Swimming Pools, Sports Centres	5
Planning and Transportation including Car Parks	Café, Car Parks, Factory Lane Depot	21

As it is not practical to include all 360 buildings, structures and open spaces in the Borough in this scoping study, it was agreed that the DSP Scoping Study would focus on the main buildings which form a dispersed Civic Complex in Central Croydon (a site map of the Croydon Council Civic complex is included in Annex A). These buildings include:

- Taberner House, which is the Croydon Council Headquarters building and incorporates Leon House, and the "One Stop Shop" advice centre (which has 380,000 visitors per year)
- The Fell Road Building, which deals specifically with Housing Benefits and Council Tax
- Croydon Registry Office
- The Town Hall, which includes the Library, Clock Tower, Cinema, exhibition galleries and a café
- Crosfield House, which is a substance misuse treatment centre run in partnership between the Council and South London's Maudsley Hospital

- The Mint Walk Building, located next to Crosfield House, which houses the Council's IT support services (operated by Cap Gemini)
- Davis House - Croydon Council currently rents a floor within Davis House, and plan to try to purchase this in the future.

As part of the 'Urban Regeneration Vehicle', the main Council offices are being refurbished over the next few years. This will include a refit of Taberner House to improve the public reception area which houses the One Stop Shop. The refurbishment programme will involve temporary relocation of large numbers of staff.

Since July 2006, Facilities Management for Croydon Council has been outsourced to Interserve plc as part of a seven year contract. Prior to this, the Council had over 40 different service providers for support services such as cleaning, maintenance, security, catering, portering and energy management, but the 7 year contract with Interserve has integrated these into a single integrated delivery model. This supports Croydon's corporate objectives of sustainable development, fair trade, people development and supporting local communities, and led to efficiencies of approximately 15% in its first year of operation. The partnership has also led to big improvements in services such as reducing waste, increasing recycling and switching to more sustainable energy solutions. The services provided by Interserve are:

- Building maintenance
- Security
- Cleaning including window cleaning
- Catering
- Mailroom
- Reprographics
- Energy and utilities management
- Room bookings
- Portering
- Minor and major projects
- Helpdesk
- Health and Safety
- Asset & lifecycle management
- Sustainable development

Interserve also has a number of other clients in London including the London Boroughs of Havering and Lambeth and Westminster City Council. Nationwide, they also serve a number of other public sector clients include Leicestershire County Council, Nottinghamshire County Council, Slough Borough Council and Warwickshire County Council.

3.2 Staff Travel Plan

The Croydon Council Staff Travel Plan (2007 to 2010) was approved by cabinet on 12th November 2007. Initial work on Croydon's Travel Plan began in the late 1990s and achieved a great deal in terms of raising staff awareness of non-car commuting alternatives and working patterns which reduce single-occupancy car use. The updated Staff Travel Plan takes this work forward by setting out how the Council will promote travel choices, reducing reliance on the car and supporting staff to be healthy and active.

The three main objectives of the Croydon Council Staff Travel Plan are:

1. Reducing carbon emissions from business mileage
2. Reducing carbon emissions from fleet vehicles
3. Increasing staff commuter journeys by public transport, cycling and walking and car share

A Sustainable Staff Transportation Group, Chaired by the Director of Planning and Transportation was established in October 2006 to co-ordinate this work. The executive summary and action plan from the Travel Plan are included as Annex B. The key Staff Travel Plan actions are listed below.

1. Develop a business case for pool cars to reduce the need for staff to have a car at work at the central complex and Leon House
2. Develop a car share scheme, based on the national 'Liftshare' database
3. Increase flexible working hours and greater opportunity to work remotely.
4. Introduce and improve teleconferencing facilities across the council
5. Identify barriers to use of public transport through consultation with staff. Promote use of public transport through better provision of information.
6. Contact staff who have expressed an interest in being part of a Bicycle Users Group (BUG) to promote cycling.
7. Promote walking and cycling to work through events such as 'Walk to Work day', provision of cycle training, walking buddies, provision of walking and cycling maps, through the Environment Action Network, BUG, Environment Forum, Departmental Newsletters, notice boards.
8. Assess how amendments to mileage allowance could be used to encourage more fuel efficient vehicles and penalise poor performers
9. Each department to nominate a member of staff to carry out further analysis of where mileage reductions can be achieved either through walking, use of public transport, car share etc and report back to CMT on progress annually as part of monitoring arrangements.
10. Introduce biodiesel from sustainable sources for all fleet vehicles at a minimum 5% mix with standard diesel for all fleet vehicles
11. Continue vehicle replacements with more efficient vehicles
12. Review provision of parking in the staff car park, once a comprehensive package of measures to support travel choice are in place, in consultation with staff and representational bodies.
13. Work with partners and key contractors to reduce emissions from vehicles used to carry out work on behalf of the council
14. Begin a consultation process with the Workers with a Disability Group to identify opportunities for promotion of equality through the Travel Planning process. Set up an equality impact monitoring system.

The Staff Travel Plan does not currently contain any specific actions to reduce the impact of deliveries to Council offices. However, action number 13 to 'Work with partners and key contractors to reduce emissions from vehicles used to carry our work on behalf of the council' could be applied to delivery companies and other suppliers.

3.3 Environmental Policy

The Croydon Council environmental policy (the Green Commitment) is available to download from the Croydon Council website:

(www.croydon.gov.uk/democracy/dande/policies/planning/environment) and is also included as Annex C. The policy was published in June 1999 and sets out Croydon's environmental aims and objectives for improving the Borough's environment.

The overall aims are to:

- Pursue and encourage environmental sustainability
- Protect and improve the quality of the borough's local surroundings
- Meet and where possible, improve upon environmental standards
- Continually strive to improve environmental performance
- Work in partnership with all parts of the community to promote environmental sustainability

In the Green Commitment, the Council pledges to:

- reduce the amount of water used
- encourage water economy in all Croydon's buildings
- reduce the impact on the environment from transport use
- promote energy efficiency in all Croydon's buildings

The concept of a DSP would support Croydon Council's Green Commitment, as part of their pledge to 'reduce the impact on the environment from transport use'.

The Nottingham Declaration on Climate Change was written in October 2000 for Local Authorities to pledge to systematically tackle climate change, and recognises the central role of local authorities in leading society's response to the challenge of climate change. There are over 300 local authorities who already signed up so far and should Croydon sign up, the DSP would contribute to "the commitment to achieve a significant reduction of greenhouse gas emissions from our authority's operations, especially energy sourcing and use, travel and transport, waste production and disposal and the purchasing of goods and services." A copy of the declaration is attached as Annex D.

Interserve is Croydon Councils' Facilities Management contract provider and has its own environmental policy. The Interserve environmental policy is available online at <http://www.interserveplc.co.uk/plc/social+responsibility/environmental+status.htm> and sets out their environmental targets and aims. Interserve's main impacts have been identified as shown below:

- Greenhouse gas emissions from use of energy, including electricity, gas, fuel in vehicles, transport and travel
- Use of resources including water and timber
- Generation and disposal of waste

To try to reduce their greenhouse gas emissions from fuel use in vehicles, transport and travel, Interserve has taken the following actions:

- Introduced a total of 20 LPG vehicles across a range of contracts including the Metropolitan Police, South East Regional Prime and UCLH and within their own operations, which should produce 10 per cent less CO₂ than the equivalent petrol version.
- Introduced video conferencing facilities in 25 locations.
- A Green Travel Plan is in place within the Facilities Management division which is believed to have led to a 1 per cent reduction in fuel consumption in the first year of operation.

3.4 Organisational factors and integration with other policies

Due to the different organisational structures at the participating Boroughs, there are differing views as to where responsibility for a DSP should rest within each organisation.

In Croydon, responsibility for the DSP Scoping Study project was with the Environmental and Sustainability Team (EaST). In addition, the emerging Croydon Transport Strategy acknowledges the potential that DSPs have to improve operational efficiency by reducing delivery and servicing impacts to premises. It then goes on to note that “DSPs will eventually be integrated in to the Travel Plan process and would be monitored in the same way.” This reflects emerging thinking around how DSPs could be rolled out to the wider institutional community, but is presumably also indicative of how Croydon Council perceive their own DSP developing.

The concept of a DSP supports the objectives of the Croydon Council ‘Green Commitment’ which aims to ‘reduce the impact on the environment from transport use’.

4 DATA COLLECTION AND ANALYSIS

4.1 Deliveries

As part of the Facilities Management service provided to Croydon Council, Interserve is responsible for 'Goods Inwards'. The study team made contact with Interserve and it was confirmed that they keep a record of the number of all deliveries and the number of packages but that they do not currently record the types of vehicles making the deliveries. Interserve agreed to make available copies of delivery notes so that TTR could analyse the delivery data. However, as it was not possible to obtain this information, TTR staff conducted onsite delivery surveys for a period of two days.

4.1.1 Data identification and collection of delivery survey data

With support from the Croydon Council Facilities Manager, TTR survey staff conducted two days of onsite delivery surveys. The surveys took place on Monday 1st December (from 09:45 – 15:00) and Wednesday 3rd December (from 09:00 – 16:00). The delivery and servicing activity recording sheet developed and used by Bromley Council was modified and used to record the following information.

1. Building serviced
2. Date
3. Arrival and departure time
4. Time on site
5. Name of supplier/deliverer
6. Nature of delivery
7. Vehicle type (as identified by the classification sheet in Annex F)
8. Multiple building accessed
9. Purpose of the activity – collection only, drop off only, collection and drop off, workman/contractor or other
10. Number of items delivered/collected
11. Contents of parcels, packets and/or packages (if applicable)
12. Originator of the contents if different to the company name

A copy of this recording sheet is included in Annex E.

4.1.2 Deliveries and servicing access

As it is not practical to include all 360 buildings, structures and open spaces in the Borough in this scoping study, it was agreed that the DSP Scoping Study would focus on the main buildings which form a dispersed Civic Complex in Central Croydon. All of these buildings are located within a small area, with Taberner House and Fell Road located on Fell Road, and the Town Hall, Crosfield House, Mint Walk, Registry Office and Davis House located and/or accessed from Mint Walk. A site map is included as Annex A. All of these 7 buildings are served by just two delivery bays;

- Fell Road Delivery Bay – this delivery bay is located on Fell Road adjacent to Taberner House,
- Mint Walk Delivery Bay – this delivery bay is located on Mint Walk, opposite the exit from the staff car park located behind Davis House.

Fell Road Delivery Bay

The Fell Road delivery bay serves Taberner House. There are a number of ways for delivery staff to deliver goods to the building:

- When delivery vehicles arrive, the delivery staff informs the Council staff through an intercom system. The Council staff are then able to open a pair of double doors through which deliveries are received, and delivery staff are able to enter the building, via a basement and lift. These doors are located at the North End of the building (see Figure 4.1).
- Delivery and servicing vehicles can also park in the loading bay and delivery staff can then take deliveries to the main entrance located at the Southern end of this section of the building
- Delivery and service vehicles can also be driven around to a small area in front of the main reception. However, entrance to this area is restricted, with the entrance only being wide enough for one vehicle to enter and/or exit at a time. In addition, at the time of the surveys, construction works were being carried out in the area around the main entrance. As a result, there were a number of vehicles already parked on site in this area, which restricted access (Figure 4.2).

