

Purley Town Centre: Delivery and Servicing Study



Prepared for

**London Borough of
Croydon**

Final Report

on behalf of

**South London
Freight Quality
Partnership**

by



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1 INTRODUCTION

1.1 Background

This study was commissioned through the South London Freight Quality Partnership by the London Borough of Croydon to assist them to develop a better understanding of the nature and extent of delivery and servicing activity within Purley town centre, prior to an anticipated upgrade to the local public realm and associated mobility improvements. Following analysis and interpretation of the gathered data, the study contains a suite of recommendations to improve the efficiency, economy, safety and sustainability of local freight movement and servicing activity in Purley town centre.

Purley is a popular and busy district centre within the London Borough of Croydon, which has a relatively high income population, its own local town centre, a large edge of town superstore and a major through route linking the M25 to Croydon Town Centre and onwards to central London.

The combination of local circumstances has led to a high level of congestion on all main routes in the area, as highlighted in the recent consultation meeting for the developing Croydon transport strategy. In combination with this, there is a perception in some parts that HGV traffic delivering to the local superstore and travelling on the A23 (both through traffic and vehicles performing local delivery and servicing activities) is blighting certain parts of the town, particularly the southern end of the town centre due to congestion, pollution and noise impacts.

Because of these issues and to help restore the local town centre ambience, Croydon Council is keen to redress the perceived balance between modes and also between local and long distance traffic within the town centre area. This is at the centre of a proposed town centre improvement strategy. However, as Purley Town Centre also still has significant commercial activity, it is essential that the proposed improvements, particularly those associated with access arrangements and public realm also accommodate the delivery and servicing needs of local businesses.

1.2 The Study Area

Purley Town Centre, located within the London Borough of Croydon, mainly consists of 4 key roads – Whytecliffe Road South, the High Street, Brighton Road and the A23 Godstone Road/Purley Way. The A23 links to the M25, Croydon Town Centre and on to Central London and there are one way systems in operation on Whytecliffe Road South, the High Street and the A23 (referred to as the Purley Gyratory System).

Parking and access restrictions are part controlled by the London Borough of Croydon and part controlled by Transport for London resulting from the presence of a number of Red Routes.

Maps from Google Maps and an extract from the Transport for London Local Cycling Guide 13 are shown in figure 1.1 and further information relating to restrictions and loading/unloading facilities are available from section 5.

Figure 1.1: Purley Town Centre Maps (Left Google Map, Right TfL)



1.3 Business and Organisations

Purley Town Centre consists of a number of different types of premises including independent retailers, servicing, professional services, health and beauty, estate agents, banks and buildings societies and a large number of restaurant, takeaway and pubs. The largest premise in the Town Centre is that of Tesco located off of Brighton Road (figure 1.1).

Based on the business list provided by the client entitled “Health Check Purley Town Centre 2009”, the breakdown of businesses by type of premise is shown in table 1.1. It should be noted that according to the business list approximately 16 premises in Purley Town Centre were vacant. The most cited types of premises were eateries, (33 premises), opticians and/or beauty establishments (20) and traditional retailers (16).

Table 1.1: Types of premises in Purley Town Centre

Type of Premise	No. Businesses	Examples
Vacant	16	
Eateries	33	Restaurants, Takeaways, Sandwich, Cafes
Opticians, Health and Beauty	20	
Traditional Retail	16	Grocers, Newsagents, Jewelers, Sports Shop, Stationers, Newsagents
Offices and Professional Services	14	Offices, Accountants, Solicitors, Interior Designers
Estate and Travel Agents	12	
Services	10	Dry Cleaners, Florists, Funeral Directors, Pharmacy and Locksmith
Charity Shops	7	
Public Houses/Bars	6	
Community Buildings	6	Leisure Centre, Job Centre, PCO Office
DIY materials	6	Carpets, Kitchens, Bathrooms, Timber Merchants
Banks and Building Societies	6	
Betting Shops	3	
Transport Related	3	Cab Office, Driving School Office

In addition to the businesses identified, there are a number of community based premises in the Town Centre including Purley Leisure Centre located on the High Street, Purley and Kenley Safer Neighbourhood Police Office, Purley Rail Station and Purley Community Health Clinic located on Whytecliffe Road South and Purley United Reformed Church and the War Memorial Hospital located on Brighton Road.

2 METHODOLOGY

2.1 Approach

The methodology used to carry out this study involved the following stages:

2.2 Stage 1: Project management team area familiarisation

Prior to undertaking initial vehicle movement observation activity, the TTR project management team spent time on site, becoming familiar with the study area. This involved walking through the area, taking digital photographs for later use in the study report and identification of key delivery and servicing locations that were to be surveying.

2.3 Stage 2: Development of Study Support Materials and Study Planning

The practical stages of the project involved an observation exercise of delivery and servicing activity at 5 appropriate locations within the study area. These locations were agreed prior to surveying with the Client and the new Town Centre Manager. The sections were identified as below, and are identified in section 3 by the street names in bold:

- **Tesco** at the junction of Godstone Road
- **Whytecliffe Road South** including the Train station and the loading bay on Godstone Road
- **High Street** Godstone Road to Whytecliffe Road South
- **Brighton Road** Purley Way to Whytecliffe Road South
- **Purley Way**, Brighton Road to Foxley lane Junction

TTR has significant experience of undertaking delivery/servicing observation project work and specialised observation record sheets were produced to allow recording of details during the study period (included as Annex A), with details of the Vehicle Classifications and Handling Units used in the Study attached as Annexes B and C. Digital cameras were also used during the study to record images of activity, to support analysis and interpretation and to be presented in the study report.

At each location, a range of information was recorded during the observations including:

- Number of vehicles loading and unloading within each survey time period
- Size of vehicles used for delivery/servicing activity
- Type of products delivered/collected
- Type and number of handling units used (roll cage, tote box, boxes)
- Duration of loading/unloading activity
- Single or multiple delivery/collection points

- Issues relating to legal loading/unloading practices
- Instances of PCNs being issued
- Issues relating to road/pedestrian/driver/vehicle safety
- Issues relating to loading/unloading activity affecting free-flow of traffic
- Availability (and observed use) of off-street loading/unloading facilities

Where applicable:

- Details of notable frequent receivers or consignors of goods
- Details (from vehicle liveries, where available) of businesses carrying out frequent delivery/collection activity

Whilst it was expected that a signed letter from the Client or Town Centre Manager be available to the surveying should this be requested by the public, this was not produced prior to the surveying.

2.4 Stage 3: Team Briefing

Briefing of the surveying team occurred prior to the surveying dates with appropriate surveying materials, familiarity with vehicle types and handling units, locations, PPE and any other issues agreed.

2.5 Stage 4: Observation Work

The observation work was conducted on the Tuesday 16th and Wednesday 17th February 2010 with the period of 12:30 to 17:30 covered on the 16th and 05:30 to 12:30 on the 17th. This allowed for a total surveying period of 5.30am to 5.30pm.

The observation dates were agreed to allow for observations and recordings to be taken as for representative working days (rather than at the end of the working week or at the weekend).

2.6 Stage 5: Business Surveys

Following the on-site observations, consultation occurred with businesses in Purley Town Centre with surveys of businesses being conducted on 25th and 26th February 2010 and on 1st March 2010. A total of 39 businesses fully completed the survey, including 2 businesses that self completed and posted the questionnaire.

Business lists were provided by the client, along with contact names and telephone numbers for 3 businesses and contact was attempted with the majority of businesses from this list as summarized in table 2.1.

Table 2.1: Outcomes of business consultation

Outcome of Consultation	No. Businesses
Completed (or Part Completion) Survey	40
Brief Discussion Held	5
Not Willing to Participate	11
Questionnaire/Envelope left to complete and return	9
Manager Not In/Busy	12
Closed on day/time of surveying	17
Not Applicable – Do not receive regular deliveries	22
Bank/Building Society – unlikely to participate for security reasons	7
Property Location Unknown	6
Vacant/Business Closed	20

The business surveys aimed to explore key issues relating to delivery and servicing activity within the area and to help validate the information gathered from activity observations. The surveys were tested with businesses and then refined (a copy of the survey used is included as Annex D) with information requested including:

- Details of frequency of delivery/servicing activity to premises
- Types of product received
- Handling units used
- Normal arrival/departure times of deliveries/collections
- Dwell times
- Availability of off-street loading unloading facilities
- Processes and practices used for product procurement and purchasing
- Perceived issues relating to delivery/servicing activity at premises
- Suggestions for improvements

One or more attempts were made to contact each business and all efforts have been made to maximise the response rate for the business surveys.

A number of brief discussions were also held with community based premises including Purley Leisure Centre, Purley and Kenley Safer Neighbourhood Police Office, Purley Rail Station and a building site being operated by Mulalley Construction, located at Whytecliffe Road South.

2.7 Stage 6: FERS Audits – On-site and Desk-based

The Freight Environment Review System (FERS) is promoted by TfL as an appropriate methodology to assess the suitability of the on-street delivery environment across London's Boroughs.

FERS audits involve on-site assessments by suitably trained staff to review, for example, the extent of loading bay provision, the proximity of loading bays to relevant premises, the quality and condition of paving over which handling used will be moved, the extent of 'barriers' to delivery, such as high kerbs, obstructive street furniture, severity of inclines on pavements etc. FERS audits also involve specific

assessments from the perspective of brewery and cash in transit deliveries, as these have their own particular delivery requirements, such as banks and public houses.

Within the study area, FERS assessments were conducted to assess the suitability of the on-street delivery environment. These were supplemented with Desk Based research where applicable.

2.8 Stage 7: Activity Analysis

Following the observations, business surveys and the FERS audits, all collected information and other relevant data was analysed and reported on to build a profile of the current nature of delivery/servicing activity and associated issues within the study area.

This highlighted various delivery and servicing issues within the area and recommendations for their management of these issues are contained within this report. These will help improve the safety, efficiency and sustainability of delivery and servicing activity within Purley Town centre.

2.9 Stage 8: Draft Reporting

Headline findings and an initial draft report was produced for the client by the 10th March 2010 and discussed with Croydon Council and the town centre manager for comment.

2.10 Stage 9: Final Reporting and Presentation

The final study report will be submitted to the client for comment. This will be accompanied by a presentation to council officers, the town centre manager and members of the business community to outline the methodology used, results reported and recommendations developed.

Particular focus within the final report will be given to developing a suite of recommendations for potential practical solutions, to help improve the safety, efficiency and sustainability of delivery and servicing activity within the study area. These recommendations would be aimed to complement any potential Public Realm Improvement Strategy, while ensuring that the delivery and servicing needs of local businesses are met.

3 OBSERVATION SURVEY

3.1 Introduction

Over the course of the 12-hour surveying period, a large amount of activity was observed in the study area. For analysis purposes, the activities observed relating to, deliveries/collections/servicing to the Tesco Superstore and Petrol Station, the Mulalley Building Site on Whytecliffe Road South and waste collections have been separated and analysed separately in sections 3.4, 3.5 and 3.6 respectively.

It should be noted that during the course of the observation surveys, a number of circumstances and instances of improvements works were being conducted which would have required servicing and other materials. These were:

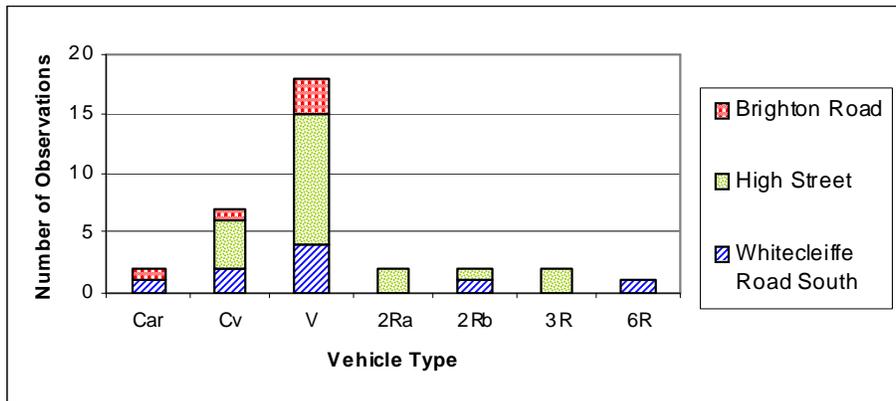
- 16/02/10 Road works on Godstone Road, resulting in the loading bay at the junction of Whytecliffe Road South and Godstone Road not being available for use by delivery and servicing vehicles.
- 16/02/10 Work was still being carried out relating to developments of flats in Whytecliffe South, as part of a Buxton Homes project nearing completion of 45 apartments located above 3 commercial units – Charlottes of London, RSE Solicitors and the People Carriers.
- 17/02/10 The LHS lane of Whytecliffe Road South leading to Godstone Road was closed midway through the surveying period for road works, with the presence of traffic cones.
- 17/02/10 A funeral arranged by the Funeral Directors in the High Street was commencing with associated deliveries of horses and flowers.

3.2 No Activity

Over the course of the surveying, 34 instances were recorded of vehicles arriving at a location as if they were going to be making delivery, collection or servicing activity that subsequently carried out no activity (i.e. they carried out personal shopping, did not leave the vehicle, was making a passenger drop-off). These have been removed from the data accordingly.

The most frequently observed types of vehicle with no activity observed were vans and car derived vans, with most cited location being on the High Street. The type of vehicle observed carrying out no activity is not surprising given that car derived vans and vans are also used for as personal/private modes of transport rather than as company vehicles and can access standard car parking spaces, compared to rigid and articulated goods vehicles which tend to be company vehicles and require larger accessing space.

