

## Chapter 4: Regional Analysis



## 4 Regional Analysis

### 4.1 Introduction

This chapter provides a regional analysis of the study results. By breaking England into the nine regions it aims to inform stakeholders at a more detailed level. A number of the outputs in this chapter also present data at the local authority level within each region. This further segmentation of the results enables the analysis to be more targeted in its approach and identify the specific locations of greatest demand for lorry parking in each region.

#### 4.1.1 Structure of Regional Analysis

All of the nine regions have a consistent format. The analysis is structured to guide the reader through a logical narrative. The sequence of outputs therefore aim to build up the overall picture of lorry parking demand, from the base information through to more complex presentations of multiple layers of data. As an outline, the analysis of each region has the following structure:

- **Regional Overview:** Three tables are used to depict base information such as the facilities, utilisation and crime totals. These are important to provide the context for each region before it is discussed in detail.
- **Facilities and Capacity:** There are two maps that illustrate capacity by specific location and within each local authority. This helps the reader to understand the options that were available to drivers and the locations in relation to the SRN.
- **On-Site Parking:** This is used to start the process of understanding demand. It therefore maps the on-site utilisation of each local authority within the region (as a percentage of total capacity). This will start to highlight areas that do not have enough capacity to accommodate on-site parking demand.
- **Off-Site Parking:** The analysis is separated into three sections with corresponding maps, including:
  - i. A map that shows the total number of vehicles that were parking off-site in each local authority of the region. This shows the overall extent of off-site parking.
  - ii. A more detailed analysis showing the specific location and type of off-site parking. This includes a differentiation between lay-bys, industrial estates and types of vehicle. Due to the level of detail means the region must be broken down into a number of maps<sup>10</sup>. The maps also include the individual on-site parking locations and depict how full they were. This helps to identify patterns of off-site parking compared to on-site availability.
  - iii. A hotspots map is used to identify locations where there was high off-site parking (25 vehicles or more, within a 5km radius of each other). This is a focussed analysis used to uncover specific locations of high off-site parking within the large area of a region.
- **Excess Demand:** This analysis presents an overall situation of demand for each local authority in the region, in terms of the total vehicle numbers that needed to park (on and off-site combined) compared to total capacity. Excess demand is important to identify local authorities, where even if off-site parking could be moved to on-site locations, there would not be enough capacity. Excess demand is therefore an indicator for potential required development, and at a minimum it is an indicator that there is an issue within the region.
- **Crime:** This is used to add a further level of comparison to demand issues<sup>11</sup>. The total number of crimes is highlighted in each local authority of the region. A further map is then used to show specific locations of where crime was happening in relation to the hotspots of off-site parking and utilisation of on-site parking. This helps to understand any relationship between location of crime and demand.

<sup>10</sup> The number of maps depends on the size of the region

<sup>11</sup> All crime data sourced from Truckpol 2010

Capabilities on project:  
Transportation

#### 4.4 London

##### List of Key Facts:

1. There were 146 recorded road freight crimes in 2010, costing the industry an estimated £3.6 million.
2. The survey showed there were 298 spaces, spread over seven onsite facilities
3. Overall the lorry parking spaces were only 45% utilised, and only the Crown Road Vehicle Park was more than 75% full
4. A high percentage of vehicles parked were rigid. This was particularly high compared to national figures.

##### 4.4.1 Overview

The base information contained in the following Tables 4.7, 4.8 and 4.9 will be analysed throughout the London regional analysis. This will include the use of graphs and written commentary as described in section 4.1.1 Structure of Regional Analysis. It is important to note that the SRN does not extend throughout London and only partially enters it. The study area for London was therefore limited by this and means many boroughs were not included in the study. Given the dense urban nature of London it would be difficult to locate all the off-site parking in lay-bys and industrial estates, in any reasonable amount of time without having prior knowledge of problem areas. Therefore, in line with the method used throughout all other regions the survey focused on identifying lorry parking sites to show on-site parking, and areas within 5km of the SRN to identify off-site parking. This naturally reduced the amount of off-site parking observed in the region, and thus the level of off-site parking in London could be higher in areas that are beyond 5km of the SRN.