Figure 4.1: Access to interior of Taberner House



Figure 4.2: Construction work near to the main entrance to Taberner House



Restrictions are in force in the Fell Road loading bay. There are signs indicating that the parking area is for goods vehicles only and waiting times are limited to 30 to 60 minutes (Figure 4.3). Despite the signage and the presence of ticketing officials, large numbers of vehicles were observed parking and waiting in the delivery bay. In a number of cases, these vehicles were waiting for people to come out of Taberner House, or the Housing and Council Tax building on Fell Road (Figure 4.4). In addition, other delivery vehicles (not delivering to the Council) were observed using the delivery bay as a waiting area. This uncontrolled use of the loading bay prevented vehicles from accessing the bay to deliver to the Council.

Figure 4.3: Loading bay restrictions on Fell Road



Figure 4.4: Non delivery activity in the Fell Road loading bay



Katherine Street Loading Bay

The main entrance to the Town Hall is on Katherine Street. The Town Hall is served by an off-street delivery bay located just off Mint Walk, which is accessed via an external door opened by intercom (Figure 4.5 left and centre). The loading area is only big enough to allow 2 vehicles to make a delivery at the same time. There were instances during the 2 days of surveying where this caused some congestion (Figure 4.5, right). Crossfield House and Mint Walk are directly opposite this delivery bay and delivery and servicing vehicles were observed parking on the kerb outside these buildings despite parking and loading restrictions.

Figure 4.5: Delivery bay, access and loading restrictions, and congestion on Mint Walk



There are two access points to the Davis House staff car park on; Mint Walk and off Croydon Flyover. The Mint Walk entrance / exit also allows delivery vehicles access (Figure 4.6, left), whilst to the side of the Croydon Flyover Entrance is a separate delivery area. However, access to this delivery area is limited due to the presence of a skip, and parked Interserve vans (Figure 4.6, centre and right).

Figure 4.6: Davis House staff car park (left) and restricted access from the Croydon Flyover



At the eastern end of Mint Walk there are some motorcycle parking bays, which were used by some motorcycle couriers to the Council buildings (Figure 4.7).

Figure 4.7: Motorcycle parking bays on Mint Walk



It should be noted that on the first day of surveying, tenders for a Design and Technical Services project was due by 12 noon. These tender documents had to be presented to the reception in Taberner House and this had an impact on delivery movements.

4.1.3 Analysis of delivery surveys

During the 2 days of surveying, information was collected about 109 deliveries, collections or servicing activities. On each of the 2 days, approximately 55 deliveries, collections or servicing activities were recorded.

Table 4.1: Proportion of activity by building

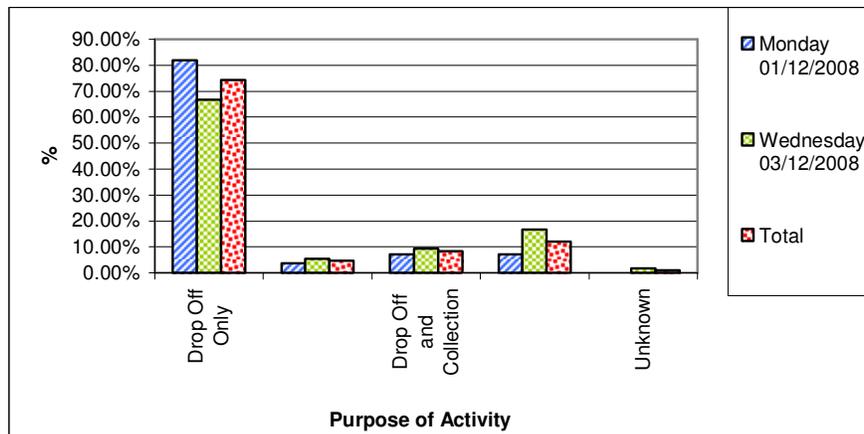
Name of Building	Frequency	Percent
Crosfield House	6	5.5
Davis House	2	1.8
Fell Road	4	3.7
Town Hall	16	14.7
Library	6	5.5
Registry Office	4	3.7
Taberner House	71	65.1
Total	109	100.0

The majority of these (65%) were to the main council building of Taberner House, with the Town Hall receiving 15% of deliveries, collections or servicing activities as shown in

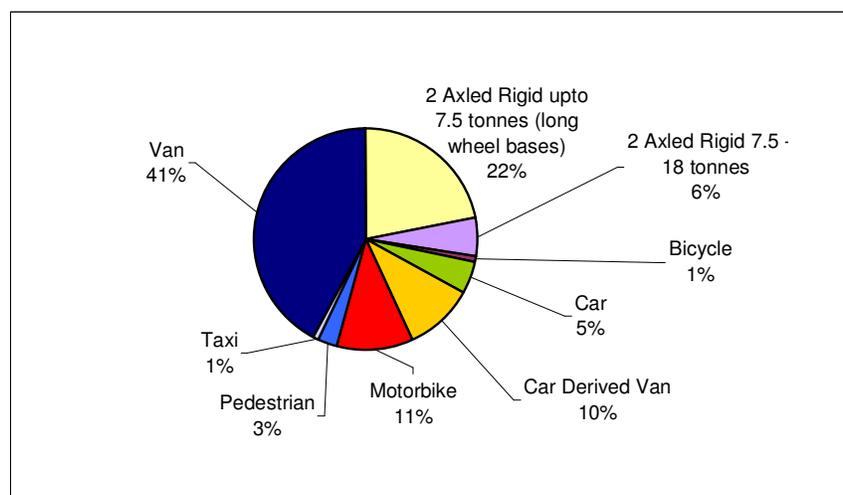
Table 4.1. 5.5% of activity was for the Library, which is located in the Town Hall, and 5.5% for Crosfield House.

As shown in Figure 4.8, the majority of the activity was associated with drops offs being made to the Council Buildings, accounting for 84% of activity on the Monday and 65% of activity on the Wednesday. However, it should be stressed that tenders for Design and Technical Services were due at 12:00 on the Monday at Taberner House, which accounted for 12 deliveries (15% of all deliveries only over the 2 days). Collections only accounted for 4% of total activity on the Monday and 6% on the Wednesday, with Drop Offs and Collections accounting for 7% and 9% respectively. With regards to Workmen/Contractors/Repairs, this varied from 5% of activity on the Monday, to 18% of activity on the Wednesday. This was a result of there appearing to be a larger amount of activity associated with the building work being completed at Taberner House on the Wednesday, compared to the Monday.

Figure 4.8: Purpose of the activity over the surveying days



The majority of activity at the site was carried out by vans accounting for 41% of all activity, with lorries (2 axled rigids (both up to 7.5 tonnes gross vehicle weight and 7.5 tonnes up to 18 tonnes gross vehicle weight)) accounting for 28% and 'Car Derived Vans' accounting for 10% of activity. This is shown in Figure 4.9, with Table 4.2 showing the breakdown of vehicle types by the purpose of the activity.

Figure 4.9: Vehicle Type

Motorcycles, '2 axled rigid' (7.5 tonnes to 18 tonnes), taxis and pedestrians were only used for deliveries. However, as shown in Table 4.3, the majority of motorcycles, pedestrians and taxis were observed on the Monday rather than the Wednesday and were delivering tender documents to Taberner House. Where collection only and drop off and collection activities were occurring, these were made by either 'car derived vans' or vans, with lorries ('2 axled rigid less than 7.5 tonnes gross vehicle weight') also used for drop offs and collections.

Table 4.2: Purpose of activity by vehicle type

Vehicle type	Purpose of Activity					
	Drop Off Only	Collection Only	Drop Off and Collection	Repair, Contractors or Workman	Other	Unknown
Lorry (2 axled rigid up to 7.5 tonnes)	25.9%	0.0%	33.3%	0.0%	0.0%	0.0%
Lorry (2 axled Rigid over 7.5 tonnes)	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Bike	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Car	6.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Car Derived Van	2.5%	40.0%	22.2%	38.5%	0.0%	0.0%
Motor Bike	14.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Pedestrian	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Taxi	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Van	37.0%	60.0%	44.4%	61.5%	0.0%	100.0%

Table 4.3: Vehicle type by day

Vehicle type	Date		Total
	01/12/2008	03/12/2008	
Lorry (2 axled rigid up to 7.5 tonnes)	8	16	24
Lorry (2 axled Rigid over 7.5 tonnes)	2	4	6
Bike	0	1	1
Car	3	2	5
Car Derived Van	2	9	11
Motor Bike	11	1	12
Pedestrian	3	0	3
Taxi	1	0	1
Van	25	21	46
Total	55	54	109

As shown by Table 4.4, whilst the majority of vehicles (89%) only accessed one building, a number of vehicles made a delivery or collection to or from more than one Council site. 11% of recorded deliveries and collections were to multiple sites, and were mainly made by UPS, DHL, PHS, City Link and Interserve.

Table 4.4: Multiple buildings access

Multiple buildings access	Frequency	Percent
No	97	89.0
Yes	12	11.0
Total	109	

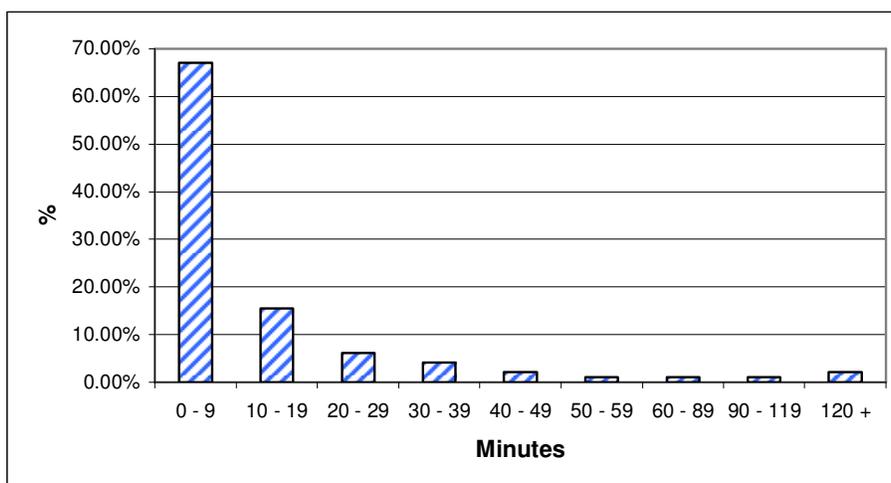
Where multiple buildings were accessed, a record was made of the main building and the secondary location being accessed. Table 4.5 shows that Taberner House and the Town Hall were the main buildings being serviced on most occasions.