Figure 3.1: Observations of no activity by location

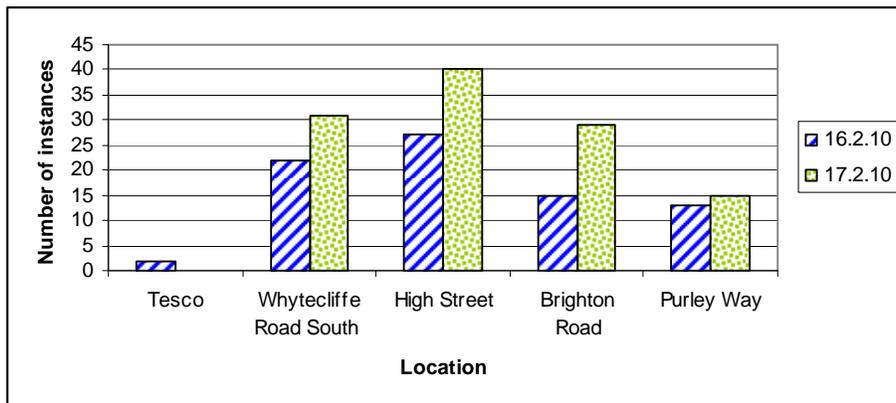


3.3 Delivery, Collection and Servicing in the Study Area

Over the course of the surveying, 194 instances of activity were recorded, 79 on 16/02/10 and 115 on 17/02/10.

Figure 3.2 shows the location of the instances of activity by location by day. The most cited locations of activity on both days was the High Street, accounting for 40 instances (35%) on the 16th and 27 instances (34%) on the 17th. It should be noted that this does not include deliveries, collections or servicing associated with Tesco, which is covered in section 3.4, accounting for the small number of instances associated with observations from the junction of Tesco and Godstone Road.

Figure 3.2: Instances of activity by location by date



The types of activity are shown in figure 3.3 with the most common type of activity been deliveries, accounting for 96 instances of activity (49%). The second most cited type of activity was collections accounting for 44 instances (23%). With regards 22 instances, it is unknown what type of activity occurred.

Figure 3.3: Type of activity

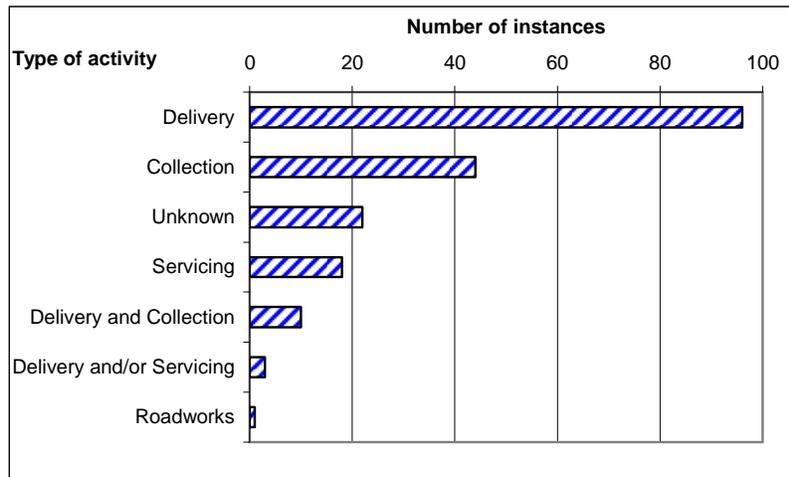
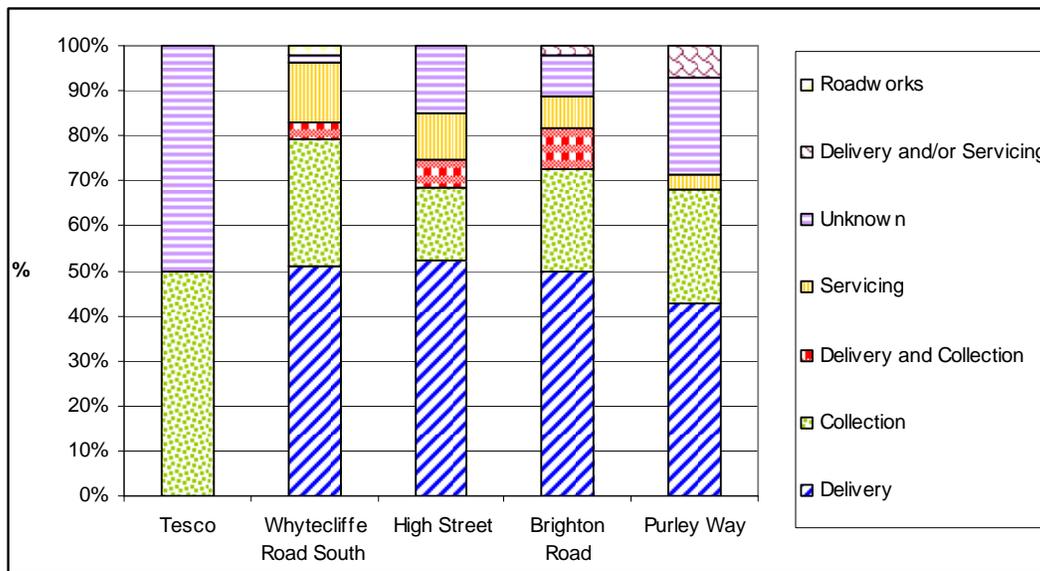


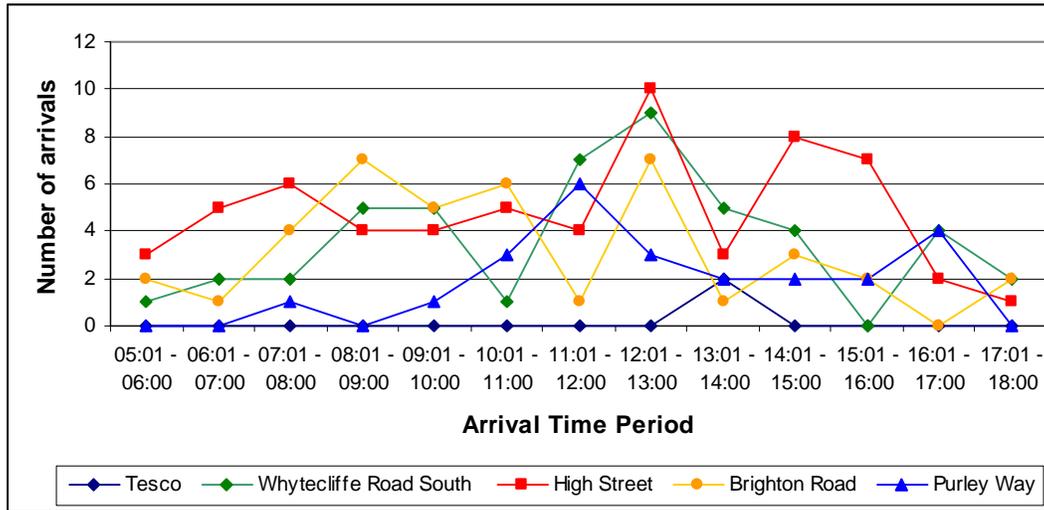
Figure 3.4 shows the percentage of activity types by location, with a fairly even split across the surveying locations with regards deliveries. Collections were observed to a higher degree on Whytecliffe Road South and Purley Way compared to the High Street, which had a slightly higher percentage of activity regarding deliveries with servicing elements.

Figure 3.4: Activity type by location



From the information collected, the arrival times for vehicles have been classified and the arrival times by location are shown in figure 3.5. It should be noted that the arrival time was not recorded in 18 instances (9%). The most cited arrival time was between 12:00 and 13:00, which was the case on Whytecliffe Road South, the High Street and Brighton Road, whilst the most cited arrival time on Purley Way was between 11:00 – 12:00. The second most cited arrival time on the High Street was 14:01 – 15:00 and on Brighton Road 08:01 and 09:00.

Figure 3.5: Arrival time by location



Where both arrival and departure times have been recorded, the duration of activity time has been calculated and is shown in table 3.1 by location. It should be noted that arrival and/or departure time was not recorded in 30% of instances and so the activity time was not able to be calculated in these cases. Of the 135 instances where the activity time has been able to be calculated, the most recorded activity time was 10 minutes or less as was the case with 95 instances (70%). The second most recorded activity was 11 – 20 minutes, as the case in 20 instances (15%).

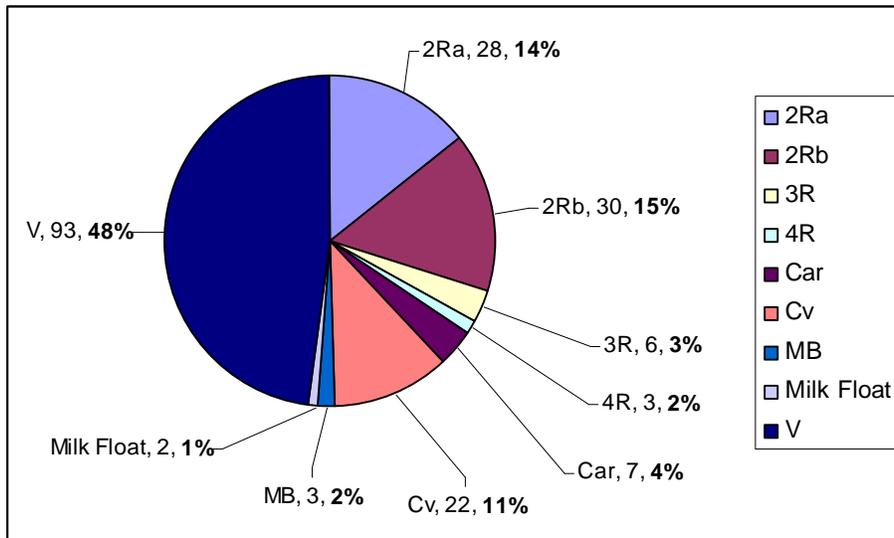
Table 3.1: Activity time by location

Activity Time Group	Location					Total Number of Instances	% of Instances
	Tesco	Whytecliffe Road South	High Street	Brighton Road	Purley Way		
10 minutes or less	0	28	29	26	12	95	70%
11 - 20 minutes	0	5	8	5	2	20	15%
21 - 30 minutes	0	0	8	1	0	9	7%
31 - 40 minutes	0	0	1	1	2	4	3%
41 - 50 minutes	0	1	4	1	0	6	4%
60 minutes or more	0	0	1	0	0	1	1%
Total	0	34	51	34	16	135	100%

Figure 3.6 shows the types of vehicles involved in the activity being carried. The most common vehicle type observed was van, accounting for 93 observations (48%), with the second most common being 2 axle rigid goods vehicles up to 7.5 tonnes gross vehicle weight (2Ra), as observed 28 times (14%). It is interesting to note that cars were observed in activity 7 times and motorbikes 3 times.

It should be noted that in a number of cases, vehicles observed in activity were serving premises with the same name as the livery indicating that they were involved in deliveries or collections from their Supply Chain (Spar, Boots, Munch), were making deliveries to other premises from the premise itself (Munch) or were using their own company vehicle for delivery, collection or servicing activity (Garlands Florists, Keith Harris Flooring, Thames Trade Centre and Home Craft and Louise of Purley Florists).

Figure 3.6: Vehicle types observed



Where it was possible from the vantage points concerned, the names of the premises/businesses associated with the activity were recorded. However, in 45 instances, it was not possible to identify the premises concerned. Table 3.2 shows those businesses/premises that were observed in activity more than once during the surveying period, by location.

The businesses/premises observed the largest number of times were Purley Station, the Post Office, Boots, Home Craft, Royal Mail Post Boxes, Newsagents (although these are in different location so likely to be more than 1 particular newsagents), Munch and Rowland Brothers Funeral Directors. However, as mentioned in section 3.1, a funeral was observed commencing on 17/02/10 explaining the deliveries to the Funeral Directors.

Table 3.2: Business observed associated with activity by location

Business Name	Number of Instances	Business Name	Number of Instances	Business Name	Number of Instances
Unknown	45	Thames Trade Centre	4	Alexander	2
Purley Station	9	Garlands Florists	3	Brighton Road Businesses	2
Post Office	9	Image Carpets	3	Dominoes Pizza	2
Boots	7	Job Centre	3	First Assist	2

Business Name	Number of Instances	Business Name	Number of Instances	Business Name	Number of Instances
Home Craft	7	Las Fuentes	3	High Street Offices	2
Mail Box	6	Louise of Purley Florists	3	Kiosk	2
Newsagents	6	Planet Pizza	3	Lucindas	2
Munch	5	Purley Wines	3	Met Police	2
Rowland Brothers Funeral Directors	5	The Rectory	3	Oxfam	2
Flats Redevelopment	4	Venture House	3	Purley Leisure Centre	2
Laura Ashley	4				

Where vehicles observed in activity had details of the company concerned through the display of livery, these details were noted by the study team. However, in 58 cases it was not possible to identify the supplier/companies concerned. Table 3.3 shows those suppliers/companies who were observed more than once over the course of the surveying period. The most observed suppliers/companies were Royal Mail, and couriers, of DHL, TNT, Parcel Force and Fed Ex with BT carrying out servicing requirements. G4S were also observed making deliveries/collection and with Loomis, part of these related to Cash in Transit.