**Table 4.7 Overview of facilities in the London region**

Name	Type	Overnight Cost (£s)	Capacity
Bexleyheath	Local Authority	£10 or less but more than £5	12
Catford Truckpark	Local Authority	£5 or less	25
Crown Road Vehicle Park	Independent	£15 or less but more than £10	35
Heston Services (E)	MSA	£20 or less but more than £15	45
Heston Services (W)	MSA	£20 or less but more than £15	41
London Gateway Services	MSA	£20 or less but more than £15	80
Seagrave Road, Earls Court	Local Authority	£10 or less but more than £5	60
Total			298

Capabilities on project:  
Transportation

**Table 4.8: Overview of on-site utilisation, off-site parking and excess demand in the London region**

Utilisation						
Vehicle Type	UK Artic	non-UK Artic	UK Rigid	non-UK Rigid	Total	% Utilisation
On-site parking	48	14	65	8	135	45%
Off-site Parking	Lay-bys	11	3	2	0	16
	Industrial Estates	0	0	0	0	
Excess Demand				-147		

**Table 4.9: Overview of 2010 reported freight crime in the London region**

Reported Freight Crime <sup>16</sup>					
Number of recorded crimes in 2010	146				
Severity Index <sup>17</sup>	1	2	3	4	5
Number of crimes recorded	8	107	30	0	1
Value of freight crimes recorded				£2,521,917*	
Estimated total value of freight crimes recorded				£3,600,000**	

\*Note that only reported costs are included in this data. Not all crimes were given an associated cost due to information not being available.

\*\*In 2008 Truckpol estimated an average incident to cost £25,000. This base figure is used to estimate the total cost of freight crime in the region. This accounts for where cost information was not available.

#### 4.4.2 Facilities and Capacity

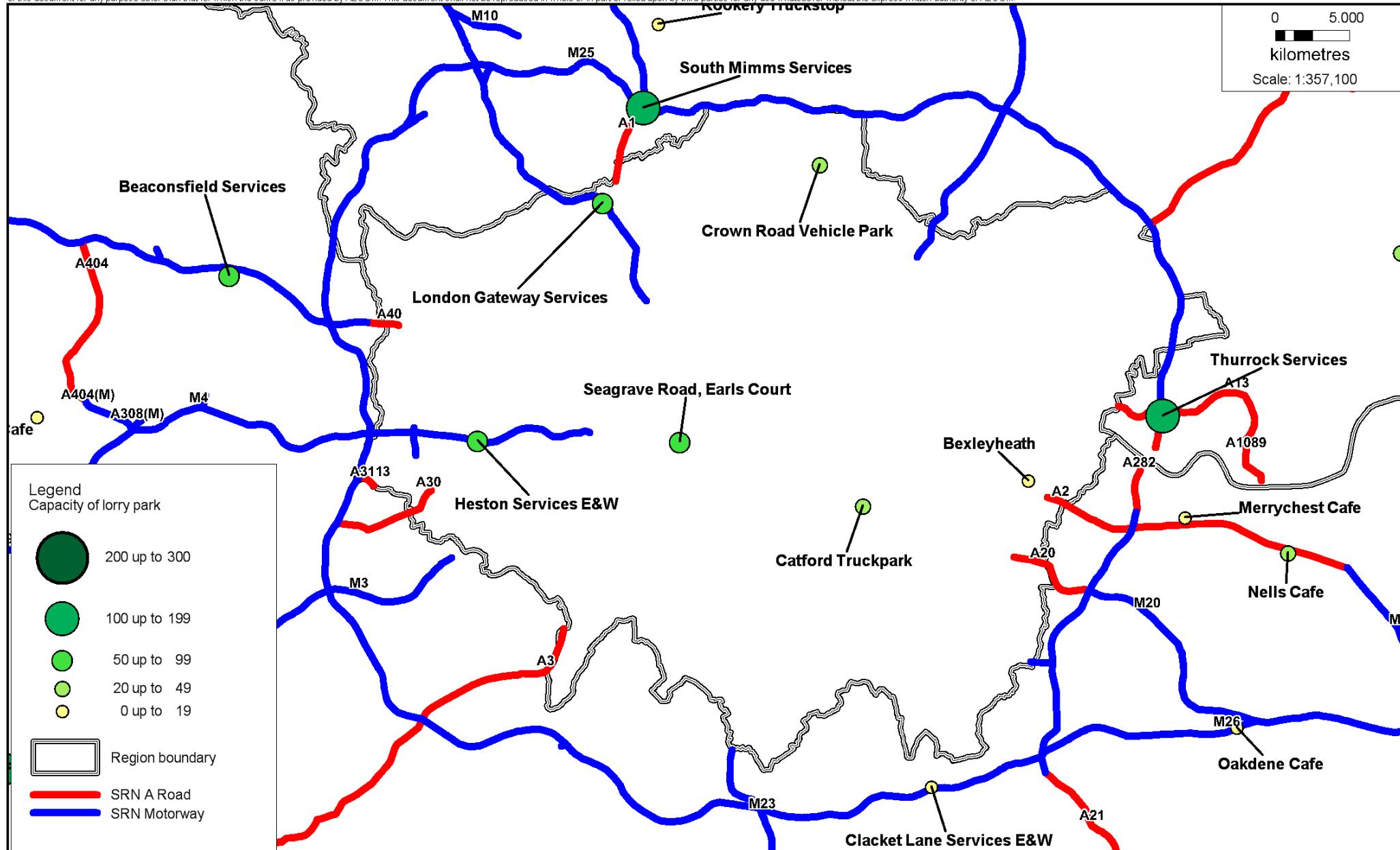
There were 298 spaces spread over seven onsite facilities (see map 4.4.1). Heston and London Gateway were Motorway Service Areas located on the M4 and M1 respectively within the M25. Crown Road Vehicle Park was an independent facility located in Enfield, North London. The remaining facilities were council operated and were located on the central axis between the A2 and M4.