Table 4.5: Secondary buildings being serviced

Main building being serviced	Frequency of multiple buildings accessed	% Multiple buildings accessed	Secondary locations serviced
Taberner House	3	43	Fell Road, Clocktower Café
Town Hall	3	43	Registry Office, Nearby Flats
Davis House	1	14	

As shown by Figure 4.10, the majority (67%) of delivery and collection vehicles were on site for less than 10 minutes, with 15% on site for 10 – 19 minutes, and 6% on site for 20 – 29 minutes. Only 10% of the delivery and collection vehicles were on site for more than 30 minutes.

Figure 4.10: Time on site



As shown by Table 4.6, of those delivery and collection vehicles which were on site for more than 30 minutes, 55% were associated with deliveries only, 27% were associated with workmen, repairs and servicing activity and 18% were involved in deliveries and collections.

Table 4.6: Purpose of activity for those vehicles on site for more 30 minutes

Time On Site (mins)	Purpose of the activity					
	Delivery Only	Collection Only	Delivery and Collection	Workman, Repairs and Servicing	Other	Unknown
30 - 39	50%	0%	25%	25%	0%	0%
40 - 49	50%	0%	0%	50%	0%	0%
50 - 59	0%	0%	100%	0%	0%	0%
60 - 89	100%	0%	0%	0%	0%	0%
90 - 119	100%	0%	0%	0%	0%	0%
120 +	50%	0%	0%	50%	0%	0%
Total	55%	0%	18%	27%	0%	0%

The nature of the delivery and servicing activity is shown in Table 4.7. The majority of deliveries, collections and servicing activity were associated with courier activity (19%), parcels (18%), packages (8%) and packets (8%).

Table 4.7: Nature of Activity

Nature of Activity	Frequency	Percent
Courier	20	18.9%
Parcel/s	19	17.9%
Package/s	8	7.5%
Packet/s	8	7.5%
Plastic Crates	5	4.7%
Workman	5	4.7%
Post	4	3.8%
Internal Mail	3	2.8%
Stationery and Paper	3	2.8%
Boxes	2	1.9%
Catering	2	1.9%
Gardener and Plants	2	1.9%
Leaflets	2	1.9%
Toilet bins	2	1.9%
Birth Certificate	1	0.9%
Books	1	0.9%
Bundles	1	0.9%
Carpet, Flooring	1	0.9%
Computer Components	1	0.9%
Drinks	1	0.9%
Glass	1	0.9%
Logistics	1	0.9%
Mail/Parcel	1	0.9%
Medical box	1	0.9%
Medicine and Mail	1	0.9%
Office Furniture	1	0.9%
Office Logistics	1	0.9%
Office Solutions	1	0.9%
Packets/ Bundles	1	0.9%
Pest Control	1	0.9%
Property Maintenance	1	0.9%
Small Box	1	0.9%
Technological Support	1	0.9%
Towels	1	0.9%
Windows+ doors	1	0.9%
Total	106	

In order to gather more detailed information about each of these deliveries, the number of items in each delivery / collection and the types of packaging used (e.g. boxes, parcels, plastic crates etc) were also recorded.

As shown in Table 4.8, 43.9% of deliveries and collections contained single items and 13.4% contained only 2 items. However there were other instances where deliveries involved a large number of items, such as Office Depot delivering 74 items from one trip, and Booker Wholesale delivering 187 bottles of wine and water in a number of boxes.

Table 4.8: Number of items delivered/collected per trip

Number of items delivered/collected	Frequency	Percent
1	36	43.9%
2	11	13.4%
3	8	9.8%
4	2	2.4%
5	1	1.2%
6	3	3.7%
7	2	2.4%
10	1	1.2%
13	3	3.7%
14	1	1.2%
15	1	1.2%
17	1	1.2%
20	2	2.4%
21	1	1.2%
23	1	1.2%
24	1	1.2%
27	1	1.2%
29	1	1.2%
35	1	1.2%
38	1	1.2%
42	1	1.2%
74	1	1.2%
187	1	1.2%
Total	82	

The packaging type used for deliveries/collections is shown in Table 4.9. The most commonly used packaging type was packets, which accounted for 29.5% of deliveries / collections. Boxes were the second most common packaging type, accounting for 13.7% and parcels accounted for 9.5%. It should be noted that some deliveries and collections involved more than one packaging type, for example, plastic crate and boxes. Roll cages were used for just one delivery / collection.

Table 4.9: Packaging type used for deliveries/collections

Type of Packaging	Frequency	Percent
Packet/s	28	29.5%
Unknown	14	14.7%
Box/es	13	13.7%
Parcel/s	9	9.5%
Plastic Crate/s	8	8.4%
Multiple Item Types (including plastic crates, boxes, parcels, coils and bundles)	6	6.3%
Package/s	4	4.2%
Bundle/s	3	3.2%
Pieces of furniture	2	2.1%
Sack of mail (including parcels)	2	2.1%
Items	1	1.1%
Other	1	1.1%
Plastic Bins	1	1.1%
Post	1	1.1%
Roll cages	1	1.1%
Toilet Bins	1	1.1%
Total	95	

In order to obtain more information about deliveries and collections, the surveyors asked delivery drivers for information about the items being delivered or collected. The findings are shown in Table 4.10. For 28% of deliveries/collections, it was not possible to identify the contents. 14% of deliveries / collections were documents and 12% of deliveries were tender documents. Due to the diverse nature of the buildings surveyed, there is a large range of goods being delivered / collected, as shown below:

- Medicine for Crosfield House
- Catering products for the Clocktower Café and Cinema
- Books and Magazines for the Library located in the Town Hall

It is interesting to note that at least 3 deliveries were specifically for the construction site and a number of deliveries and collections were associated with internal mail, which was carried out by staff from Croydon Hospital and Interserve.

Table 4.10: Contents of packaged goods

Contents	Frequency	Percent
Unknown	26	27.7%
Documents	13	13.8%
Tender Documents	11	11.7%
Books	10	10.6%
Internal Mail	5	5.3%
Brochures and Leaflets	3	3.2%
Catering	3	3.2%
IT Equipment	3	3.2%
Mail	3	3.2%
Paper and Stationery	3	3.2%
Medicine and Letters	2	2.1%
Office Furniture	2	2.1%
Books, Magazines and Mail	1	1.1%
Carpets and Flooring	1	1.1%
DVD	1	1.1%
Electrical and construction materials	1	1.1%
Glassware	1	1.1%
Medicine	1	1.1%
Newspapers	1	1.1%
Rubbish and Toilet Bins	1	1.1%
Tender Documents and Printer Toners	1	1.1%
Wood and construction materials	1	1.1%
Total	94	

In order to obtain more information about deliveries and collections, the surveyors also asked delivery drivers for information about the source of the items being delivered. However, in the majority of cases the delivery drivers were not able to answer this question either because the information was not known or due to time limitations.

Where the information was available, the names of the companies were recorded and are shown in Table 4.11. Table 4.11 also shows how many times each company was observed over the 2 day surveying period. The 103 delivery, collection and servicing activities were carried out by a total of 58 different companies during the 2 days. The companies that were observed most frequently were Interserve, DHL, Fed Ex, Brem Wilson and APC. It is interesting to note that there are a number of different companies for a number of products; for example; books are delivered by 6 different companies, catering products are delivered by at least 2 different companies and office furniture was delivered by 2 different companies (although one of these delivered furniture and assembled it on site). Paper and stationery is only supplied by Office Depot, with Mears making a collection from Taberner House, rather than a delivery.

Table 4.11: Names of supplier/deliverer, nature of and contents of deliveries and collections

	Name of Company	Nature of Delivery	Contents of Delivery	Freq.	Percent
1	DX	Packets/Bundles	Books, Magazines and Mail	1	1.0%
2	DHL	Parcel/s, Packet/s, Courier	Books, Documents, Brochures and Leaflets, Unknown	4	3.9%
3	Interserve	Plastic Crates, Books, Internal Mail, Post	Books, Internal Mail	6	5.8%
4	UPS	Courier, Parcel/s	Books, Mail, Unknown	2	1.9%
5	Interlink Express	Parcel, Unknown	Books, Unknown	2	1.9%
6	APC	Parcel, Plastic Crates	Books, Unknown	3	2.9%
7	Committee Member	Leaflets	Brochures and Leaflets	1	1.0%
8	Konsoon Grav	Carpets and Flooring	Carpets and Flooring	1	1.0%
9	Booker Wholesale	Drinks	Catering	1	1.0%
10	KFF	Catering	Catering	1	1.0%
11	Fastway Flyers	Courier	Documents	1	1.0%
12	Haven	Courier	Documents	1	1.0%
13	Lewis Day	Courier	Documents	1	1.0%
14	Iron Mountain	Boxes	Documents	1	1.0%
15	Fed Ex	Package/s, Parcel/s, Packet/s,	Documents, Glassware, Unknown	4	3.9%
16	Moss Electrical Co.Ltd.	Parcel/s	Electrical and Construction Materials	1	1.0%
17	Croydon Hospital	Internal Mail	Internal Mail	2	1.9%
18	A to Z Courier	Boxes, Courier	Internal Mail, Unknown	2	1.9%
19	VAL.L	Parcel/s	IT Equipment	1	1.0%
20	T.A.G Transport	Leaflets	Leaflets and Brochures	1	1.0%
21	Royal Mail	Post, Mail/Parcel	Mail, Unknown	3	2.9%
22	Medical Assistance	Small Box, Medical Box	Medicine, Internal Mail	2	1.9%
23	NHS	Medicine and Mail	Medicine, Internal Mail	1	1.0%
24	Barclay	Workman	N/A	1	1.0%
25	Hertel	Workman	N/A	1	1.0%
26	Johnson Controls	Workman	N/A	1	1.0%
27	Rentokil	Towels	N/A	1	1.0%
28	HA Systems	Technical Support	N/A	1	1.0%
29	Bryan Langley	Property Maintenance	N/A	1	1.0%
30	DOP Southern	Plasters, Dry Lining	N/A	1	1.0%
31	EcoLab	Pest Control	N/A	1	1.0%
32	Conran Glazing Glass	Glass	N/A	1	1.0%
33	Continental Landscapes	Gardenor and Plants	N/A	2	1.9%
34	Newsquest	Bundles	Newspapers	1	1.0%
35	Unique	Office Solutions	Office Furniture,	1	1.0%
36	PHS	Toilet Bins, Parcel/s	Rubbish and Toilet Bins, Unknown	2	1.9%