Table 3.3: Suppliers/Companies observed in activity

Supplier/companies	Number of Instances	Supplier/companies	Number of Instances
No livery / unknown	58	City Link	2
Royal Mail	16	Coca Cola	2
DHL	8	Dairy Crest	2
TNT	5	Garlands Florists	2
Parcel Force	4	Loomis	2
BT	3	Louise of Purley	2
Fed Ex	3	Matthew Clark	2
G4S	3	Mitie	2
Munch	3	Ryalux Carpets Ltd	2
Unichem	3	UPS	2

Where possible, the types of products being delivered/collected were recorded as shown in table 3.4. In 65 cases, it was not possible to indicate the type of product being observed with 19 instances of surveyors recording servicing for product type. The most recorded product types observed were food (18 instances), post and mail (15 instances), couriers or parcels (13 instances), drink (12 instances) and catering supplies (9 instances).

Table 3.4: Products types observed

Product Type	Number of Instances	Product Type	Number of Instances
Unknown	65	Pharmaceuticals	3
Servicing	19	Other	3
Food	18	Construction Equipment and Machines	2
Post or Mail	15	Shop Displays/Advertising Materials	2
Courier or Parcel	13	Paper and Stationary	2
Drink	12	Ambient Goods	2
Catering Supplies	9	Home Ware	2
Flowers	7	Clothing	1
Cash in Transit	6	Documents	1
Furniture	5	Automotive Repair Parts	1
Home Improvement Materials	4	Charity Donation	1
Newspapers and Magazines	4	Beer	1
Construction Materials	3	Total Product Types Identified	201

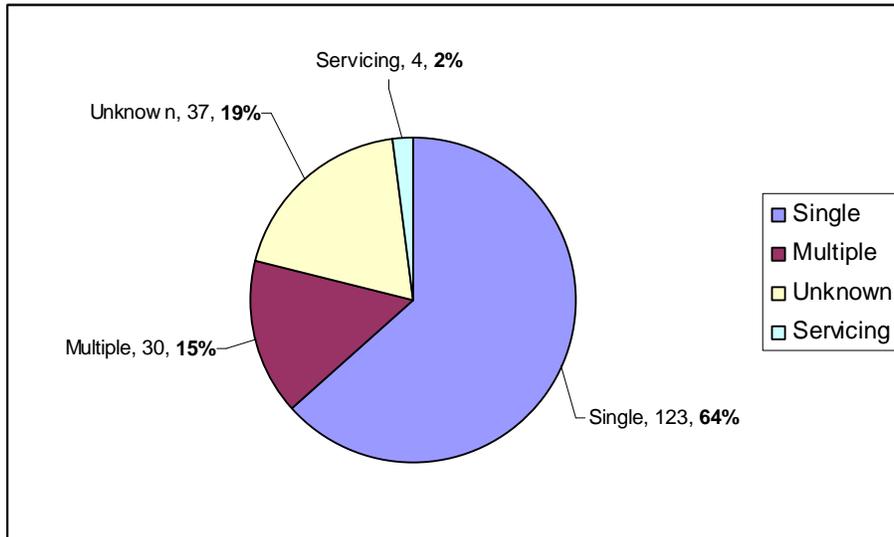
Alongside recording product type, the type of handling unit used was also recorded where possible as shown in table 3.5. In 48 cases, it was not possible to indicate the type of handling unit used. The most cited types of handlings units were loose cartons/boxes or parcels (53 instances), loose items (30 instances) and bags/sacks (19 instances) with surveyors indicating servicing in 20 instances.

Table 3.5: Handling units observed

Type of Handling Unit	Number of Instances	Type of Handling Unit	Number of Instances
Loose Carton/s, Boxes or Parcels	53	Cash in Transit	3
Unknown	48	Tote Boxes / Plastic Containers	3
Loose Items	30	Cases	2
Servicing	20	Bottles	2
Bags or Sacks	19	Keg	2
Roll Cages	8	Pallets	1
Plastic Trays	5	Loose Packets / Envelopes	1
Bundles	4	Total Number of Handling Units observed	205
Trolley	4		

Where possible, surveyors recorded whether the activity observed consisted of single or multiple delivery/collection points. It should be noted that in 19% of instances, it was not known whether the activity was to a single or multiple points. The most cited recorded was that the activity was associated with a single premises, as in 123 instances (64%) with 30 instances (15%) serving multiple premises.

Table 3.6: Single or multiple delivery/collection points

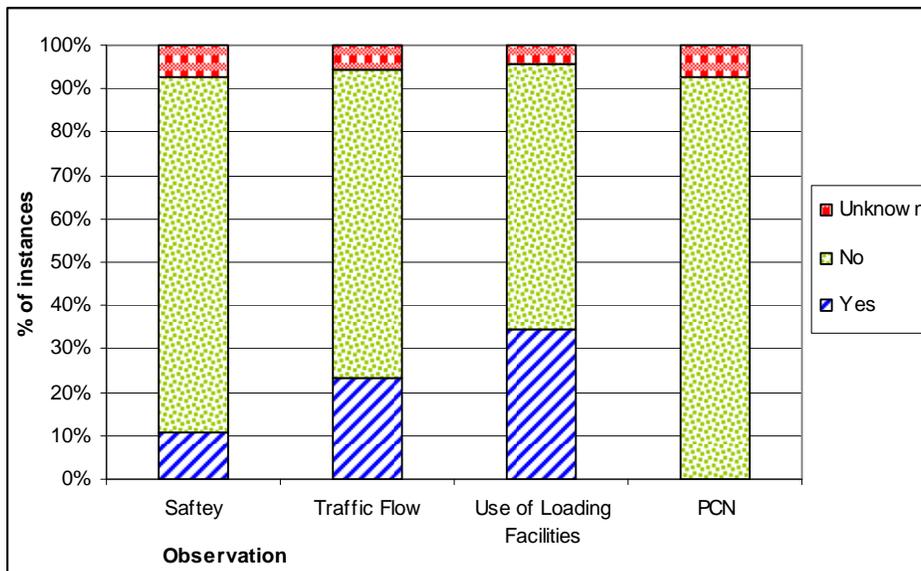


Surveyors were asked to record whether the activity observed:

- Affected safety, including from road, pedestrian, driver or vehicle perspective.
- Affected traffic flow as a result of loading and unloading.
- Had a Penalty Charge Notice (PCN) issued.
- Used loading/unloading facilities.

A summary of observations is shown in figure 3.8

Figure 3.7: % instances of activity affecting safety, traffic flow, using loading, unloading facilities and issuing of PCNs



With regards Safety, in 21 instances (11%), surveyors indicated issues with the loading/unloading activity affecting the safety of one or more parties. The comments recorded are shown in table 3.6. The most cited observations being that vehicle involved in activity parked on pavements or in pedestrianised areas.

Table 3.7: Safety observations

Safety Issues Comments	Number of comments
Parked on the pavement	12
Parked in pedestrianised area	3
Blocked station access	1
Doors opened left unattended	1
Delivered load was left on the road	1
Parked in middle of car park	1
Stopped on the road	1
Unloaded in the road	1
Total number of comments	21

With regards the loading and unloading affecting Traffic Flow, 45 instances (23%) of this were recorded, with observations recorded shown in table 3.7. The most cited issues related to parking observed on Red Routes, Single and Double Yellow Lines and parking in Taxi Waiting Area, in which all 5 cases where this were observed were serving Purley Station.

Table 3.8: Comments relating to loading and unloading issues affecting Traffic Flow

Loading and Unloading Issues Traffic Comments	Number of comments	Loading and Unloading Issues Traffic Comments	Number of comments
Parked on Red Route	12	Load took up space on Road	2
Single Yellow Line Parking	9	Reversed into side/road	2
Double Yellow Line Parking	6	Double Red Line Parked	1
Parked in Taxi Rank	5	Parked Yellow lines	1
Single Red Line Parking	3	Parked on/near Disabled Spaces	1
Parked in Bus Lane/Stop	3	Pedestrians/car stop to look at horses	1
Blocked Cycle Lane	2	Total number of comments	48

With regards the use of loading and unloading facilities, there were 67 instances (35%) of the use of loading/unloading facilities being observed, with 119 instances (61%) of activity observed occurring outside of the loading bay. In a number of cases, supporting comments were recorded indicating the other types of locations where loading/unloading occurred instead of in the loading facilities or clarified the location of the facilities used. In 12 instances, vehicles involved in activity used car parking spaces, 3 instances of activity parked in disabled spaces and 3 instances of using the facilities off street adjacent to the Thames Trade Centre.

Table 3.9: Supporting comments relating to the use of loading/unloading facilities

Loading/unloading facilities used comments	Number of comments
Used Car Parking Space	12
Adjacent to Thames Trade Centre	3
Parked in Disable Space	3
Original drop not in loading bay, second was	2
Used loading bay outside of permitted hours	2
Parked on double red lines then entered loading bay	1
PCSO advised vehicle to move forward into the loading bay	1
Used parking bay outside of permitted hours	1
Total Number of Comments	25

Over the course of the observations, no observations of parking enforcement officials were observed and as such no vehicles were observed as receiving Penalty Charge Notices.

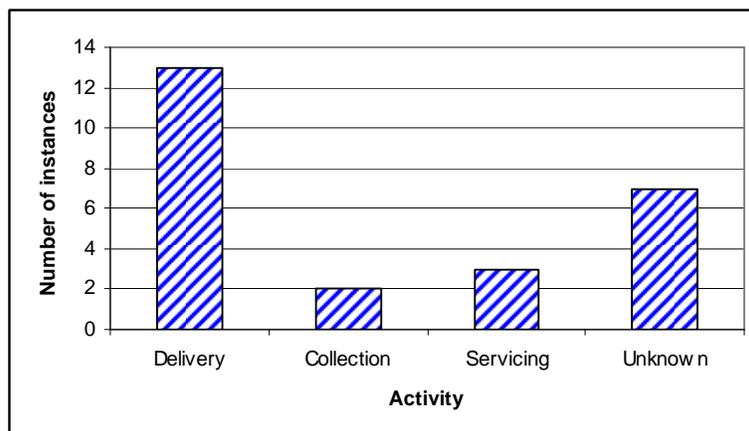
3.4 Delivery, Collection and Servicing at Tesco

The Tesco Extra store located off of Brighton Road is open 24 hours a day Monday to Saturday and 10:00 to 16:00 on Sunday. In addition to selling household goods and groceries, the store also stocks clothing and entertainment products and has an in store café, pharmacy and optician. There is also a petrol station located on site. From the observation surveys, home delivery vehicles also operate from the store with a fleet of 8 vehicles (2 axle Rigid Goods Vehicles up to 7.5 tonnes gross vehicle weight).

Over the observation period, approximately 40 instances of activity were observed associated with Tesco, 15 of these relating to Home Delivery Vehicle Movements, 2 to the Petrol Station and 23 to the store.

Excluding the movements of the home delivery vehicles, the types of activity that the vehicles were involved in is shown in figure 3.9. The most observed type of activity was deliveries accounting for 13 instances of activity (52%).

Figure 3.8: Types of activity associated with Tesco related vehicle movements



The time of arrivals of the vehicles is shown in figure 3.10. It should be noted that the arrival time for 6 vehicles (24%) could not be recorded. The most cited arrival time was between 13:01 – 15:00. It was not possible to calculate the activity duration for 60% of the observations due to either the arrival and/or departure times not being recorded.

Figure 3.9: Arrival times at Tesco

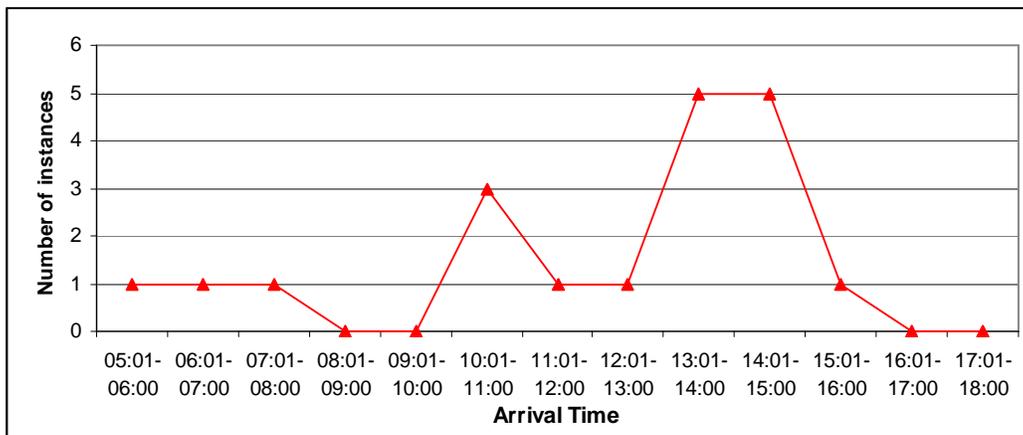


Table 3.9 shows the types of vehicles observed associated with the activity at Tesco. The most cited types of vehicles were 4 axle goods vehicles and vans (both 6 instances, 24%). Compared to the vehicles observed in the Town Centre, there was a higher proportion of larger vehicles which is to be expected due to the size of premises and nature of the supply chain utilising larger vehicles for deliveries.

Table 3.10: Types of vehicles observed at Tesco

Type of Vehicle	No of instances	% of instances
V	6	24%
2Ra	4	16%
2Rb	3	12%
3R	2	8%
4R	6	24%
6R/A	4	16%
Total Number of Vehicles	25	100%

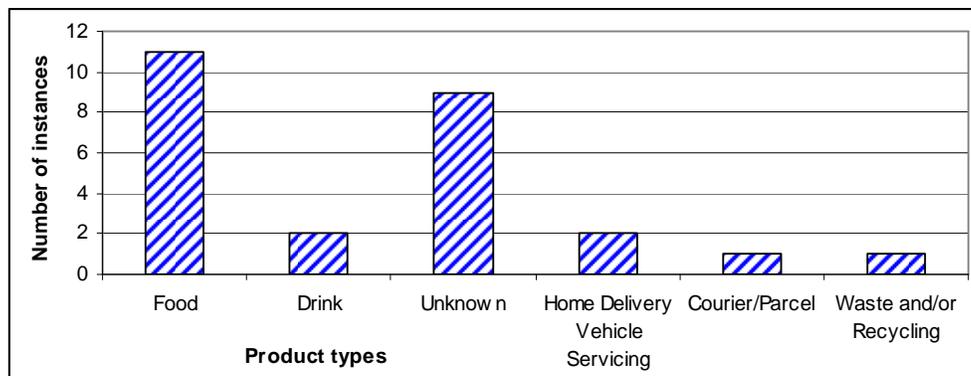
Table 3.10 shows the names of suppliers/deliverers who were observed in activity at Tesco. Unsurprisingly, the most cited supplier was Tesco indicating deliveries from their supply chain.

Table 3.11: Supplier/deliverers names to/from Tesco

Supplier Name	Number of instances	% of instances	Supplier Name	Number of instances	% of instances
Tesco	9	36%	GAH Transport Refrigeration and Heating	1	4%
No livery / unknown	6	24%	Krispy Kreme	1	4%
3663 Food Suppliers	1	4%	Tesco Petrol Tanker	1	4%
Coca Cola	1	4%	TNT	1	4%
DHL	1	4%	Veolia	1	4%
Euromaster	1	4%	Walkers	1	4%
			Total	25	100%

The types of products being delivered/collected is shown in figure 3.11. The most cited product type was food, as in the case of 11 instances. 2 instances of servicing were for servicing Home Delivery Vehicles. It was not possible to ascertain the types of goods being delivered / collected in 9 instances.

Figure 3.10: Types of product delivered/collected at Tesco



3.5 Delivery, Collection and Servicing and the Mulalley Building Site

Currently being built at 51 – 61 Whytecliffe Road South is a mixed use development of a two/three storey building and a five/six storey building comprising a total of 87 flats. There is provision within the planning application to use of part of the ground floor for purposes within Class A2 (financial and professional services) or B1 (business) (09/03656/P). This is being undertaken by Mulalley & Company Ltd and is due to be completed by August 2011.

It is acknowledged that the site generates a number of deliveries on a daily basis and these vary according to the number of contractors on site, number of staff (which can be up to 100) and the stage of the development.

Over the course of the surveying period, approximately 18 instances of activity were observed associated with the building work. Of these, the most observed activities

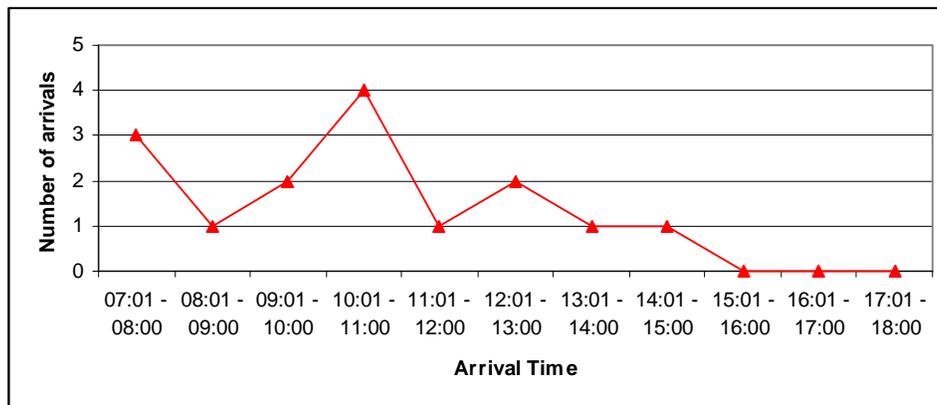
were deliveries in 9 instances (50%) with the second most observed been servicing, in 5 instances (28%).

Table 3.12: Activity at the Mulalley Building Site

Type of Activity	No of instances	% of instances
Delivery	9	50%
Collection	2	11%
Delivery and Collection	1	6%
Servicing	5	28%
Unknown	1	6%
Total Number of activities	18	100%

The times of arrival at the building site are shown in figure 3.12. The most cited arrival times were between 10:01 – 11:00 and 07:01 – 08:00, although it should be noted that the arrival times could not be recorded in 3 instances (17%).

Figure 3.11: Arrival times at the building site



Of the 18 instances, the most cited duration of activity was 11-20 minutes as cited in 6 instances (33%). However, it was not possible to calculate the duration of activity in 7 instances (39%).

The most cited type of vehicle accessing the construction site was a 3 axle Rigid Goods Vehicle, which is unsurprising given the nature of the goods associated with the activity.

Figure 3.12: Vehicles associated with the activity at the Building Site

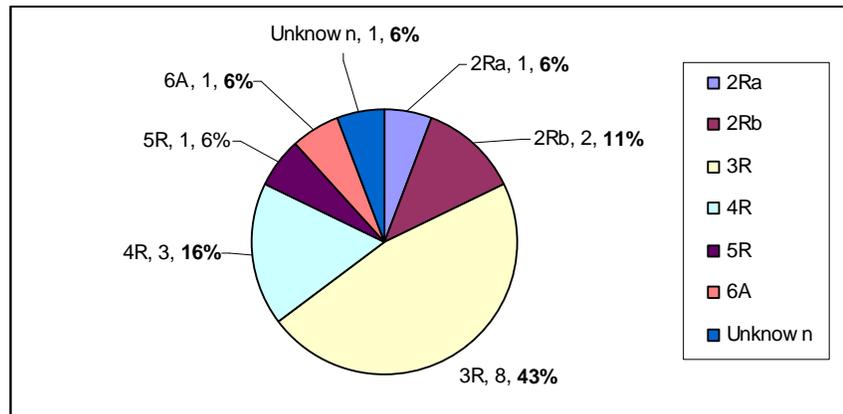
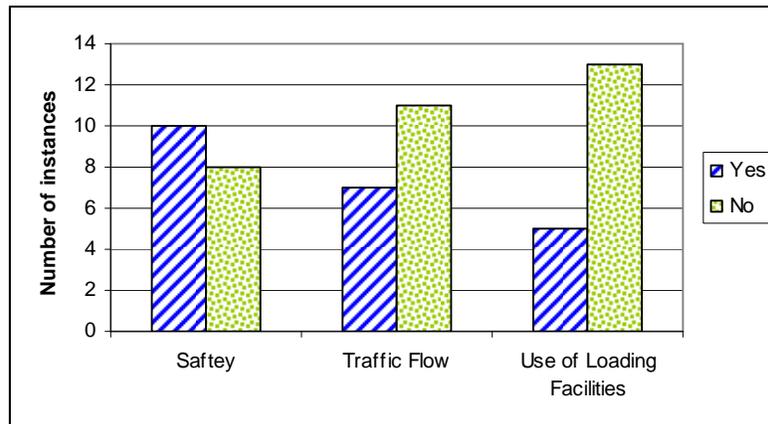


Table 3.12 shows the types of products associated with the activity and also the names of the suppliers/deliverers observed accessing the site. Unsurprisingly, the most cited type of product was construction materials with construction equipment and machines the second most cited product type. A variety of suppliers and deliverers were observed at the site with 3 suppliers/deliverers observed more than once.

Table 3.13: Suppliers/deliverers and product types observed at the Building Site

Supplier/Deliverers Name	Number of instances	% of instances	Product Type	Number of instances	% of instances
Hanson	4	22%	Construction Materials	9	47%
R E Kent Transport	2	11%	Construction Equipment and Machines	5	26%
Premix	2	11%	Unknown	3	16%
Wolsey	1	6%	Servicing	1	5%
Suez	1	6%	Waste and/or Recycling	1	5%
Smiths Transport Services	1	6%	Total number of instances	19	100%
S + S	1	6%			
Powder Day	1	6%			
Fed Ex	1	6%			
Fairview Lifting Equipment	1	6%			
Everyday Hire	1	6%			
ESG	1	6%			
Drain Centre	1	6%			
Total number of instances	18	100%			

Figure 3.13: Impact of activity at the Building Site



Vehicles wishing to make deliveries/collections or carry out servicing of the building site do not have to a loading bay and as such either park on the pavement, which can impact on safety or reverse into the building site itself. It is recognised from observations and discussion with the site that congestion on Whytecliffe Road South can occur with vehicles reversing onto the site, particularly close to the entrance with the presence of bus stops on the opposite side of Whytecliffe Road South. This is an issue that has been discussed by the builders with both London Transport and a member of the Highways Department from Croydon Council.

3.6 Waste Collection

It is recognised that waste collection is a requirement of servicing and vehicle activity in the area and that this is carried out by Veolia on behalf of Croydon Council. Over the course of the surveying period, 2 – 3 Veolia vehicles were observed making collections from multiple premises on the High Street, Whytecliffe Road South, Brighton Road and Purley Way.

It was observed that the Recycling Banks located at the North end of the High Street are serviced but it was not possible to observe the livery. It was also observed that Biffa collected waste from Whytecliffe Road South and Suez served the Mulalley building site.

4 BUSINESS SURVEYS

4.1 Type of businesses surveyed

Of the businesses surveyed, 15% were fast food/take away eateries and 13% were charity shops. 5% of businesses surveyed were each estate agents, furniture retailers, pharmacy and beauty retailers, hairdressers, pubs, restaurants and spas.

Table 4.1: Type of business surveyed

Type of business	No of business	% of businesses	Type of business	No of business	% of businesses
Fast food	6	15	Coffee shop	1	3
Charity	5	13	Construction &PM	1	3
Craft and other retailer	2	5	Florist	1	3
Estate Agents	2	5	Home/kitchen fitters	1	3
Furniture retailer	2	5	Mini cab office	1	3
Hairdressers	2	5	News agent	1	3
Pharmacy & Beauty retailer	2	5	Opticians	1	3
Pub	2	5	Sports Retailer	1	3
Restaurant	2	5	Supermarket	1	3
Spa	2	5	Video retailer	1	3
Carpet Retailer	1	3	Web design	1	3
			Total	39	100

4.2 Business opening and closing hours

On weekdays the majority of businesses open for business between 08:01 and 10:00 and close between 17:01 and 19:00. 3 businesses are closed on Mondays while 2 businesses interviewed are closed on Saturday and 20 businesses surveyed are closed on Sundays.

Table 4.2: Opening Hours

Opening Hours									
Day	00:01-06:00	06:01-08:00	08:01-10:00	10:01-12:00	12:01-14:00	Open 24 hours	Closed all day	Unspecified	Total
Monday	0	6	22	6	0	0	3	2	39
Tuesday	0	6	25	6	0	0	0	2	39
Wednesday	0	6	25	6	0	0	0	2	39
Thursday	0	6	25	6	0	0	0	2	39
Friday	0	6	25	6	0	0	0	2	39
Saturday	0	6	23	6	0	0	2	2	39
Sunday	0	3	5	9	0	0	20	2	39

Table 4.3: Closing hours

Closing Hours										
Day	06:01 - 12:00	12:01 - 15:00	15:01 - 17:00	17:01 - 19:00	19:01 - 21:00	21:01- 00:00	00:01- 06:00	Closed all day	Unspecified	Total
Monday	0	0	8	12	2	12	0	3	2	39
Tuesday	0	0	11	11	3	12	0	0	2	39
Wednesday	0	0	11	11	3	12	0	0	2	39
Thursday	0	0	11	11	3	12	0	0	2	39
Friday	0	0	11	12	2	12	0	0	2	39
Saturday	0	0	11	10	2	12	1	1	2	39
Sunday	0	0	5	1	2	9	1	19	2	39

4.3 Frequency of delivery and servicing activity

The majority of businesses surveyed indicated that they do not receive daily deliveries or collection, as indicated by 64% of businesses with regards deliveries and 79% with regards collections.

38% of businesses surveyed indicated that they have between 1 and 5 deliveries per a week. However, despite the majority of businesses indicating that they do not receive daily deliveries, a large number (38%) indicated that they receive more than 5 deliveries a week, particularly charity shops which receive a large number of drops offs from customers as well as head offices. Approximately 23% of retailers indicated that they do not receive a regular number of weekly deliveries.

As regards collections, 46% of business indicated that they have 1 - 5 collections per a week, with 10% having more than 5 collections per a week. 44% of businesses indicated that they do not receive regular collections on a weekly basis. With regards the charity shops, a number of these also indicated that they have donated goods and items that have not been sold collected on a weekly basis.

Daily servicing requirements were not identified by businesses as part of the survey, with only 29% having a weekly servicing requirement.

Table 4.4: Daily deliveries and collections

Daily Delivery	No of businesses	% of businesses	Daily collections	No of businesses	% of businesses
No daily deliveries	25	64%	No daily collections	31	79%
1	4	10%	No regular collections	1	3%
2	3	8%	1	3	8%
3 to 5	2	5%	2	3	8%
4	2	5%	3	1	3%
5	1	3%	Total	39	100%
10 (including customers drop off)	1	3%			
Don't know	1	3%			
Total	39	100%			

Table 4.5: Weekly deliveries

Weekly Delivery	No of businesses	% of businesses	Weekly collections	No of businesses	% of businesses
1	4	10%	1	7	18%
2	4	10%	2	5	13%
3	4	10%	3	1	3%
5	3	8%	5	5	13%
6 to 7	3	8%	10	1	3%
7	1	3%	12	1	3%
8	1	3%	15	1	3%
10	1	3%	18	1	3%
12	1	3%	Not on regular basis	13	33%
13	1	3%	On ad hoc basis	3	8%
15	3	8%	Unspecified	1	3%
18 (3 Head office and 15 donations)	1	3%	Total	39	100%
24	1	3%			
30	1	3%			
50 (including customers donations)	1	3%			
1 every 2/3weeks	2	5%			
1 a month	4	10%			
Don't know	1	3%			
Deliveries on ad hoc basis	2	5%			
Total	39	100%			

Table 4.6: Weekly Servicing

Weekly Servicing	No of businesses	% of businesses
1	8	21%
2	2	5%
10	1	3%
1 every fortnight	1	3%
1 a month	3	8%
1 every 2 - 3 months	1	3%
No weekly/regular servicing	21	54%
Don't know	1	3%
Unspecified	1	3%
Total	39	100%

4.4 Type of delivery and servicing activities

As shown by table 4.7, retail goods are the most cited type of good collected/delivered as identified by 79% of businesses. 51% of businesses identified business goods with 38% of business indicating that they receive couriers and mail. 64% of the businesses interviewed have waste and recycling collections.