	Name of Company	Nature of Delivery	Contents of Delivery	Freq.	Percent
37	Office Depot	Stationery and Paper,	Stationery and Paper,	2	1.9%
38	Mears	Stationery and Paper, Courier	Stationery and Paper, Unknown	2	1.9%
39	E.Carriers	Packet/s	Tender Documents	1	1.0%
40	City Sprint	Courier	Tender Documents	1	1.0%
41	Courier Systems	Courier	Tender Documents	1	1.0%
42	GLH	Courier	Tender Documents	1	1.0%
43	Grey Hand	Courier	Tender Documents	1	1.0%
44	Pink Express	Courier	Tender Documents	1	1.0%
45	Prestiege	Courier	Tender Documents	1	1.0%
46	TNT	Courier, Unknown	Tender Documents, Unknown	2	1.9%
47	Bifrost Engineering	Parcel/s	Unknown	1	1.0%
48	Parcel Mit	Parcel/s	Unknown	1	1.0%
49	City Link	Packets/Parcels	Unknown	2	1.9%
50	OSI Sameday	Packet/s	Unknown	1	1.0%
51	Parcel Force	Packet/s	Unknown	1	1.0%
52	ORBIS	Package/s,	Unknown	1	1.0%
53	Aspray	Logistics	Unknown	1	1.0%
54	Adison Lee	Courier	Unknown	1	1.0%
55	Vanarak Delivery	Courier	Unknown	1	1.0%
56	Brem Wilson	Office Furniture, Logistics, Parcel/s	Unknown, Office Furniture	3	2.9%
57	Cliver	Windows+ doors	Wood and construction materials	1	1.0%
58	Unknown (includes courier and white van)	Catering, Computer, Package/s, Post, Courier, Workman, Packet/s, Birth Certificate	Catering, IT Equipment, Documents, DVD, Tender Documents, Unknown	18	17.5%
	Total			103	

Table 4.12 shows those companies making more than one visit to one or more sites on the same day. Those companies that made more than one trip to one or more of the surveying sites each day include DHL, PHS, Brem Wilson, Interserve and Fed Ex.

Table 4.12: Companies making a number of trips to one or both of the surveying sites

Name of Company	Number of trips to one or both of the surveying sites	
	1/12/2008	3/12/2008
APC	1	2
Brem Wilson	0	3
DHL	2	2
Fed Ex	3	1
Interserve	2	4
Medical Assistance	0	2
PHS	1	2
Royal Mail	1	2

A large amount of courier activity was recorded during the two day survey period, with 28 different courier companies delivering to and collecting from the sites, accounting for 44% of all delivery and servicing activity. Table 4.13 shows that the majority of these companies (18) only visited a Council site once.

Table 4.13: Courier activity

	Courier	Freq.	%
1	DHL	6	12.5%
2	Fed Ex	4	8.3%
3	APC	3	6.3%
4	Brem Wilson	3	6.3%
5	City Link	3	6.3%
6	UPS	3	6.3%
7	A to Z Courier	2	4.2%
8	Interlink Express	2	4.2%
9	Mears	2	4.2%
10	TNT	2	4.2%
11	Adison Lee	1	2.1%
12	City Sprint	1	2.1%
13	Courier	1	2.1%
14	Courier Systems	1	2.1%
15	DX	1	2.1%
16	E.Carriers	1	2.1%
17	Fastway Flyers	1	2.1%
18	GLH	1	2.1%
19	Grey Hand	1	2.1%
20	Haven	1	2.1%
21	Iron Mountain	1	2.1%
22	Lewis Day	1	2.1%
23	OSI Sameday	1	2.1%
24	Parcel Force	1	2.1%
25	Parcel Mit	1	2.1%
26	Pink Express	1	2.1%
27	Prestiege	1	2.1%
28	Vanarak Delivery	1	2.1%
	Total	48	

It would be logical to suggest that courier trips are rationalised as part of the DSP. However, as shown in Table 4.14, the vast majority of courier activity is made up of deliveries to the sites. Croydon Council doesn't have control over the courier companies selected for deliveries to the site, so there is limited potential for rationalising the number of courier trips made to the site, except to liaise with the local depots to see if scheduling could be improved.

Table 4.14: Nature of courier activity

Purpose of the Activity	Frequency	%
Delivery Only	47	92.2%
Collection Only	2	3.9%
Delivery and Collection	1	2.0%
Workman/Repairs/Collections	0	0.0%
Unknown	1	2.0%
Total	51	

4.1.4 Summary of delivery survey data analysis

- The majority of vehicle movements were associated with Taberner House (65%) and the Town Hall (15%), rather than the other council buildings in the Civic Complex in Central Croydon (Fell Road, Croydon Registry Office, Crosfield House, the Mint Walk Building and Davis House).
- The majority of vehicle movements (74.31%) were associated with deliveries rather than collections to the Council buildings.
- The majority of deliveries/collections to the site are made by van (41%) with the second most commonly used vehicle being lorry (2 Axle Rigid up to 7.5 tonnes and 2 axle rigid over 7.5 tonnes) (28%)
- The majority of vehicles (89%) accessed only one building with 11% of vehicles accessing multiple buildings.
- 90% of deliveries/collections took less than 30 minutes and of these, 67% took less than 10 minutes.
- The majority of the activity was for couriers (19%), parcels (18%), packages (8%) and packets (8%).
- Most deliveries/collections were made up of only one item (44%) or two items (13%).
- The most commonly used packaging type was 'packet' accounting for 29% deliveries/collections. Boxes were used for 14% of deliveries and parcels accounted for 9%. Roll cages were only used for one delivery / collection during the survey period.
- The surveyors asked delivery drivers for information about the items being delivered and in 28% of cases; the delivery drivers did not know the content of the deliveries. 14% of deliveries were documents and 12% were tender documents. There was a wide variety of items being delivered / collected including tender documents, books, medicine and catering supplies.
- A total of 58 different companies carried out deliveries, collections or services to the Council buildings.
- The most frequent deliveries and collections were made by DHL, Interserve, Fed Ex, APC, Royal Mail and Medical Assistance. A number of these companies visited the sites more than once a day.
- Couriers accounted for over 44% of delivery / collection activities during the survey period. There were 28 different courier companies recorded. The majority of courier activity is made up of deliveries to the site (92%) rather than collections from the site. Croydon Council doesn't have control over the courier companies selected for deliveries to the site, so there is limited potential for rationalising the number of courier trips made to the site, except to liaise with the local depots to see if scheduling could be improved.

4.2 Procurement

Croydon Council Central Procurement team coordinates all contracts. However, purchasing is managed by the individual departments and so there is also some independent ordering. Council policy is to use Office Depot for all stationery orders; however departments do make ad hoc stationery orders too.

4.2.1 Data Identification

Office Depot is the main stationery supplier to Croydon Council. Office Depot provides a 'next day to desk' delivery service which was chosen by the Council to minimise on storage. Office Depot provides Croydon Council with a quarterly report, providing information on the quantity of stationery orders and an estimate of the environmental impact of the processing and delivery of these orders. The data included in these reports covers deliveries to all Council sites. Croydon Council provided TTR with a sample of these reports for the periods:

- 01.04.2007 - 30.06.2007 (April 2007 – June 2007)
- 01.10.2007 - 31.12.2007 (October 2007 – December 2007)
- 01.01.2008 - 31.03.2008 (January 2008 – March 2008)
- 01.07.2008 - 30.09.2008 (July 2008 – September 2008)

These reports provide the following information:

- the number of orders placed
- the carbon dioxide emissions associated with the warehouse processing and packaging (calculated from the average amount of electricity and natural gas used per order, multiplied by the number of orders),
- the carbon emissions associated with the delivery process (calculated according to the average kilometres travelled by trunking and delivery vehicles per drop in the previous year, multiplied by the number of drops)
- the method used to place the order.

These figures are used to calculate the total carbon emissions associated with the warehouse processing and delivery of the orders, whilst the method used to place the order is used to calculate how much paper was used and/or saved by each method, the amount of toner used and the amount of carbon dioxide used in the paper manufacture. However, the carbon dioxide emissions associated with the paper manufacture are not included in the total figure for warehouse processing and delivering. A sample report is included in Annex H.

4.2.2 Method Statements

Upon examination of the reports, it was evident that there were some errors in the excel formulae as outlined below. These errors were corrected by TTR and then the reports were analysed.

- When calculating the total amount of CO₂ produced through warehouse processing and delivering, the formula should read as F29 + C50, not F29 + D50. The error in the formula underestimates the amount of carbon dioxide produced as a result of deliveries and warehouse processing by summing the total carbon dioxide for warehouse process in kilograms, and the total carbon dioxide produced from deliveries in tonnes.
- When calculating the paper and toner savings, some of the formulae were inconsistent between the various reports.

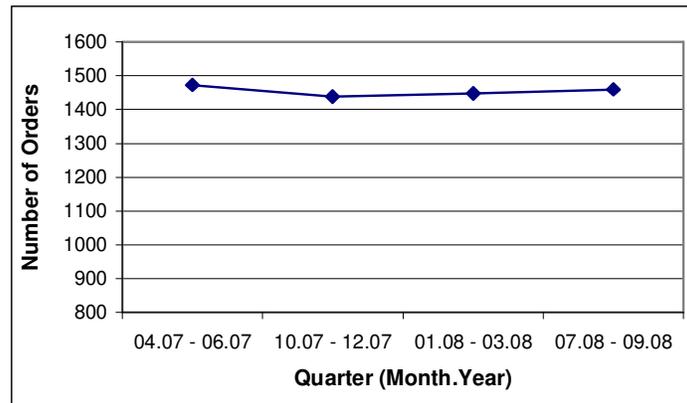
The paper and toner savings are based upon:

- E-Mail orders calculated at one sheet per order as printed on receipt.
- Fax orders calculated at two sheets (as one transmitting and one receiving)
- All order methods that require no paper (i.e. web, other electronic & phone) calculated at a saving of one sheet per order.
- The ordering method “other” was associated with using 1 sheet of paper per order.
- At present, postal orders are associated with the use of one sheet by Office Depot.

4.2.3 Data Analysis

The Office Depot Green Surveys record the number of stationery orders placed by Croydon Council. Figure 4.11 shows that the total number of stationery orders has stayed relatively constant at approximately 1450 per quarter. The highest number of stationery orders (1474) were placed between 1 April and the end of June 2007 with the fewest (1438) being placed between 1 October and the end of December 2007.