Table 4.7: Type of delivery and servicing activity

Type of goods delivered/collected to/from the businesses	Number of Businesses	% of Businesses
Retail	31	79%
Business goods necessary for the business	20	51%
Couriers & Mail	15	38%
Servicing	5	13%
Consumables (Own Consumption)	1	3%
Total Number of Goods Types Identified	72	

Table 4.8: Waste and recycling activities

Businesses with waste/recycling collections	Number of Businesses	% of Businesses
Businesses with waste / recycling collections	25	64%
No waste / recycling collections	14	36%
Total	39	100%

4.5 Handling units

As illustrated by tables 4.9, the most cited type of handling unit for deliveries is loose carton for deliveries as cited by 56% of businesses with bags the most cited collection handling unit, accounting for 21% of businesses. Pallets was the second most cited delivery unit, as indicated by 38% of businesses with loose carton was the second most cited type for collections accounting for 18% of businesses.

Table 4.9: Handling Units used for deliveries and collections

Handling Units - Deliveries	Number of Businesses	% of Businesses	Handling Units - Collections	Number of Businesses	% of Businesses
Loose cartoons	22	56%	Not Regular collections	14	36%
Pallets	15	38%	Bags	8	21%
Tote boxes	13	33%	Loose cartoons	7	18%
Bags	8	21%	Tote boxes	6	15%
Roll cages	7	18%	Roll cages	4	10%
Barrels	2	5%	Plastic containers	3	8%
Plastic containers	1	3%	Pallets	2	5%
Sacks	1	3%	Barrels	2	5%
Using trolleys	1	3%	Sacks	1	3%
Loose materials	1	3%	Parcel(s)	1	3%
Boxes of bottles	1	3%	Envelopes	1	3%
Total Number of Handling Units	72		Total Number of Handling Units	49	

4.6 Control of the replenishment process

As shown by the tables 4.10, 56% of the businesses have planned deliveries, 10% of the interviewed businesses have both planned and ad hoc deliveries while 41% of the businesses have planned collections.

Table 4.10: Planned/ ad hoc deliveries and collections

Deliveries planned/ad hoc	Number of Businesses	% of Businesses	Collections planned/ad hoc	Number of Businesses	% of Businesses
Deliveries Planned	22	56%	Collections Planned	16	41%
Deliveries ad hoc	7	18%	Collections ad hoc	6	15%
Both Planned and ad hoc deliveries	4	10%	Do not have regular collections	11	28%
Unspecified	6	15%	Unspecified	6	15%
Total	39	100%	Total	39	100%

4.7 Busiest times for deliveries and collections

Businesses reported that the busiest time for their deliveries is between 10 am and 4 pm with the period between 7 am and 10 am the second busiest time period. The busiest time for collections is before 7am and between 7 am and 10 am. 10% of the businesses do not have set times for collections.

Table 4.11: Activity times for deliveries and collections

Deliveries Taking Place	Number of Businesses	% of Businesses	Collections Taking Place	Number of Businesses	% of Businesses
Before 10 am	2	5%	Before 10 am	9	23%
7am - 10am	13	33%	7am - 10am	9	23%
10 am - 4 pm	23	59%	10 am - 4 pm	4	10%
4 pm - 7 pm	2	5%	4 pm - 7 pm	2	5%
After 7 pm	1	3%	After 7 pm	0	0%
No Set Time	8	21%	No Set Time/Ad hoc	4	10%
Total Number of Times Identified	49		No regular collections	14	36%
			Total Number of Times Identified	42	

4.8 Busy day for deliveries and servicing activities

As shown by table 4.12 the busiest weekdays for deliveries are Tuesdays and Friday with 21% of the businesses receiving deliveries on Tuesdays and 18% receiving deliveries on Fridays. 51% of the businesses interviewed have not identified a specific busy day for deliveries.

Table 4.12: Busy day for deliveries and collections

Busy day for deliveries	Number of Businesses	% of Businesses	Busy day for collections	Number of Businesses	% of Businesses
Monday	6	15%	Monday	5	13%
Tuesday	8	21%	Tuesday	3	8%
Wednesday	5	13%	Wednesday	3	8%
Thursday	4	10%	Thursday	4	10%
Friday	7	18%	Friday	3	8%
Saturday	2	5%	Saturday	0	0%
Sunday	0	0%	Sunday	0	0%
No busy day for deliveries	20	51%	No busy day	14	36%
Total delivery days	52		Do not have regular collections	14	36%
			Total collection days	46	

As shown by Tables 4.12 and 4.13, 31% of the businesses do not have regular collections, while 26% have identified the busy weekdays for collections. 13% of the businesses interviewed have Mondays and Thursdays (10%) busy weekdays for collections.

Table 4.13: Busy days for collections identified

Businesses with 1 or 2 busy collection days	Number of Businesses	% of Businesses
No busy day collection	14	44%
No regular collections	14	31%
Businesses with 1,2 or 3 busy collection days	11	26%
Total Number of Businesses	39	100%

97% of businesses indicated that there is no busy day for servicing with only one business identifying a day, Monday, as busy day for servicing.

4.9 Type of vehicles used for deliveries and collections

As illustrated by Table 4.14 82% of the businesses receive deliveries carried out by vans, 28% of the businesses interviewed receive deliveries carried out by rigid goods vehicles and 8% of the businesses receive deliveries carried out by private vehicles as cards.

56% of the businesses interviewed have collections from the businesses carried out by vans. 10% of the businesses have their collections carried out by rigid goods vehicles.

Table 4.14: Type of vehicles delivering to the businesses

Type of Vehicles Delivering	Number of Businesses	% of Businesses	Type of Vehicles Collecting	Number of Businesses	% of Businesses
Van	32	82%	Van	22	56%
Rigid goods vehicles	11	28%	Rigid goods vehicles	4	10%
Articulated goods vehicles	5	13%	Articulated goods vehicles	1	3%
Cars	4	10%	Cars	4	10%
Total Delivery Vehicles	52		No regular collections	14	36%
			Total Collection Vehicles	45	

4.10 Delivery and collection completion times

As shown by the Table 4.15, 49% of businesses have deliveries that last less than minutes with 18% taking 10 – 20 minutes and 15% 20 – 30 minutes. 38% of the businesses taking part in the interviews have collections that last less than 10 minutes with 10% having collections that take between 10 to 20 minutes for completion.

Table 4.15: Deliveries and collections completion time

Average delivery duration	Number of Businesses	% of Businesses	Average collection duration	Number of Businesses	% of Businesses
Less than 10 minutes	19	49%	Less than 10 minutes	15	38%
10 to 20 minutes	7	18%	10 to 20 minutes	4	10%
20 to 30 minutes	6	15%	20 to 30 minutes	3	8%
30 to 40 minutes	4	10%	30 to 40 minutes	0	0%
40 to 50 minutes	1	3%	40 to 50 minutes	2	5%
50 to 60 minutes	2	5%	50 to 60 minutes	0	0%
Don't know	3	8%	Not regular collections	14	36%
Total Delivery Durations	42		Don't know	2	5%
			Total Collection Durations	40	

4.11 Locations used by vehicles to load/unload their deliveries and collections of goods

As shown by Table 4.16, 51% of the businesses interviewed use on street loading bays for loading/unloading activities. 36% of the businesses interviewed said that the vehicles load/unload on street, 18% of the businesses interviewed use the rear access for their deliveries and collections. Only 6% of the businesses use off street loading bays for loading and unloading.

Table 4.16: Locations used by vehicles for loading/unloading

Location used for deliveries and collections	Number of Businesses	% of Businesses
On Street Loading bay	20	51%
On street	14	36%
Rear Access	7	18%
Don't know	3	8%
Off street loading bay	2	5%
In front of the store area	1	3%
Whatever place they can park	1	3%
Off street car parking in front of premises	1	3%
Total Number of Locations Identified	49	

4.12 Ratings of loading and unloading facilities

As shown in tables 4. 17 and 4.18, 31% of the businesses interviewed said that the loading/unloading facilities are “very poor” and “poor” (26%) explaining that there is a lack of parking for customers (21%) and lack of loading facilities (21%) or the loading bays being affected by restrictions (15%). However, 15% of the businesses interviewed said that the loading facilities are “good” and “very good” (8%).

Table 4.17: Loading/unloading facilities scored

Scored loading / unloading facilities	Number of Businesses	% of Businesses
Very poor	12	31%
Poor	10	26%
Fair	7	18%
Good	6	15%
Very good	3	8%
Don't know	1	3%
Total	39	100%

Table 4.18: Comments about loading/unloading facilities

Comments to facilities scored	Number of Businesses	% of Businesses	Comments to facilities scored	Number of Businesses	% of Businesses
Lack of parking for customers	8	21%	No drop off point for customers	2	5%
Restrictions on the loading bays	6	15%	No parking provision at the station	1	3%
If the loading space is taken, cannot have deliveries	4	10%	Lack of disabled parking provision	1	3%
Lack of loading facilities	8	21%	The multi storey car park is expensive	1	3%
Customers donating goods get fined	1	3%	No comments offered	16	41%
Red Route makes deliveries difficult	1	3%	Total comments	33	85%
			Total businesses	39	100%

4.13 Control of delivery/collection times

As illustrated by the table 4.19, 72% of the businesses taking part in the survey do not control delivery times whilst 49% of the businesses interviewed said that they do not control the collection times.

Table 4.19: Control over delivery and collection times

Control over delivery times	Number of Businesses	% of Businesses	Control over collections times	Number of Businesses	% of Businesses
They control the delivery times	10	26%	They control collections times	6	15%
They do not control delivery times	28	72%	They do not control collections times	19	49%
Unspecified	1	3%	Do not have regular collections	14	36%
Total	39	100%	Total	39	100%

4.14 Problems associated with freight

As illustrated by table 4.20, 31% of the businesses interviewed said that the Red Route makes deliveries difficult while 23% of the businesses said that among the problems associated with freight movements, lack of parking for customers causes problems.

Table 4.20: Problems associated with freight movements

Problem commented on relating to freight movements	Number of Businesses	% of Businesses	Problem commented on relating to freight movements	Number of Businesses	% of Businesses
The Red Route makes the deliveries difficult	12	31%	Lack of Space for people drop off	1	3%
Lack of parking for customers	9	23%	Delivery vehicles get fined	1	3%
Not having any problems	8	21%	Customers that make donation/deliveries get fined	1	3%
Restriction times on the loading bays	4	10%	Difficult to park at the back, use of Russell Sq.	1	3%
If the loading area is taken, deliveries are difficult to make	3	8%	Large trucks on the High Street	1	3%
Not completed	3	8%	HGV reversing into premises yard	1	3%
Lack of loading bays	2	5%	Difficult to park at the back, use of Russell Sq.	1	3%
			Total Number of problems	48	

4.15 Opinions on delivery and servicing activity

As shown by table 4.31 below, 36% of the businesses taking part in the survey said that the safety and efficiency of the freight movements in the area could be improved. However, 21% of the businesses have a good general opinion about the safety and efficiency of the freight movements in the area.

Table 4.21: General views about freight movements

General views about freight	Number of Businesses	% of Businesses
Could be improved	14	36%
Not completed	12	31%
None, it is good	8	21%
Remove restriction times from the loading bays	2	5%
Don't know	1	3%
More parking for customers	1	3%
Congested area/busy	1	3%
Lorries sometimes cause congestion	1	3%
Total number of views	40	

4.16 Suggested improvements for delivery and servicing activity

44% of the businesses interviewed said that Purley could benefit from improved provision of loading bays whilst 23% of the businesses interviewed suggested improved parking provision for customers.

Table 4.22: Suggested improvements

Suggestions for improvement	Number of Businesses	% of Businesses
Improved provision of loading bays	17	44%
More parking for customers	9	23%
No suggestions	8	21%
Remove the Red Route	6	15%
Remove restriction hours from the loading bays	4	10%
Not completed	4	10%
Provision of spaces for customers to pull in	2	5%
Provision of loading bays on Purley Parade	1	3%
Non-compliant parking can be a problem	1	3%
Improved provision of loading bays, willing to pay for them	1	3%
Reduction of the volume of traffic / congestion	1	3%
Loading bay extended, larger size	1	3%
Total Number of Suggestions	55	

4.17 Discussions with selected businesses in Purley

During our businesses surveys, a number of semi-structured discussions were held with businesses and premises might receive deliveries. The discussions are summarised below.

Purley Leisure Centre – located on the High Street, Purley Leisure Centre received approximately 1 – 2 deliveries per a day excluding post and these include Office Supplies, Chemicals and Cleaning Products, Deliveries are made by Vans and Tucks which park on the High Street or Woburn Avenue, which runs parallel to the centre and typically take 5 – 10 minutes. No collections are made from the Centre although there is a servicing requirement once a week for fire alarms. No problems or issues have been reported relating to delivery, collection and servicing activity.