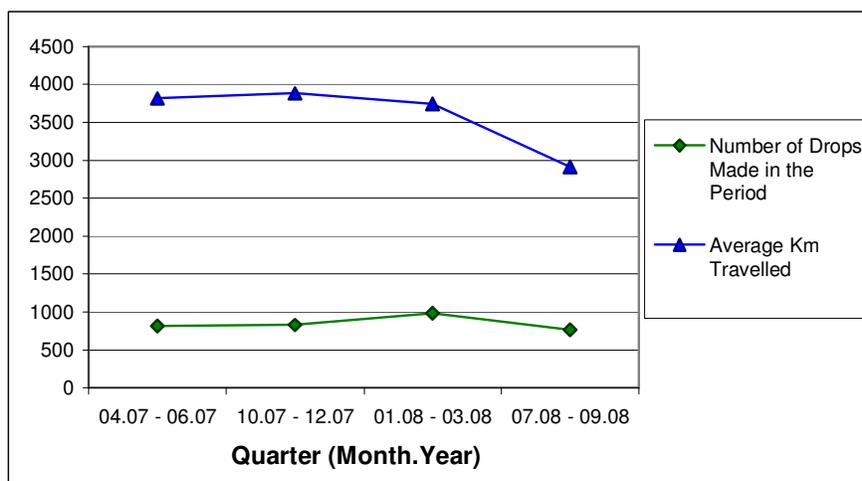
Figure 4.11: Number of Office Depot orders placed by Croydon Council April 2007 to September 2008



The Office Depot reports also record the number of drops which isn't necessarily consistent with the number of orders. As shown by Figure 4.12, whilst the number of orders has stayed relatively constant, the number of drops made has varied. There were a maximum of 985 drops made between 1 January and the end of March 2008, compared to 766 between July and the end of September 2008.

Figure 4.12 also shows that the average distance travelled by Office Depot delivery vehicles has varied over time with more kilometres travelled during 2007, compared to 2008. This is, partly as a result of fewer drops being made in the 07.08 – 09.08 quarter. However, it is also as a result of the average kilometres travelled being based on the average kilometres per drop by Office Depot vehicles from the previous year. In 2006, the average was 4.69km per drop, but in 2007, Office Depot vehicles were travelling fewer kilometres per drop, on average 3.80km.

Figure 4.12: Number of drops made and average distance travelled by Office Depot April 2007 to September 2008



TTR calculated the ratio between the number of orders placed and the number of deliveries (or 'drops'). Figure 4.13 shows the ratio of 'orders to drops' varies over time but does not

ever fall below 1.4 'orders to drops'. This would suggest that there is some consolidation of deliveries as there are always between 1.5 and 2 orders in each delivery (or 'drop').

Figure 4.13: 'Orders to drops' ratio for Office Depot orders April 2007 to September 2008

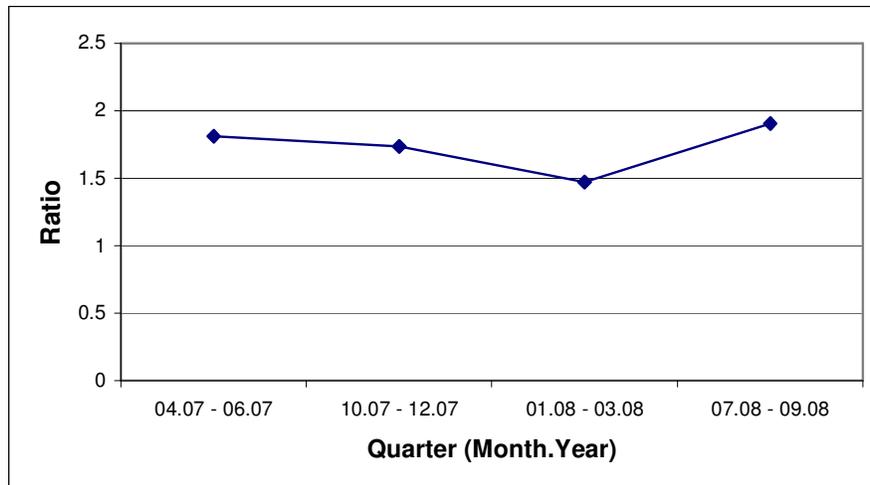


Figure 4.14 shows the amount of carbon dioxide generated as a result of the warehouse process (blue), delivery process (green) and combined (yellow). The level of carbon dioxide was relatively constant during the 2007 quarters (4519 – 4584 kg), before decreasing during the 2008 quarters. This decrease could be explained by the fact that the figure used to estimate the 'kilometres travelled per drop' was higher in 2007 than in 2008. It should be pointed out that the amount of carbon dioxide produced during warehouse processes has stayed relatively constant as a result of only a small amount of change in the number of orders placed.

Figure 4.14: Carbon dioxide emissions associated with Office Depot deliveries and processing

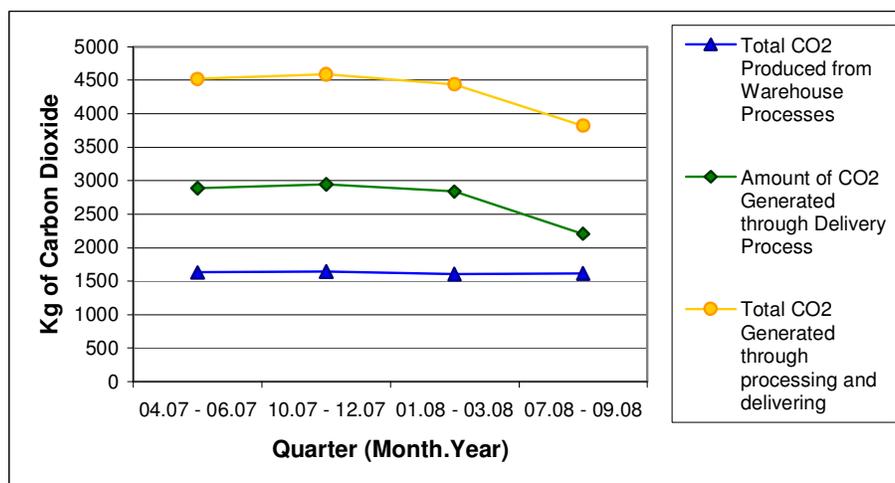


Figure 4.15 shows the main methods used to place orders with Office Depot. By email (39%) and by fax (36%) are currently the most popular methods used to place orders. 19% of orders are placed using the website. Less popular methods used to place orders are by

post, phone, and ‘other electronic method’. There has been a decline in the use of email to place stationery orders over time, whilst the use of web-based ordering has increased from 12% to 19%. From an environmental perspective, this trend is positive as orders received by email have to be printed whereas web-based orders do not require any printing. However, orders received by fax also require printing, and the use of this method has increased from 33% in the April 2007 quarter to 36% in the September 2008 quarter.

Figure 4.15: Methods used to place orders with Office Depot (April 2007 to September 2008)

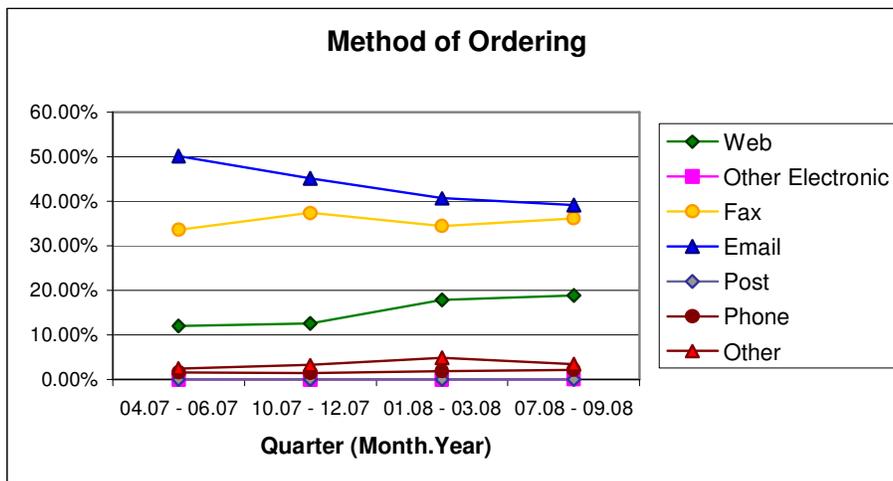
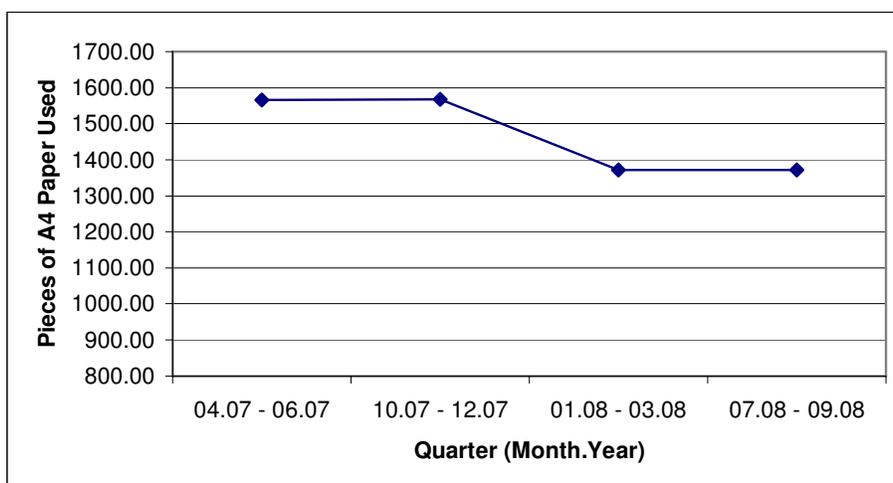


Figure 4.16 shows paper usage as a result of orders placed by Croydon Council. Overall paper usage has decreased by 14% from 1568 sheets in October 2007, to 1375 in September 2008. This reduction in paper usage is due to a change in the methods used to place orders.

Figure 4.16: A4 paper usage by Office Depot for Croydon Council orders (April 2007 to September 2008)



4.2.4 Limitations

Following the analysis of the data, TTR identified some limitations of this system. For example, although these reports are useful in identifying the number of orders placed and number of drops offs made, the reports do not:

- indicate how large any of the orders were or whether the orders consisted of multiple parcels;
- the procedures for consolidation and dispatch of orders to the same customer
- or mechanisms for continuous improvement.

5 RECOMMENDATIONS

Below are recommendations based on the analysis of the delivery survey data, procurement data and review of policy documents.

5.1.1 Deliveries

There are a number of recommendations related to supply chain management which impact on deliveries as outlined below:

- **Consolidating suppliers** - During the two week period, there were a number of occasions where there was more than one supplier used for a particular product (e.g.: catering, books and furniture). It is recommended that departments are encouraged to consolidate orders and use one supplier where practical.
- **Consolidating deliveries** – Office Depot already deliver between 1.5 and 2 orders in each ‘drop’ (as shown by the ‘drop to order ratio is section 4). Croydon Council could work with suppliers such as Office Depot to try to increase the ‘orders to drops’ ratio which would reduce the impact and cost of multiple deliveries. It is understood that this process has already started as in order to reduce costs, a ‘cap’ has now been introduced on the number of stationery orders made by Croydon Council staff.
- **Demonstrating the business case** – Office Depot already supplies Croydon Council with data to show the environmental impact of deliveries. Using the same data, it would be possible to also calculate the potential cost savings of consolidating deliveries as part of a DSP. The outcome of such an exercise could be transferable so that other Councils can promote DSPs as an ‘efficiency measure’ rather than as an ‘environmental measure’.
- **Increasing storage facilities** – It is understood that one of the barriers to consolidation of deliveries at Croydon Council is lack of storage space on site and the expectations of the end users to receive a ‘next day’ service. The Civic Centre complex in Croydon is undergoing a refurbishment in the next few years which may be an opportunity to investigate increasing storage facilities so that deliveries can be consolidated. A cost benefit analysis of the storage facilities versus consolidating deliveries would need to be conducted to determine whether this was a viable option.

5.1.2 Data Collection

- **Survey duration** - Whilst the data collected is useful in providing a snap shot of the nature of deliveries/collections to the Civic Complex in Central Croydon, the data was only collected for a period of 2 days. It is therefore recommended that a longer surveying period is used in the future to try to gather further information surrounding deliveries/collections. Alternatively, if Interserve is able to provide delivery notes and receipts to TTR, analysis of delivery data over a longer period of time could be carried out.
- **Data recording sheet** - Following a similar survey undertaken at Bromley Civic Centre, some improvements were made to the data collection sheet used in Croydon. For example, an improved vehicle classification system was used. As part of the onsite delivery surveys, TTR staff were required to record the type of delivery vehicle using a standardised vehicle classification sheet (based on the TRAVL standard). This is

included as Annex F. Following on from the Croydon surveying, it is recommended that a standardised categorisation be used in future deliveries and servicing surveys for 'Nature of Delivery'. In the two periods of surveying, the surveyors manually filled this in with text, and it would speed up and improve the data collection process, and subsequent analysis. A suggested system, from the TRAVL standard is indicated below, and is based on 2 observations. In addition, some delivery and collection vehicles accessed more than one of the surveying sites at Croydon Civic Centre. For this reason, where applicable, this question should be added to the data collection form. A revised data collection form is included as Annex G.

Table 5.1: Suggested nature of delivery and collection categorisation standard

GOODS DESCRIPTION OBSERVATIONS	
1	Envelopes
2	Packages
3	Boxes
4	Roll Cages
5	Crates
6	Pallets
7	Plastic Bottles
8	Refuse/Recycling Sacks
9	Dangerous/Hazardous Materials
10	Sack(s)
11	Tray (s)
12	Bins
99	Other (please comment)

DELIVERY/COLLECTION CATEGORY	
1	Alcohol
2	Catering/Food
3	Catering/Vending
4	CDs
5	Contractors/Builders
6	Courier
7	Document Storage
8	Electrical Items
9	Empty Crates
10	Furniture
11	Hazardous Materials
12	IT Servicing
13	Linen/Laundry
14	Mail
15	Newspapers
16	Services
17	Stationery
18	Toiletries
19	Water (bottled)
20	Other (please comment)

- **Courier activity** - Couriers accounted for over 40% of delivery / collection activities during the survey period; however with most couriers it is not possible to identify the

contents of the parcel or the supplier of the goods from observation only. Following the surveys conducted in Bromley, it was agreed that this level of detail would be useful in assessing the potential for rationalisation of courier deliveries. For example, if the majority of courier activity was related to the delivery of tenders, it may be possible to investigate using an online tendering system instead of requiring hard copy tenders. Therefore, for the onsite survey work in Croydon, TTR staff, where feasible, the surveyors asked the delivery driver to identify the supplier and content of the parcel. Surveyors were also required to determine the number of boxes and parcels being delivered and or collected which is useful when investigating whether a different vehicle type could be used.

However, as shown in Table 5.2, it was still not possible to ascertain the contents or suppliers of the majority of deliveries/collections made by couriers. It should be noted that the majority of couriers lacked time to answer questions, and in a number of cases, did not know the supplier themselves. In addition, as 92% of courier activity is associated with deliveries to the site, rather than collection from the site, the council would have limited control of this process.

Table 5.2: Contents of the boxes and parcels delivered by couriers

Contents of the Deliveries/Collections	Frequency
Unknown	19
Documents	10
Tender Documents	7
Books	6
Books, Magazines and Mail	1
Brochures and Leaflets	1
DVD	1
Glassware	1
Internal Mail	1
Mail	1
Office Furniture	1
Paper and Stationery	1
Tender Documents and Printer Toners	1
Total	51

It was noted that a number of companies made multiple trips in one day. Royal Mail has to make an initial drop off in the morning and final collection later in the day, however for the other companies, it would be beneficial to liaise with the companies concerned to see if it would be possible to consolidate deliveries/collections so that only one vehicle trip to the site would be needed.

5.1.3 Procurement

For Croydon Council, the only procurement data provided was for the main stationery supplier - Office Depot. It is recommended that procurement at Croydon Council be further investigated to gather further information. Potential consolidated ordering between departments could also be reviewed.

Previously, Office Depot has trialled a limited delivery option (allowing for consolidation of deliveries) with some London Boroughs. In response to this, the procurement team at Croydon Council explored this option informally with service users. It is understood that there was some scepticism as to whether this would work because there is currently an expectation of a 'next day to desk' delivery service.

It is understood that Croydon Council staff are currently encouraged to place Office Depot orders using the Office Depot website or the Council's own i-procurement system which is part of the Council's Oracle suite. Using these methods to place orders, reduces the amount of paper and toner used, subsequently lowering the environmental impact of the orders.

6 LESSONS LEARNED

The preliminary lessons learned from the DSP Scoping Study in Croydon relate to; organisational factors & integration with other policies, delivery survey techniques and gathering of procurement data. More detail about each of the lessons learned is included below.

6.1 Organisational factors and integration with other policies

Due to the different organisational structures at the Borough Councils, there are differing views as to where responsibility for a DSP should rest within each organisation. At Croydon Council, the emerging Croydon Transport Strategy acknowledges the potential that DSPs have to improve operational efficiency by reducing delivery and servicing impacts to premises. It then goes on to note that “DSPs will eventually be integrated in to the Travel Plan process and would be monitored in the same way.” This reflects emerging thinking around how DSPs could be rolled out to the wider institutional community, but is presumably also indicative of how Croydon Council perceive their own DSP developing. Whereas at the other two Boroughs involved in the DSP Scoping Study; London Borough of Sutton and Bromley Council, there are different views as to how the DSP should be integrated into existing policies and structures. For example, at the London Borough of Sutton, the main point of contact for the project has been the co-ordinator of Sutton’s EMAS team, who has cross-Borough responsibility for initiatives such as DSPs which are primarily viewed as having an environmental focus. In Bromley, responsibility for the DSP Scoping Study was with the Transport Strategy and Facilities Management departments. The view of Bromley Council is that a Bromley Council DSP should stand alone and should not be incorporated into the Environmental Policy or Council Travel Plan.

6.2 Delivery Survey techniques

As part of the DSP Scoping Study, delivery data was collected – by TTR staff for Croydon Council and by Bromley Council staff for Bromley. Data collection is currently underway by Ecolocal and Sutton. A data collection sheet was developed to gather data for Bromley Council and a number of lessons learned were identified regarding delivery survey data collection as outlined below. These lessons learned were then taken into account to develop the data collection sheet for use at Croydon Council.

The original data collection sheet was drafted and used by Bromley Council staff to gather data on deliveries to Bromley Council. After analysing the data gathered by Bromley Council, TTR then modified the sheet to improve the quality of information collected, and a revised version was subsequently used when surveying delivery activity at Croydon Council. These modifications are summarised below:

- 5 columns were originally used to indicate the approximate amount of time spent on site and to indicate if the activity was delivery or collection only (Table 6.1). The data entered in this sheet indicated that there was some confusion surrounding the column headings. Therefore, these five columns were removed.

Table 6.1: Columns removed from the original data sheet

Approximate Time on Site	Drop Off Only	Approx Time on Site	Collection Only	Approx Time on Site
3 hrs	n/a	n/a	n/a	n/a
n/a	Yes	10 mins	n/a	n/a
n/a	n/a	n/a	Yes	10 mins

- Instead, an additional column was added which indicated the purpose of activity, whether it be delivery, collection, delivery and collection, repair/workmen/contractor or other, with a numbering system.
- The time column was renamed to ‘arrival time’ and a column was added for ‘departure time’. This allowed for time on site to be calculated during the data analysis.
- A column was added to reveal the number of items that were delivered/collected, which was recorded by the surveyors.

TTR staff conducted the delivery surveys at Croydon Council and in order to obtain more information, they asked questions of delivery drivers to ascertain the contents of boxes, parcels and packets, and if possible, who was the supplier of the contents. Whilst this was useful, it should be noted that in the majority of cases it was unknown who the supplier was and that the majority of couriers had very little time available to stop and answer questions such as these.

Vehicle Classification system - The delivery data gathered by Bromley Council was analysed by TTR. During the analysis it became apparent that in future surveys, the use of a vehicle classification system would make the data easier to analyse. Therefore, a standardised vehicle type categorisation was used for the similar delivery surveys conducted in Croydon. This was based on the TRAVL standard, but included a further category of 2 Axle Rigid up to 7.5 tonnes with a long wheel base. A copy of the standard used is included as Annex F.

Nature of deliveries - The delivery data gathered by Bromley Council was analysed by TTR. Based on the analysis, it is recommended that, in future surveys, a standard is used to define the nature of deliveries. A suggested system, from the TRAVL standard is included as Annex I.

Whilst the data collected as part of this study is useful in providing a snapshot of the nature of deliveries/collections for the Borough Councils, the data was only collected for a short period of time. It is therefore recommended that a longer surveying period is used in the future to try to gather information surrounding deliveries/collections.

It was noted that a number of companies made multiple trips to the surveying sites on the same day. With respect to this, it would be beneficial to liaise with companies making multiple visits to the same site on the same day to investigate whether it would be possible to group deliveries/collections so that only one vehicle trip to the site would be needed. The current arrangement may reflect the level of service provision offered by the service provider in order to win the contract – a guarantee of same day delivery may be regarded as a sign of responsiveness in the award of a contract, but has inevitable consequences for transport if implemented within a devolved purchasing system. Changes to such an arrangement would necessitate changes to working practices within the organisation in terms of ordering, storage etc.

6.3 Procurement data

It was observed that procurement is dealt with differently at the three Councils. For example, at Croydon Council, Interserve oversees procurement of stationery through Office Depot and at Bromley Council procurement is not currently dealt with centrally. Bromley Council uses an electronic ordering system (i-Proc) which can be used by all departments to place orders. At Sutton Council, only some contracts are managed centrally, notably stationery, photocopiers and printing. Many other services and goods are procured by individual departments with 478 registered users in the authority who can raise a requisition and purchase goods which may result in one or more vehicle movements. However, as part of EMAS, a procedure was introduced to 'Green the supply chain'. This requires suppliers for contracts worth over £5k to have an environmental policy which is expected to refer to transport if relevant.

Croydon Council stationery supplies are mainly sourced from Office Depot. In response to interest expressed by Croydon Council, Office Depot developed an environmental report which illustrates the likely environmental impact of stationery deliveries to Croydon Council offices. The reports contain information provided about the carbon dioxide emissions associated with the processing and delivering of their orders and the amount of paper used by Office Depot in their processing.