Purley Station is currently undergoing improvements to the roof and platform areas with associated construction activity and requirements associated with this being observed. The station additionally houses a Coffee Bay Sandwich Bar, serving newspapers, hot drinks, snacks and confectionery. The number of deliveries / collections and other information relating to this snack bar are not available.

The station itself receives approximately 1 - 2 deliveries per a day comprising office supplies, leaflets and marketing material. The station staff indicated that Vans make the deliveries stopping to the front of the station, presumably in the taxi waiting area with deliveries taking approximately 2 -3 minutes. No access problems have been reported by the station's staff except when large vehicles try to access the front of the station.

The **Purley and Kenley Safer Neighbourhood Police Office** is located opposite Purley Station on Whytecliffe Road South and does not receive frequent deliveries. The Office is manned and open to the public from 11:00 – 14:00 on Mondays, Tuesdays and Fridays only. If deliveries for the Office arrive outside of these hours, they are held with Unique Beauty next door.

Let U In Limited is a safe and locksmith retailer and servicing premises which is undergoing a period of development and refitting and do not receive regular deliveries. Feedback received indicated that they feel there are too many red lines and restrictions on parking times are too late in the day, particularly for disabled people along Brighton Road.

5 FERS AUDITS

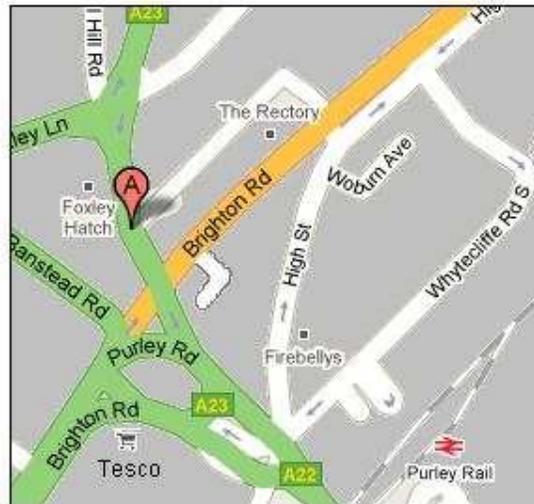
5.1 Introduction

This section presents the key findings from the FERS audit of Purley Town Centre, focusing upon those parts of the freight environment relating to delivery and servicing activity. The report does not comment on issues raised by the through traffic, unless it directly impinges on delivery and servicing activity in the town centre.

For the purposes of the FERS audit Purley Town centre was split into four separate geographical locations, each with their distinctive characteristics. These locations are:

- Purley Way (marked as “A” on the below map)
- Brighton Road
- High Street, including Purley Parade
- Whytecliffe Road South, including Purley Station and Godstone Road

Fig 5.1: Map of Purley Town Centre



The Tesco location was not subject to a FERS audit as it is private property, not for public use, and does not impact on any other locations in the Town Centre.

5.2 Purley Way

This location covers the short length of Purley Way between the junction with Foxley Lane / Pampisford Road at the West end and the junction with Brighton Road at the East end. It is a red route and forms part of the western section of the one-way Purley Gyratory system. There is single lane access from Foxley Lane and two lane access from Purley way / Pampisford Road, whilst the exit junction at the east end consists of three lanes. Considerable merging of traffic was observed as vehicles position themselves to traverse and exit the gyratory system. The road slopes downwards from West to East at a significant angle as it curves round to the Brighton Road junction. There are traffic light controlled pedestrian crossings at the junctions at each end of this stretch of road.

In delivery and servicing terms it is bordered by mixed use development, with shops and restaurants at street level with office and residential units above. On the northern side there is access to a servicing yard immediately south of the junction. This is for both businesses on Purley Way and others accessed off of the yard. Towards the Brighton Road Junction Russell Hill Place branches off to provide access to the rear of premises on Brighton Road and those located on Russell Hill Road itself. On the Southern side there is gated access to a small yard which may also provide access to the development site behind.

The road is in constant use from early morning to late evening with vehicle movements continuing during the night. This will mask most noise generated by delivery and servicing activity.

Only one location is identified as receiving specialist deliveries / collections. This is the Foxley Hatch pub, which receives cash in transit (fig2) and beer deliveries from Purley Way.

Fig 5.2: Cash in Transit delivery to The Foxley Hatch



This site is clearly constrained by its topography. The West / East downward slope of the road and the associated drop across the footway, from the shop fronts to the kerbside are a given. The loading bay on the North side, like the one in Godstone Road, is set in the traffic flow. However, the level of traffic is such that loading bays are required on both sides of Purley Way. The site topography and the distance to the pedestrian crossings are barriers to removal of this loading bay.

Pertinent points from the FERS audit are shown in tables below. Because of this the loading bay on the North side of Purley Way is scored as -1. However, the loading bay on the south side scores higher at +1 as whilst it suffers from the site topography, it is not located in the main traffic flow.

Location	FERS Score	Photographs	Comments
<p>Loading Bay – North side of Purley Way.</p> <p>The loading and unloading facilities on the North side of Purley way consist of a single use loading bay which is operational between 10.00 and 16.00 within the 07.00 – 19.00 no stopping period. The bay is immediately to the east of the bus stop. The bay serves a stretch of road approximately 150m in length.</p>	<p>-1</p>		<p>The bay is suitable for rigid vehicles only, although larger vehicles may protrude into the carriageway on the offside.</p> <p>The timings and dwell times appear suitable for local businesses. However there is conflict between the loading bay and motorised traffic as indicated in the accompanying photograph; the traffic queues through the bus stop and the loading bay. Use of the loading bay interferes with traffic flow on this stretch of road.</p> <p>Signage is adequate, other than it faces up, rather than into the street.</p> <p>There is no obvious infrastructure damage caused by freight vehicles.</p> <p>There is potential for conflict between delivery and servicing activity in the afternoon and the high number of school-children present in the area from 14.45 until approximately 16.00.</p> <p>The Post Box and signage pole obstruct kerbside activity.</p> <p>Driver egress into the traffic flow isn't ideal. The footway slopes west / east as well as across the footway. The café seating area blocks off part of the footway close to the loading bay.</p>

<p>Loading Bay – South side of Purley Way.</p> <p>The loading and unloading facilities on the South side of Purley way consist of a dual use loading bay which allows either 20 minutes for unloading or three hours disabled parking within the 07.00 – 19.00 no stopping period. The bay is sandwiched between two parking bays. The bay serves a stretch of road approximately 150m in length.</p>	<p>+1</p>	 	<p>The loading space is larger, than most in Purley as an articulated vehicle could fit in it. However as it is sandwiched between two parking bays some maneuvering may be required to access the bay.</p> <p>Timings are suitable for most businesses other than Laura Ashley Home where delivery staff remove packaging and position furniture in the store. However, the parking bays could be utilised during the in-store part of the delivery. There is reduced conflict with other motorized traffic due to the protection afforded by the kerb build-out at the Foxley Lane junction and the parking bays. The loading bay isn't in the direct line of traffic.</p> <p>The signage is adequate, although potential non-compliant car parking was observed.</p> <p>Limited cracking of the pavement was observed adjacent to the loading bay. A nearby parking sign had obviously been hit by a delivery vehicle.</p> <p>There is reduced conflict with pedestrians on this side of Purley Way as there is no bus stop on this side. Goods were observed stored temporarily on the footway.</p> <p>There is no street furniture Other than lighting and signage poles on this side of Purley Way. This means that there is little or no separation between vehicle maneuvering, loading and unloading activity and pedestrian flows.</p>
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5.3 Brighton Road

The FERS audit covers the length of Brighton Road, North of the junction with Purley Way up to the junctions with Russell Hill Place on the West Side and the High Street on the East side.

It is a single carriageway road with two exit lanes at the southern junction with Purley Way. For most of its length, the road is covered by Red Route regulations. It is only towards the Russell Hill Place / High Street junctions that Borough regulations prevail. There is a pedestrian crossing at the junction with Purley Way and a second crossing just south of the Russell Hill Place / High Street Junctions. The London Cycle Network passes down Brighton Road, although cycle lane provision ceases at the red route boundary.

On the eastern side of Brighton Road at its Southern end Kimberley Place is a location for rear access delivery and servicing for its properties as well as the rear of properties on Brighton Road and the High Street. Further North there is a pedestrian passageway leading through to The Downlands shopping centre and the High Street which is used for delivery and servicing activity. On the east side, mid-way up the survey area there is a pedestrian cut through to Russell Hill Place. No delivery and servicing observations were made here.

Brighton road is a local distributor for traffic heading up to Purley Oaks and using local roads to access Croydon. It is mixed use, with retail activity at street level and offices / residential above.

There are a number of locations on Brighton Road that receive cash in transit deliveries. These can cause some disruption for pedestrians as shown in fig 5.3.

Fig 5.3: Cash in Transit Delivery to Barclays Bank on the High Street



Whilst there is only one loading bay on Brighton Road there are two locations for free parking on the West side of the road which could be used for loading and unloading activity. Figs 5.4 (a) and (b) show the varying parking restrictions.

Fig 5.4 (a) & (b): Parking opportunities in Brighton Road



The delivery and servicing environment on the West side of Brighton Road is of mixed quality. The pavement is approximately 2m wide but contains many freestanding shop boards. A bus stop, post box and litter bin are co-located mid-way up Brighton Road. The northern parking bay is inset, but any vehicle larger than a van would exceed the dimensions of the parking bay (Fig 5.5).

Fig 5.5: West side of Brighton Road



Whilst the loading bay on the East side of Brighton Road scores +2, consideration should be given to the provision of loading facilities on the West side. Whilst the road isn't as congested as Purley Way the level of businesses on the West side suggests that at the very least a dual use loading / disabled parking bay should be provided.

<p>Loading Bay – East side of Brighton Road.</p> <p>The loading and unloading facilities on the east side of Brighton Road consists of a dual use loading bay which allows either 20 minutes for unloading or three hours disabled parking between 10.00 and 16.00 within the 07.00 – 19.00 no stopping period. The bay is sited immediately south of a bus stop. It serves both sides of the full length of Brighton Road, approximately 200m in length.</p>	<p>+2</p>		<p>The mixed use loading space is large enough for two vans or a rigid vehicle. However it is the only designated loading and unloading space in Brighton Road so has to serve businesses on both sides of the road.</p> <p>Timings are suitable for most businesses in Brighton Road. However, the timings allowed for loading and unloading (10.00 – 16.00) correspond to the busiest time for pedestrians. Noise from delivery and servicing activity will be masked by traffic noise.</p> <p>The signage is adequate, although the sign has been hit and is facing the pavement not the road. Potential non-compliant car parking was observed.</p> <p>Use of the loading bay will interfere with the smooth flow of traffic. A similar effect exists with buses stopping at the bus stop immediately to the North of the loading bay.</p> <p>No obvious footway damage was observed.</p> <p>There is no separation between the loading bay and the footway leading to varying levels of conflict between delivery and servicing activity and pedestrians. Goods were observed stored temporarily on the footway.</p> <p>To the North of the loading bay the bus stop obstructs the footway. This, along with street furniture and freestanding shop signs means that the pavement is congested. To the South similar conditions exist, however there is a clear path between shop front displays and signage, trees etc. at the kerbside.</p>
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5.4 High Street, including Purley Parade

The part of the High Street included within the FERS audit runs Northwards from its junction with the Purley gyratory system to its junction with Whytecliffe Road South. At its southern end there is a short stretch of red route. However, for the majority of its length it is a Borough controlled road. It is a one-way street other than a short two-way stretch towards its Northern end which enables access from Brighton Road to Woburn Avenue.

Surprisingly, given the nature of a high street there is no direct provision for loading and unloading activity to take place. The kerbside is dominated by the provision of pay and display bays from its southern end until the pedestrian crossing by Woburn Avenue. There is also provision for disabled parking and solo motorcycles. Whilst there are stretches of single yellow lines they are mainly used to protect access to service yards or rear access to businesses premises rather than to facilitate delivery and servicing activity. The signage used to control parking is shown in figs 5.6 (a) and (b).

Figs 5.6 (a) and (b): High Street Parking Controls



There are two locations requiring cash in transit deliveries in the High Street. These are the HSBC Bank and Ladbrokes.

Like the parking regulations, the delivery and servicing environment in the High street isn't particularly conducive to efficient movement of goods. This is illustrated by figs 5.7 (a) and (b). The east side (fig 5.7(b)) has narrow tarmac pavements, which in places are suffering from cracking due to vehicle activity. Some of this may be due to business proprietors crossing the pavement to park on their forecourts. Narrow pavements on the West side broaden out in the centre of the High Street. However, there is a barrier consisting of CCTV poles, light stands, street signage, cycle stands, pay and display machines, trees, phone boxes and waste bins blocking access from the kerbside to the pavement.

Fig 5.7 (a) and (b): Footways in the High Street



The mixed situation is replicated at Purley Parade. The pay and display bays and pavement on the west side provide opportunity for compliant and non-compliant parking fig 5.7.

Fig 5.7: Pay and Display Bays at Purley Parade



However the situation on the east side is much more confused fig 5.8(a) and (b). The business premises have a forecourt area in front of their buildings. The owners have taken the opportunity to erect bollards either mid-way across the forecourt to deter parking, not always successfully, or to mark out their own parking territory. This practice

continues even at the northern end where the paving indicates no separate forecourt area.

Fig 5.8 (a) and (b): Purley Parade Forecourts



It is clear that the designs for the public realm improvements due to be implemented in the high street during the 2010 / 2011 financial year need to pay heed to the delivery and servicing requirements of the area to ensure the best outcomes for all parties.