Following the analysis of the data, TTR identified some limitations of this system. For example, although these reports are useful in identifying the number of orders placed and number of drops offs made, the reports do not:

- indicate how large any of the orders were or whether the orders consisted of multiple parcels;
- the procedures for consolidation and dispatch of orders to the same customer
- or mechanisms for continuous improvement.

7 PATHWAY TO IMPLEMENTATION

Over the next few years, Croydon Council is developing new Civic Offices, so there is good potential for working on a DSP into over the next few years as the new developments take place. The proposed pathway to implementation of a Delivery and Servicing Plan for Croydon Council includes:

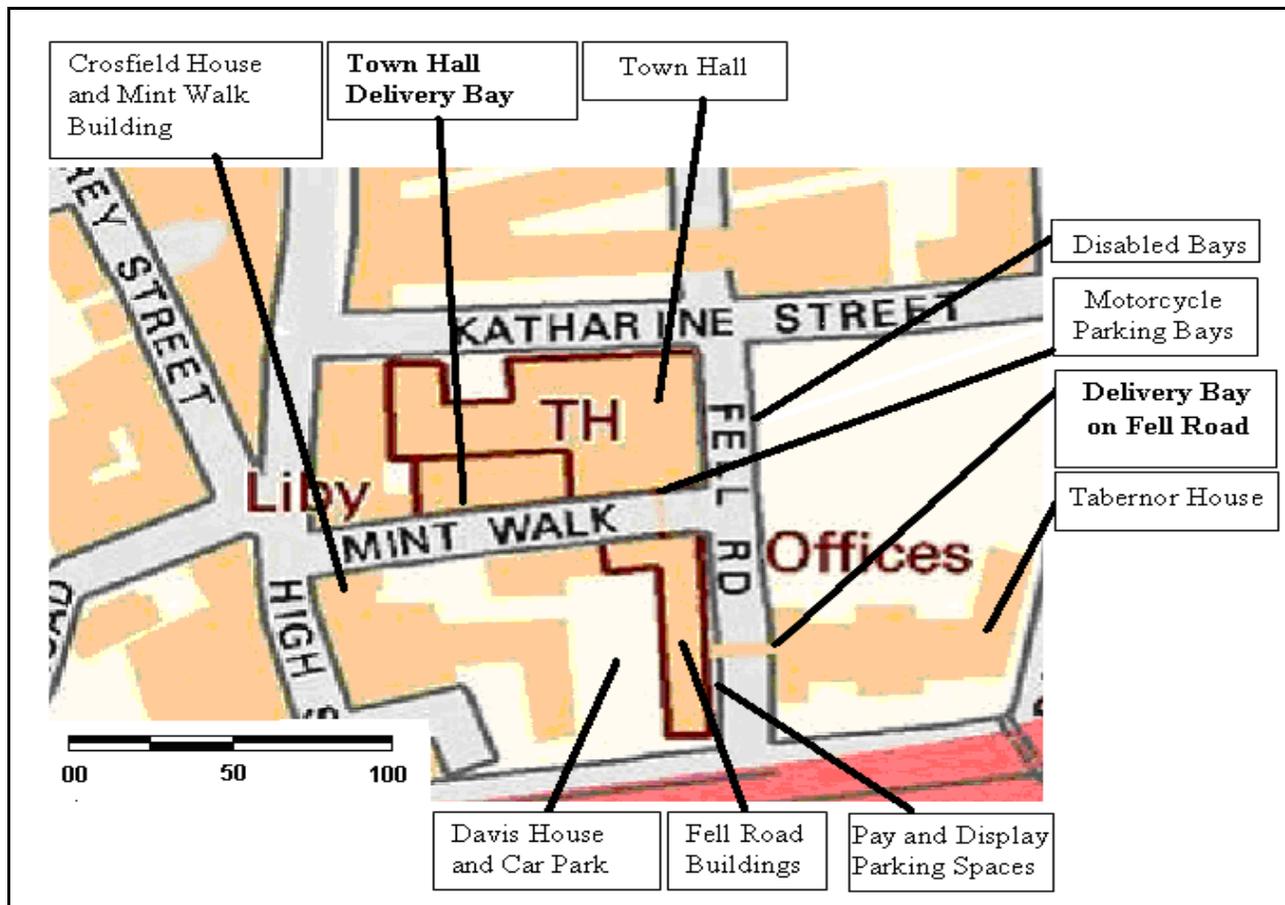
- **Development of a business case** – through further research with Council departments and Interserve, a business case needs to be developed for the DSP. This would clearly define a DSP and demonstrate the potential cost savings, environmental benefits and efficiency benefits of a DSP. However, it should be acknowledged since a DSP is a new concept to local authorities and there are no case studies available, it will be difficult to actually work on a business case, especially working with departments who would not want to own this. Croydon Council is also interested in identifying what specific support (funding/human resource etc) is available to work on a business case and further potential implementation of the plan.
- **Integration with Council Policies** –The DSP will be integrated into the existing Croydon Council Staff Travel Plan.
- **Knowledge sharing and dissemination** – development of a case study / good practice guide at the end of the project. Make information available about the Croydon DSP on the Croydon website. The case study information could be made available through ENVIBE ('Environmental Business Excellence') which gives hands on support to businesses in Croydon and rewards environmental business excellence.
- **Establishment of a DSP Working Group** - to ensure that the relevant departments fully understand the benefits of DSP and are all supportive of the process. Suggested representatives are: Andrew Day (Facilities Management), Peter McDonald (Acting Head of the Environment and Sustainability Team at Croydon Council), Paul Croxon (Head of Transport) a representative from Procurement and a member from the Pollution team.
- **Identification of a DSP Champion** - Senior-level support for the concept from across sectors – for Croydon Council, the main support for the project has been from the Environmental and Sustainability Team (EaST). Therefore it is recommended that the Director of the EaST leads the development of the DSP for Croydon, with a potential champion being a member of the Service Transformation and Support Division.
- **Human Resources** – the implementation of a DSP will require an identified staff resource from within Croydon Council. It is recommended that an existing staff member from the Environmental and Sustainability Team is given responsibility for coordinating the DSP alongside their other duties.

Integration with existing networks / wider policies and use of existing resources – e.g. the Mayor's Green Procurement Code, which is a free support service for London based organisations committed to reducing their environmental impact through responsible purchasing. The programme provides practical advice and online resources to help embed green purchasing into all aspects of an organisation, including sourcing green products. The expansion of Council procurement procedures to include reference to suppliers' transport practices and specification of the use of FORS-registered companies is another example of how to build the wider policy agenda into the DSP as it develops. In addition, the Croydon Council DSP would need to be developed in parallel

to the London-wide work commissioned by TfL to pursue the development of a framework for DSPs, focussing initially on TfL and the GLA Group premises, followed by other public authority activities.

These proposed measures are subject to funding being made available, and the drafting of specific project deliverables.

ANNEX A: SITE MAP



**ANNEX B: CROYDON COUNCIL STAFF TRAVEL PLAN –
EXECUTIVE SUMMARY AND KEY ACTIONS**

Croydon Council - Draft Staff Travel Plan 2007- 2010

Executive Summary / Key Actions

Action	Owner	Timeframe	Cost
Develop a business case for pool cars to reduce the need for staff to have a car at work at the central complex and Leon House	HR / Environment and Sustainability Team (EaST)	During 2008	Business case to be developed
Develop a car share scheme, based on the national 'Liftshare' database to be accessed online and administered by Liftshare, including marketing plan to ensure effective communication to staff through all communication channels.	EaST	December 2007	£2,000 per annum funding for 2007/08 already drawn down
Increase flexible working hours and greater opportunity to work remotely.	Service Transformation	ongoing	May lead to savings
Introduce and improve teleconferencing facilities across the council	Service Transformation	By April 2010	May lead to savings
Identify barriers to use of public transport through consultation with staff. Promote use of public transport through better provision of information (for example use of the TfL 'Journey Planner')	EaST	By 2009	Within existing budget
Contact staff who have expressed an interest in being part of a Bicycle Users Group (BUG) to promote cycling. If possible encourage those staff who are most enthusiastic to lead on the development of Terms of Reference and annual projects for this group, such as a cycle 50% club, 'buddying' with staff who are not confident to cycle alone, identifying where improvements to showers or storage would lead to a greater number of cyclists.	EaST	By 2008	- £1, 000 of funding already drawn down for 2007/08 - Officer time within existing budgets. - 'Cycle 50% club' £5,000 optional project with Company of Cyclists using funding already drawn down
Promote walking and cycling to work through events such as 'Walk to Work day', provision of cycle training, walking buddies, provision of walking and cycling maps, through the Environment Action Network, BUG, Environment Forum, Departmental Newsletters, notice boards. A 'Travel Plan' section of the intranet will be developed and regularly updated.	EaST	ongoing	Within existing budgets

Action	Owner	Timeframe	Cost
Assess how amendments to mileage allowance could be used to encourage more fuel efficient vehicles and penalise poor performers	HR	By April 2008	Could be cost neutral or revenue generating
Each department to nominate a member of staff to carry out further analysis of where mileage reductions can be achieved either through walking, use of public transport, car share etc and report back to CMT on progress annually as part of monitoring arrangements.	CMT	By April 2008	Will lead to savings
Introduce biodiesel from sustainable sources for all fleet vehicles at a minimum 5% mix with standard diesel for all fleet vehicles	Fleet Manager	June 2008	Business case to be developed
Continue vehicle replacements with more efficient vehicles	Fleet Manager	June 2008	Within existing budgets
Review provision of parking in the staff car park, once a comprehensive package of measures to support travel choice are in place, in consultation with staff and representational bodies.	HR	Once sufficient measures are in place to support a modal shift	May lead to savings
Work with partners and key contractors to reduce emissions from vehicles used to carry our work on behalf of the council	Environmental Management Officer	Ongoing	To be addressed within the scope of each contract
Begin a consultation process with the Workers with a Disability Group to identify opportunities for promotion of equality though the Travel Planning process. Set up an equality impact monitoring system.	Environmental Management Officer	By April 2008	N/A

**ANNEX C: CROYDON COUNCIL'S ENVIRONMENTAL POLICY
(GREEN COMMITMENT)**

CROYDON COUNCIL'S GREEN commitment

As the largest service provider and employer in the Borough and a massive user of goods and services the Council is in a unique position to improve Croydon's environment for this and future generations and also to have a positive impact on the regional, national and even global environment.

Croydon Council's Green Commitment is our new environmental policy which will be used to guide our actions.

Everyone who lives or works in or visits Croydon has an impact on the local and global environment.



Croydon Council's Green Commitment is that we will:

- pursue and encourage environmental sustainability - living and developing in ways which ensure that future generations can continue to enjoy the earth's resources
- protect and improve the quality of our local surroundings
- meet and, where possible, improve upon the environmental standards set down by law
- continually strive to improve our environmental performance; and
- work in partnership with the public, Government, other agencies and the business community to promote environmental sustainability.

To do this, we will protect and improve specific elements of the environment affected by human activity:

AIR

We will:

- take action to meet national air quality targets
- provide information about air pollution levels in Croydon and how they may affect you
- reduce our own emissions of air pollution, including greenhouse gases



CONTAMINATED LAND

We will:

- reduce the risk to human health and the environment from contaminated land
- ensure that when contaminated land is developed it is suitable for its new use



RESOURCES

We will:

- reduce our consumption of non-renewable resources and encourage their replacement with renewable resources
- try to meet our needs using local resources

WATER

We will:

- test drinking water in Croydon and take action to ensure it is safe and adequate
- protect and improve the quality and setting of outdoor waters including ponds, streams and aquifers
- reduce the amount of water we use and encourage water economy in all Croydon's buildings

WASTE

We will:

- maintain safe and economic services for recycling, composting, refuse collection, cleansing and waste disposal
- aim to meet national targets for recycling and waste minimisation
- promote waste minimisation in the community including re-use, repair, recycling and composting

GREENSPACES AND WILDLIFE

We will:

- seek to make greenspaces more accessible, even safer and more attractive to visit
- aim to create new publicly accessible open spaces where they are needed the most
- work to conserve and improve our many greenspaces and other habitats to benefit wildlife and people
- maintain and create green links using open spaces, hedges, footpaths, verges, trees and streams



HOW will we achieve this?

TRANSPORT

We will:

- reduce the need for people to travel
- aim to reduce overall levels of traffic
- try to increase the use of public transport, cycling and walking
- reduce our own impact on the environment from our use of transport

ENERGY

We will:

- maximise energy efficiency in the design, maintenance and operation of our schools and public buildings, and as landlords to our tenants
- promote energy efficiency in all Croydon's buildings

LIVING AND WORKING IN CROYDON

We will:

- try to make Croydon a healthier, less noisy and more pleasant place for its residents, workers and visitors
- improve Croydon's built environment
- promote environmental awareness to Croydon's businesses

FOOD

We will:

- promote organic food, encourage people to grow their own food and make more use of allotments
- promote "fairly traded" food so that its growers receive a higher proportion of its selling price

We will:

- include environmental considerations in policy development, corporate and service planning, strategies and work programmes at all levels of the organisation
- implement the Council's policies and strategies which benefit the environment such as the Unitary Development Plan, Croydon's Local Agenda 21 Strategy, Economic Programme and Healthy Croydon
- adopt an Environmental Management System based on the Eco Management and Audit System
- set objectives and targets and publish an annual report on our environmental performance
- promote knowledge and understanding of the global and local environment and our impact on it by:
 - formal education in schools and colleges
 - training and raising awareness of Council staff
 - providing information
 - campaigning
 - offering support and advice to businesses, voluntary organisations and individuals
- use our investments and purchasing power to promote environmental sustainability
- maintain procedures for dealing with environmental accidents and emergencies
- work in partnership with the public, environment agencies, voluntary groups, businesses and the Government to promote environmental sustainability

A copy of the Green Commitment will be distributed to schools and libraries. It will also be placed on the Council's Intranet and Internet sites. For additional copies or information on how you can make a difference at work, telephone 020 8686 4433 extension 3849

For more details on how you can 'do your bit' for the environment at home, contact the Local Agenda 21 Team on 020 8760 5791

CROYDON COUNCIL

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**ANNEX D: THE NOTTINGHAM DECLARATION ON CLIMATE
CHANGE**

The Nottingham Declaration on Climate Change

We acknowledge that

- Evidence shows that climate change is occurring.
- Climate change will continue to have far reaching effects on the UK's people and places, economy, society and environment.

We welcome the

- Social, economic and environmental benefits which come from combating climate change.
- Emissions targets agreed by central government and the programme for delivering change, as set out in the UK Climate Change Programme.
- Opportunity for local government to lead the response at a local level, encouraging and helping local residents, local businesses and other organisations - to reduce their energy costs, to reduce congestion, to adapt to the impacts of climate change, to improve the local environment and to deal with fuel poverty in our communities.
- Endorsement of this declaration by central government.

We commit our Council from this date _____ to

- Work with central government to contribute, at a local level, to the delivery of the UK Climate Change Programme, the Kyoto Protocol and the target for carbon dioxide reduction by 2010.
- Participate in local and regional networks for support.
- Within the next two years develop plans with our partners and local communities to progressively address the causes and the impacts of climate change, according to our local priorities, securing maximum benefit for our communities.
- Publicly declare, within appropriate plans and strategies, the commitment to achieve a significant reduction of greenhouse gas emissions from our own authority's operations, especially energy sourcing and use, travel and transport, waste production and disposal and the purchasing of goods and services.
- Assess the risk associated with climate change and the implications for our services and our communities of climate change impacts and adapt accordingly.
- Encourage all sectors in our local community to take the opportunity to adapt to the impacts of climate change, to reduce their own greenhouse gas emissions and to make public their commitment to action.
- Monitor the progress of our plans against the actions needed and publish the result.

Council

acknowledges the increasing impact that climate change will have on our community during the 21st century and commits to tackling the causes and effects of a changing climate on our city/county/borough/district.



ANNEX E: DELIVERIES DATA COLLECTION FORM

ANNEX F: VEHICLE CLASSIFICATION SHEET

Classification	Code as	Examples	Classification	Code as	Examples
Pedestrian	P		Bicycle	B	
Motorcycle	MC		Car	C	
Car Derived Van	CV				
Van	V				
2 axled Rigid up to 7.5 tonnes (long wheel bases)	2Ra				
2 axled Rigid 7.5 – 18 tonnes	2Rb				
3 axled Rigid 18 – 26 tonnes	3R				
4 axled Rigid 26 – 34 tonnes	4R				
Articulated Vehicles according to the number of axles	3A, 4A, 5A, 6A				

ANNEX G – RECOMMENDED SURVEYING FROM FOR FUTURE USE

DATA COLLECTION FORM FOR CROYDON COUNCIL ON MONDAY 1ST DECEMBER. **Building NAME** _____

1 = Drop off only, 2 = Collection Only, 3 = Drop Off and Collection, 4 = Repair/Contractor/Workman, 5 = Other												
Time of Arrival (24 hour clock)	Time of Departure (24 hour clock)	Purpose of the activity	Name of Supplier/Deliverer	Goods Descriptions and Observation	What is the delivery/collection category?	Number of ITEMS Delivered/Coll ected	Vehicle type	Multiple Building Access Required	Multiple Surveying Site Accessed	Comment if other	Supplier of the Contents (If different to company name)	Other Comments
10:00	10:30	3	Water For Work	Plastic Bottles	Water	10 (5 collected, 5 delivered)	2Rb	Yes	Yes		N/A	EXAMP LE ONLY
16:00	16:25	2	Royal Mail	Sacks	Post	N/A	V	Yes	No		N/A	EXAMP LE ONLY
12:00	14:00	4	Acropetal Gardeners	N/A	Contractor/Workman	N/A	V	Yes	No	Grounds maintenance of Gardens	N/A	EXAMP LE ONLY
08:30	09:00	1	DHL	Parcel	Courier	2	2Ra	No	No		Unknown	EXAMP LE ONLY

**ANNEX H – OFFICE DEPOT ENVIRONMENTAL REPORT FOR
CROYDON COUNCIL 01.07.08 – 30.09.08**

Placing fewer, larger orders and reducing the frequency of deliveries to your organisation can have the following effect on the CO2 emissions associated with your office supplies purchasing.

Order Frequency

On average an order uses 1.808 kWh of electricity within the warehouse process.

On average an order uses 0.860 kWh of gas within the warehouse process.

Increasing the number and quantity of products ordered at one time can reduce the electricity/gas used in the picking process as well as the amount of packaging used to despatch your order.

Each Order that is consolidated instead of being picked separately could save 1.105kg CO2 emissions.

Cal. Year/Month		07.2008..09.2008		
Corporate (CMD)		London Borough of Croydon		
No. Orders	Average kWh Electricity Used (Supply Chain)	CO2 kg Generated (Electricity)	Average kWh Gas Used (Supply Chain)	Tonnes CO2 Generated
1,460	2,639.68	1,380.55	1,255.60	1.61

Delivery Frequency

Every 100 km a delivery vehicle travels = 75.74kg CO2 emitted.

On average a UK Office Depot delivery vehicle travels 3.803 kilometres per drop to our customers.

Cal. Year/Month		07.2008..09.2008		
Corporate (CMD)		London Borough of Croydon		
Envt Delivery Drops	Average Km Travelled	kg CO2 Generated	Tonnes CO2 Generated	
766	2,913	2,206.50	2.21	

Deliveries to multiple sold to's/cost centres within the same building are counted as one Environmental delivery drop.

Placing orders using different methods can have the following effect on the paper and toner consumption associated with your office supplies purchasing.

Order Method

The way in which orders are placed can be controlled to reduce the amount of paper & toners used.

Online ordering uses no paper or toners whatsoever.

Cal. Year/Month		07.2008..09.2008		
Corporate (CMD)		London Borough of Croydon		

	No. of Orders	Min Sheets A4 Used	Toners Used	CO2 kg in Paper Manufacture
Web	275	-275	-0.03	-2.17
Other Electronic	1	-1	-0.00	-0.01
Fax	528	1056	0.11	8.34
E-Mail	572	572	0.06	4.52
Post	1	1	0.00	0.01
Phone	32	-32	-0.00	-0.25
Other	51	-51	-0.01	-0.40
Total	1,460	1,270	0.13	10
The total CO2 generated in picking the above Orders & Delivering them was:		3,819.34	kg of Carbon Dioxide	
1kg of Carbon Dioxide is typically produced by:				
Photocopier running continuously for over 3.5 hours to produce 5700 copies				
Making over 115 cups of tea				
A small car travelling 5.5km				

**ANNEX I – SUGGESTED NATURE OF DELIVERY AND COLLECTION
CATEGORISATION STANDARD**

Suggested nature of delivery and collection categorisation standard

GOODS DESCRIPTION OBSERVATIONS	
1	Envelopes
2	Packages
3	Boxes
4	Roll Cages
5	Crates
6	Pallets
7	Plastic Bottles
8	Refuse/Recycling Sacks
9	Dangerous/Hazardous Materials
10	Sack(s)
11	Tray (s)
12	Bins
99	Other (please comment)

DELIVERY/COLLECTION CATEGORY	
1	Alcohol
2	Catering/Food
3	Catering/Vending
4	CDs
5	Contractors/Builders
6	Courier
7	Document Storage
8	Electrical Items
9	Empty Crates
10	Furniture
11	Hazardous Materials
12	IT Servicing
13	Linen/Laundry
14	Mail
15	Newspapers
16	Services
17	Stationery
18	Toiletries
19	Water (bottled)
20	Other (please comment)