5.5 Whytecliffe Road South

Whytecliffe Road South is the one-way southbound counterpart to the High Street. Commencing at its Northern junction with the High Street, the single carriageway road joins the gyratory system at its southern end. It is a Borough road until the approach to the gyratory system when it becomes part of the Transport for London Red Route. There is a southbound cycle lane painted on the carriageway. For the purposes of the FERS audit this location contains Purley Station and the loading bay on Godstone Road.

Immediately to the east of the junction with the high street the road has office developments with service bay and car park on the North side and two residential developments on the South side (fig 5.9 (a)). The residential developments have their own servicing bays, underground and rear access, along with two blocks of on-street pay and display bays. There is no loading allowed adjacent to the junction from 07.00 – 24.00 Monday to Saturday (fig 5.9 (b)).

Fig 5.9 (a) and (b): North end of Whytecliffe Road South



As Whytecliffe Road South turns southwards it is bordered on both sides by businesses having their own off road servicing bays. On the east side there is then the access to the station car park followed by a bus stand for two buses on the carriageway. This is immediately opposite the entrance to a building site that is, and for a couple of years will be, a major generator of delivery and servicing traffic. Fig 10 (a) and (b) shows the location and the traffic conflict that this causes.

Heading south there are now single yellow lines and a bus stop on the east side with pay and display and disabled parking bay on the West side. The station entrance then follows on the east side. Loading is forbidden on the station forecourt, with a twenty minute limit for parking. This does not seem to be enforced, with the result that deliveries of cash in transit and workwear were observed. These blocked the forecourt, halting the movement of cars dropping people off at the station. The parking was used by workmen at a nearby building site who also consumed their lunch in the vehicle.

Fig 5.10 (a) and (b): Conflict between bus stand and building site entrance



Immediately south of Purley Station exit the red route commences. There are then two loading bays, one on each side of Whytecliffe Road South, in the short stretch of road approaching the junction. Around the corner on Godstone Road is a third loading bay that serves businesses in the area.

Due to the conflict between the two loading bays at the southern end of Whytecliffe Road South they have only been scored at +1. The loading bay in Godstone Road has been scored at 0 due to its location in the merging traffic and the attendant dangers that it brings. It does however highlight the difficulty in providing delivery and servicing facilities in constrained locations.

<p>Loading Bay – East side of Whytecliffe Road South.</p> <p>The loading and unloading facilities on the east side of Whytecliffe Road South consists of a dual use loading bay which allows either 20 minutes for unloading or three hours disabled parking between 13.00 and 16.00 within the 07.00 – 19.00 no stopping period. There is complementary loading bay sited on the West side which allows loading from 07.00 – 13.00.</p>	<p>+1</p>		<p>The mixed use loading space is large enough for two vans or a rigid vehicle.</p> <p>Timings are suitable for the majority of deliveries. However, some businesses in the area take large deliveries for which 20 minutes will not be adequate. It is assumed that the loading bay is PM only due to the large number of pedestrian movements to the station in the morning. Noise from delivery and servicing activity will be masked by noise from traffic using the road.</p> <p>The signage is adequate, although it is hidden by the Croydon Enterprise sign. Potential non-compliant use in the morning was observed.</p> <p>Use of both loading bays at the same time interferes with the smooth flow of traffic. Buses and large vehicles are unable to pass between the two sets of parked vehicles leading to queues of traffic backing up Whytecliffe Road South.</p> <p>No obvious vehicle damage to the footway of street furniture was observed.</p> <p>The pavement slopes, both from North to South and across the footway. The bay is sited under a lighting column. There is a drop kerb to the rear of the loading bay.</p> <p>There is no separation between the loading bay and the footway leading to varying levels of conflict between delivery and servicing activity and pedestrians. Goods were observed stored temporarily on the footway. Pedestrians were</p>
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			<p>observed jaywalking across the road to the station. The loading bay interrupts the London Cycle Network cycle lane.</p>
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<p>Loading Bay – West side of Whytecliffe Road South.</p> <p>The loading and unloading facilities on the West side of Whytecliffe Road South consists of a dual use loading bay which allows either 20 minutes for unloading or three hours disabled parking between 07.00 and 13.00 within the 07.00 – 19.00 no stopping period. There is complementary loading bay sited on the East side which allows loading from 13.00 – 16.00.</p>	<p>+1</p>	 	<p>The mixed use loading space is large enough for two vans or a rigid vehicle.</p> <p>Timings are suitable for the majority of deliveries. However, some businesses in the area take large deliveries for which 20 minutes will not be adequate. It is assumed that the loading bay is AM only due to the large number of pedestrian movements made to the station on the opposite side of the road in the morning. Noise from delivery and servicing activity will be masked by noise from traffic using the road.</p> <p>The signage is adequate, although it faces North along the street rather than into the carriageway. Potential non-compliant use in the afternoon was observed.</p> <p>Use of both loading bays at the same time interferes with the smooth flow of traffic. Buses and large vehicles are unable to pass between the two sets of parked vehicles leading to queues of traffic backing up Whytecliffe Road South.</p> <p>Cracking of the tarmac adjacent to the loading bay was observed.</p> <p>The pavement slopes, both from North to South and across the footway. There is a drop kerb to the rear of the loading bay.</p> <p>There is no separation between the loading bay and the footway leading to varying levels of conflict between delivery and servicing activity and pedestrians. Goods were observed stored temporarily on the footway. Pedestrians were observed jaywalking across the road to the station.</p>
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<p>Loading Bay – North side of Godstone Road.</p> <p>The loading and unloading facilities on the North side of Godstone Road consists of a use loading bay which allows either 20 minutes for unloading or three hours disabled parking between 10.00 and 16.00 within the 07.00 – 19.00 no stopping period. The bay is sited immediately prior to a railway bridge at a point where two lanes merge into one. If the bay isn't in use then the traffic merges over the bay. A cycle lane commences immediately to the East of the loading bay.</p>	<p>0</p>		<p>The mixed use loading space is large enough for two vans or a rigid vehicle. It is the only designated loading and unloading space in Godstone Road so may serve the businesses on the South side of the road.</p> <p>Timings are suitable for the majority of deliveries. However, some businesses in the area take large deliveries for which 20 minutes will not be adequate. Noise from delivery and servicing activity will be masked by noise from the through traffic using the road.</p> <p>The signage is adequate, although the sign is facing the pavement not the road. Potential non-compliant car parking was observed.</p> <p>Use of the loading bay interferes with the smooth flow of traffic. A similar effect exists with buses stopping at the bus stop immediately to the North of the loading bay.</p> <p>No obvious vehicle damage to the footway of street furniture was observed.</p> <p>There is no separation between the loading bay and the footway. However, the wide pavement means that conflict between delivery and servicing activity and pedestrians is minimised.</p> <p>Other than the pole to which the loading bay signage is affixed there are no impediments to loading and unloading.</p>
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6 CONCLUSIONS

6.1 Purley Town Centre

From the results obtained from the observation and business surveys and discussions with stakeholders, it is concluded that there are three aspects to freight, delivery and servicing activity in the vicinity of Purley Town Centre. These are:

1. Delivery and servicing in Purley town centre
2. The gyratory system and its associated red route
3. The Tesco Superstore

Each of these has greater or lesser affects on the delivery and servicing activity taking place in the area.

6.1.1 Purley Town Centre

For delivery and servicing purposes each road constituting the town centre – Purley Way, Brighton Road, High Street and Whytecliffe Road South, are very much self contained units. Whilst there are pedestrian linkages between some of the roads, little use is made of these for delivery and servicing activity, other than serving the shops located on the walkways. Therefore the provision made for delivery and servicing activity needs to meet the particular requirements of that location. It should be noted that all loading bay provision in Purley Town Centre is made on Red Routes managed by TfL, rather than on roads managed by the London Borough of Croydon.

Purley Way is reasonably well catered for as it has a loading bay on each side of the carriageway. This is essential as it would not be safe for delivery and servicing staff to cross the road due to the high traffic flows during the working day.

Brighton Road has provision for loading and unloading on only the East side of the carriageway. This bay is also used to make deliveries to the shops in cut through to the High Street. It would be preferable for provision for loading and unloading activity to be made on the West side of Brighton Road to obviate the need for delivery and servicing staff to cross that road. The impact on traffic flow would be minimised if part of the inset parking bay at the Northern end of Brighton Road was converted to loading and unloading use.

There is no specific provision for loading and unloading activity in The High Street, with drivers having to use the pay and display bays or the yellow lines during the allotted time periods. There is conflict between loading and unloading activity and pedestrians at Purley Parade at the Northern end of the High Street where some vehicles traverse the footway to park on the private land comprising the shop forecourts to load and unload. The High Street is to undergo redevelopment during the 2010 / 2011 financial year and recommendations regarding delivery and servicing activity are set out later in the report.

For the purposes of this report Whytecliffe Road South and the loading bay on Godstone Road, which is the Eastern end of the gyratory system on the Red Route, are included together. This is because businesses at the Southern End of Whytecliffe Road South are served by loading bays in both roads. These Red Route loading bays are the best compromise that is available at this moment. However, if changes are made to the gyratory system in the future these arrangements will require consideration.

6.1.2 Gyratory system and its Red Route

The Purley gyratory system, the junction between the A23 Purley Way and the A22 is the defining feature of the road network and traffic flow in Purley. It separates the town centre from the Tesco superstore. However, provided that the traffic is flowing there is little direct interaction between the large volumes of through traffic using the gyratory system and that involved in servicing Purley town centre.

There are two exceptions. Firstly when the traffic isn't flowing and traffic backs up around the town centre affecting delivery and servicing activity. The second is when road works on the gyratory affect the loading bays as shown in fig 6.1. The road works on the gyratory mean that the traffic passes through the Red Route loading bay, so rendering it unavailable.

Fig 6.1: Godstone Road loading bay



In the longer term there are proposed changes to the gyratory system. Various points regarding the potential changes and their implications for delivery and servicing activity are made in section 6.3.2 below.

6.1.3 Tesco Superstore

The Tesco superstore is a major traffic generator for both freight and private car movements. It receives deliveries into the superstore and petrol station and has a variety of servicing requirements. It is also home to an estimated eight home delivery vehicles which make multiple journeys each day. However, its access arrangements and location adjacent to the south of the gyratory system and Brighton Road means that its traffic generation is in proportion to capacity of the surrounding roads.

Whilst there may well be issues regarding Tesco shoppers and accessing Purley Town Centre, or not, its delivery and servicing arrangements are completely self-contained and easily handled within the site boundaries. There is no direct linkage between delivery and servicing arrangements in Purley Town Centre and those at the Tesco site.

6.2 Future Management of Freight and Servicing Activity

Discussions with stakeholders suggest that there are a few sites in Purley Town Centre that may be redeveloped over the coming years. This, and the future delivery and servicing requirements for the Town Centre will require an increasing amount of vehicular traffic. There are a suite of tools available to London Borough of Croydon Planners, Highways Officers and Town Centre Managers to ensure that this activity is best managed. This section outlines some of the measures that can be put into effect to minimise the adverse effects of freight and servicing activity.

6.2.1 Construction Logistics Plans

Within the environs of Purley Town Centre there are a couple of sites currently under redevelopment and some potential major redevelopment sites at which work may commence over the coming years. These sites include the Baptist church site within the gyratory system, which has been cleared and is ready for construction and the swimming pool site within the town centre which will require demolition and construction. Due to the compact nature of Purley Town Centre and the high volume of through traffic, vehicles serving these sites will significantly contribute towards traffic congestion in the immediate vicinity.

For those sites awaiting development Construction Logistics Plans (CLPs) should be produced. These CLPs help the construction industry manage all types of freight vehicle movement to and from construction sites. They improve the safety and reliability of deliveries to a site, reduce congestion and minimise the environmental impact of construction traffic. The benefits of CLPs to the local community are less noise and intrusion from vehicle movements; better compliance with health and safety legislation leading to fewer accidents; improved compliance with loading and unloading regulations and reduced pollution and greenhouse gas emissions.

CLPs should be developed as part of a transport assessment for each redevelopment site in the town centre. Every CLP needs to be tailored to the individual site's requirements, but points to consider include looking at where legal loading can take place; using freight operators who can demonstrate their commitment to best practice - for example, members of the TfL Freight Operator Recognition Scheme (FORS); consolidating deliveries so fewer journeys are needed; and using more sustainable delivery methods.

There is also a desire on the part of TfL to develop area-wide CLPs with the expectation that this will maximise the benefits from the use of CLPs by exploiting the synergies between different development sites. Incorporation of area-wide CLPs

into the Area Action Plan process provides an opportunity to progress this towards implementation.

The potential benefit of synergies between different development sites within a Town Centre is complemented by the potential for localised congestion issues where these synergies fail to be properly realised, as highlighted above. In a compact town centre such as Purley that also closely adjoins two major TfL red routes, this potential for congestion is crucial to the functioning of the area. Therefore it is recommended that a future area-wide CLP for Purley is established to mitigate the effects of demolition and construction traffic on the Town Centre.

6.2.2 Delivery and Servicing Plans

The London Borough of Croydon is one of the first London Boroughs to develop its own Delivery and Servicing Plan (DSP). This is being carried out with assistance from the South London Freight Quality Partnership.

DSPs help the management of freight vehicle movement to and from individual buildings or a discrete geographical area. They improve the safety and reliability of deliveries, help reduce congestion and minimise environmental impact. The benefits of DSPs to the local community are less noise and intrusion from vehicle movements; better compliance with health and safety legislation leading to fewer accidents; improved compliance with loading and unloading regulations and reduced pollution and greenhouse gas emissions.

DSPs should be drafted as part of a transport assessment during the planning process, and can be drafted retrospectively for existing buildings. Items for inclusion in a DSP are investigating where safe and legal loading can take place; using freight operators who can demonstrate their commitment to best practice - for example, members of the TfL Freight Operator Recognition Scheme (FORS); reducing numbers of journeys, so reducing pollution and greenhouse gas emissions; and using more sustainable delivery methods - cycles rather than vans, for example, or requesting that your suppliers use electric vehicles.

The broad existing and likely future patterns of commercial and retail development in Purley Town Centre mean that DSP's for development schemes may well appear viable when considered individually. However, in such a compact town centre as Purley, which closely adjoins two major TfL red routes, they may nevertheless effectively contain hidden flaws when the impacts of DSP's for a number of local development sites eventually materialise in situ. There are two alternative main approaches to resolving this issue:

- Development of a viable and acceptable mechanism for an area-wide DSP covering Purley Town Centre. To maintain a credible overview of activity in Purley Town Centre responsibility for this should rest within a clearly identified role.
- Creation of a traffic model for Purley Town Centre whose architecture readily permits convenient modelling (chargeable to relevant developers under a

viable and acceptable mechanism) of local DSP's taken both individually and in a suitable variety of groupings.

6.2.3 Freight Environmental Review System (FERS)

As included above within this report, the Freight Environmental Review System (FERS) is a tool to manage delivery and servicing infrastructure and activity on the street. It involves an audit of a location or street to identify existing infrastructure and impediments to deliveries and can be used to evaluate proposed new infrastructure, or changes to existing delivery infrastructure. This will ensure that the requirements of freight and servicing activity are considered along with the competing demands of pedestrians, cars, bicycles etc when improvements to the public realm are being developed.

Further information of CLPs, DSPs and FERS can be obtained from the South London Freight Quality Partnership.

6.3 Future Area Based Schemes

There are two area based schemes being considered for the Purley environs. The first is that for the High Street which will be completed during the 2010 / 2011 financial year. The second is a potential scheme for future consideration which involves a redesign of the gyratory system. Pertinent comments regarding delivery and servicing provision for each location are made in the sections below.

6.3.1 The High Street

Currently, there is no detailed information available for the planned redevelopment of the High Street in Purley. Therefore it is not possible to provide specific recommendations for delivery and servicing activity at this point in time. However, the observations, FERS audit of existing delivery and servicing activity provision and conversations with stakeholders have highlighted two issues that should be addressed in the proposed new arrangements.

The first is the provision of specific infrastructure for delivery and servicing activity. Whilst it is understood that the intention is to reduce vehicular activity in the High Street to improve the pedestrian environment, suitable delivery and servicing infrastructure is required for shops and businesses. Otherwise they will cease to be attractive for shoppers and residents alike. The redesign also needs to take into account the situation at Purley Parade with vehicles currently crossing the footway to access the private forecourts.

The second is the likely commencement of a market at the Northern end of the High Street. Market traders will require access to set up and break down their stalls at the beginning and the end of the market day. As well as requiring parking for an extended period of time for this activity they will also require all day parking for their vehicles at a nearby location. Consideration should be given to the possibility of any potential parallels with issues that may have been identified over an extended period in connection with Surrey Street Market in central Croydon arising from:

- Long-term parking of traders' vehicles.
- Delivery movements by traders' vehicles.
- Delivery or other servicing movements associated with adjoining properties, whether commercial/retail or residential.

6.3.2 Purley Gyrotory System

Currently all specific provision for loading and unloading activity is made on roads that fall under TfL Red Route control. In Purley Way the loading bays are sited directly on the Red Route. Unless any form of alternative provision can be made, which does not seem likely given the geography of the locality, this provision should be retained. In Brighton Road, the loading bay is some way from the junction with the gyrotory system, so it is envisaged that it will not be affected by any changes. Consideration should be given to the loading bay provision in the vicinity of Whytecliffe Road South which is close to the junction with the gyrotory system and Godstone Road which is directly on the gyrotory system. However, given their location, it will be dependent on the final road layout that is agreed.

6.3.3 Recommendations

To ensure the best possible outcomes for freight transport, and hence to minimise the effects of freight traffic on local residents, when implementing these area based schemes the following two recommendations are made.

1. An area-wide CLP is developed by London Borough of Croydon officers. This should be carried out in conjunction with appropriate TfL officers in recognition of the proximity of Purley Town Centre to two major TfL red routes. All development proposals within the area will be required to comply with that CLP.
2. A suitable mechanism will be applied to consideration of DSP's for identifying and addressing potential flaws amongst suitable groupings of DSP's (see section 6.2.2).

ANNEX A
OBSERVATION SURVEY FORM

PURLEY DELIVERY AND SERVICING STUDY														
Date:	Locations	3 = Tesco/junction Godstone Rd and Purley Rd				1 = Brighton Road		2 = High Street	4= Purley Gyratory system					Page No.
Business Serviced	Location	Time of Arrival	Time of Departure	Vehicle Type	Name of Supplier/Deliverer/Livery	Purpose of the activity	Type of product	Type of handling units	Single or Multiple delivery / collection points	Safety Issues	Loading & Unloading issues affecting traffic flow	PCN Issued	Use of loading/unloading facilities	Other Comments
	No:	24 hour clock	24 hour clock	See sheet	Contact details	D / C / S		Roll cage, tote box, loose, etc.	S / M, or number if known	Road / Pedestrian / Driver / Vehicle		Y / N	Y / N	

ANNEX B

VEHICLE CLASSIFICATION

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 C

TYPES OF HANDLING UNIT



Plastic trays



Plastic containers



Tote boxes



Pallets



Loose cartoons



Roll cages



Dairy Cart trolley



Cash and Carry Trolley



Garment rails



Commercial waste bins



Bags

ANNEX D
BUSINESS SURVEY FORM

Purley Delivery and Servicing Study Business Interviews

Good morning/afternoon. I am from Transport & Travel Research and we are conducting interviews on behalf of the London Borough of Croydon to find out about the delivery and servicing needs of businesses in Purley area. The survey will help us better understand businesses delivery and servicing requirements and enable us to offer recommendations to the council as to how they can be improved. The questionnaire will take between 15 and 20 minutes to complete.

Time		Date	
Business		Telephone	
Business Type		Email	
Street		Weblink	

Interviewee Name	
-------------------------	--

Q1	Please can you tell me your business hours?		
		From	To
	Monday		
	Tuesday		
	Wednesday		
	Thursday		
	Friday		
	Saturday		
	Sunday		

Q2	Approximately, how many delivery, collection or servicing activities do you have during an average day/week?		
	Daily Delivery		Weekly Delivery
	Daily Collection		Weekly Collection
	Daily Servicing		Weekly Servicing
	Other		

Q3	What types of deliveries and collections are made to your business?		
	Business (goods necessary for the business) e.g. newspapers, stationery, document storage, furniture, laundry	<input type="checkbox"/>	1
	Couriers & Mail e.g. Letters, parcels, mail bags, bundles	<input type="checkbox"/>	2
	Retail (for sale) e.g. newspapers, CDs, toiletries, clothing, computer equipment, furniture, food, drink, toiletries, electrical items, beer/spirits etc	<input type="checkbox"/>	3
	Consumables (own consumption) e.g. Water (bottled), catering/vending	<input type="checkbox"/>	4
	Servicing e.g. Contractors / builders, IT servicing, empty crates	<input type="checkbox"/>	5
	Waste/Recycling	<input type="checkbox"/>	6
Any other deliveries	<input type="checkbox"/>	7	

Q4	Can you tell me how goods are delivered to, and collected from your business?	
	Delivery	

	On pallets	<input type="checkbox"/> 1	In tote boxes	<input type="checkbox"/> 3	Other	<input type="checkbox"/> 5
	In roll cages	<input type="checkbox"/> 2	In loose cartons	<input type="checkbox"/> 4		
	Collection					
	On pallets	<input type="checkbox"/> 1	In tote boxes	<input type="checkbox"/> 3	Other	<input type="checkbox"/> 5
	In roll cages	<input type="checkbox"/> 2	In loose cartons	<input type="checkbox"/> 4		

Q5	Are you deliveries/collections planned or adhoc as and when?			
	Delivery		Collection	
	Yes	<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 1
	No	<input type="checkbox"/> 2	No	<input type="checkbox"/> 2
	Don't know	<input type="checkbox"/> 3	Don't know	<input type="checkbox"/> 3
	Other	<input type="checkbox"/> 4	Other	<input type="checkbox"/> 4

Q6	During which period(s) do the majority of your deliveries and collections take place?			
	Delivery			
	Before 7am	<input type="checkbox"/> 1	After 7pm	<input type="checkbox"/> 5
	7am-10am	<input type="checkbox"/> 2	Not applicable	<input type="checkbox"/> 6
	10am-4pm	<input type="checkbox"/> 3	No Set Time	<input type="checkbox"/> 7
	4pm-7pm	<input type="checkbox"/> 4		
	Collection			
	Before 7am	<input type="checkbox"/> 1	After 7pm	<input type="checkbox"/> 5
	7am-10am	<input type="checkbox"/> 2	Not applicable	<input type="checkbox"/> 6
	10am-4pm	<input type="checkbox"/> 3	No Set Time	<input type="checkbox"/> 7
	4pm-7pm	<input type="checkbox"/> 4		

Q7	Please can you tell me which is the busiest day for delivery and collection of goods for your business					
	Delivery					
	Monday	<input type="checkbox"/> 1	Thursday	<input type="checkbox"/> 4	Sunday	<input type="checkbox"/> 7
	Tuesday	<input type="checkbox"/> 2	Friday	<input type="checkbox"/> 5	There is no busiest day	<input type="checkbox"/> 8
	Wednesday	<input type="checkbox"/> 3	Saturday	<input type="checkbox"/> 6		
	Collection					
	Monday	<input type="checkbox"/> 1	Thursday	<input type="checkbox"/> 4	Sunday	<input type="checkbox"/> 7
	Tuesday	<input type="checkbox"/> 2	Friday	<input type="checkbox"/> 5	There is no busiest day	<input type="checkbox"/> 8
	Wednesday	<input type="checkbox"/> 3	Saturday	<input type="checkbox"/> 6		
	Servicing					
	Monday	<input type="checkbox"/> 1	Thursday	<input type="checkbox"/> 4	Sunday	<input type="checkbox"/> 7
	Tuesday	<input type="checkbox"/> 2	Friday	<input type="checkbox"/> 5	There is no busiest day	<input type="checkbox"/> 8
	Wednesday	<input type="checkbox"/> 3	Saturday	<input type="checkbox"/> 6		

Q8	Can you tell me what type of vehicles deliver to and collect from your business?			
	Delivery		Collection	
	Van	<input type="checkbox"/> 1	Van	<input type="checkbox"/> 1
	Rigid goods vehicle	<input type="checkbox"/> 2	Rigid goods vehicle	<input type="checkbox"/> 2
	Articulated goods vehicle	<input type="checkbox"/> 3	Articulated goods vehicle	<input type="checkbox"/> 3
	Other	<input type="checkbox"/> 4	Other	<input type="checkbox"/> 4

Q9	On average, how long does a delivery and collection take?
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Delivery			
Less than 10 minutes	<input type="checkbox"/> 1	40 to 50 minutes	<input type="checkbox"/> 5
10 to 20 minutes	<input type="checkbox"/> 2	50 to 60 minutes	<input type="checkbox"/> 6
20 to 30 minutes	<input type="checkbox"/> 3	More than 60 minutes	<input type="checkbox"/> 7
30 to 40 minutes	<input type="checkbox"/> 4	No set duration	<input type="checkbox"/> 8
Collection			
Less than 10 minutes	<input type="checkbox"/> 1	40 to 50 minutes	<input type="checkbox"/> 5
10 to 20 minutes	<input type="checkbox"/> 2	50 to 60 minutes	<input type="checkbox"/> 6
20 to 30 minutes	<input type="checkbox"/> 3	More than 60 minutes	<input type="checkbox"/> 7
30 to 40 minutes	<input type="checkbox"/> 4	No set duration	<input type="checkbox"/> 8

Q10	What is the location from which vehicles load/unload their deliveries and collection of goods?		
	On Street Loading Bay	<input type="checkbox"/> 1	
	On Street	<input type="checkbox"/> 2	
	Off Street Loading Bay	<input type="checkbox"/> 3	
	Rear Access	<input type="checkbox"/> 4	
	Other	<input type="checkbox"/> 5	

Q11	How would you describe the loading and unloading facilities for your deliveries and collections?					
	Very poor	Poor	Fair	Good	Very good	Not applicable
	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
<i>Comment</i>						

Q12	Who controls the Ordering of goods/products for the business?		
	You or an Employee	<input type="checkbox"/> 1	
	Head Office	<input type="checkbox"/> 2	
	Suppliers	<input type="checkbox"/> 3	
	Other	<input type="checkbox"/> 4	

Q13	Do you control your delivery/collection times?			
	Delivery		Collection	
	Yes	<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 1
	No	<input type="checkbox"/> 2	No	<input type="checkbox"/> 2
	Don't know	<input type="checkbox"/> 3	Don't know	<input type="checkbox"/> 3
Other	<input type="checkbox"/> 4	Other	<input type="checkbox"/> 4	

Q14	Can you tell me of any problems associated with freight movements in Purley Town Centre ?
	<i>Comments</i>

Q15	What is your general view of current efficiency, safety and sustainability of freight movements in Purley Town Centre?
	<i>Comments</i>

Q16	Do you have any suggestions, from your experience, on how to improve freight movements in Purley Town Centre in terms of efficiency safety and sustainability?
	<i>Comments</i>

Thank you for your participation.