#### 4.4.3 On-site Parking

Overall the lorry parking spaces were only 45% utilised and only the Crown Road Vehicle Park was more than 75% full indicating that there was spare capacity available during the survey. It is worth noting the high percentage of vehicles parked in the London region were rigid, this was relatively high compared to national figures. This would however be expected based on rigid vehicles being more common in urban areas (see Figure 4.8 and map 4.4.2).

<sup>16</sup> Truckpol 2010

<sup>17</sup> See Appendix 5 for explanation of crime severity index



Client: Department for Transport

Project: Lorry Parking Study

Title:

London:  
Capacity of lorry parking sites

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Design: T.F

Mapinfo: T.F

Chk'd: J.M

App'd: S.H

Date: 21.06.11

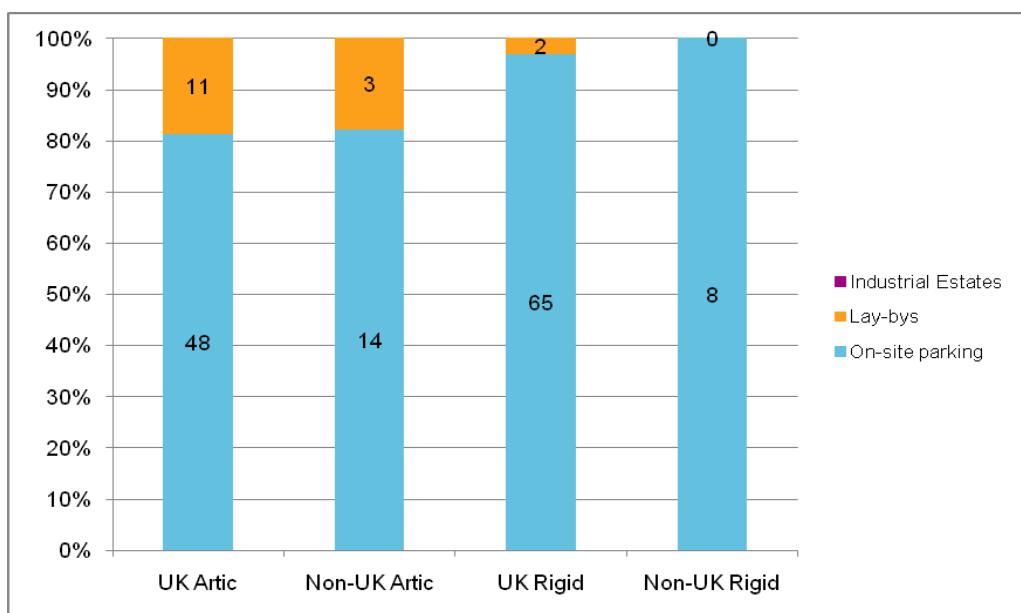
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0 5.000  
kilometres  
Scale: 1:357,100

Capabilities on project:  
Transportation

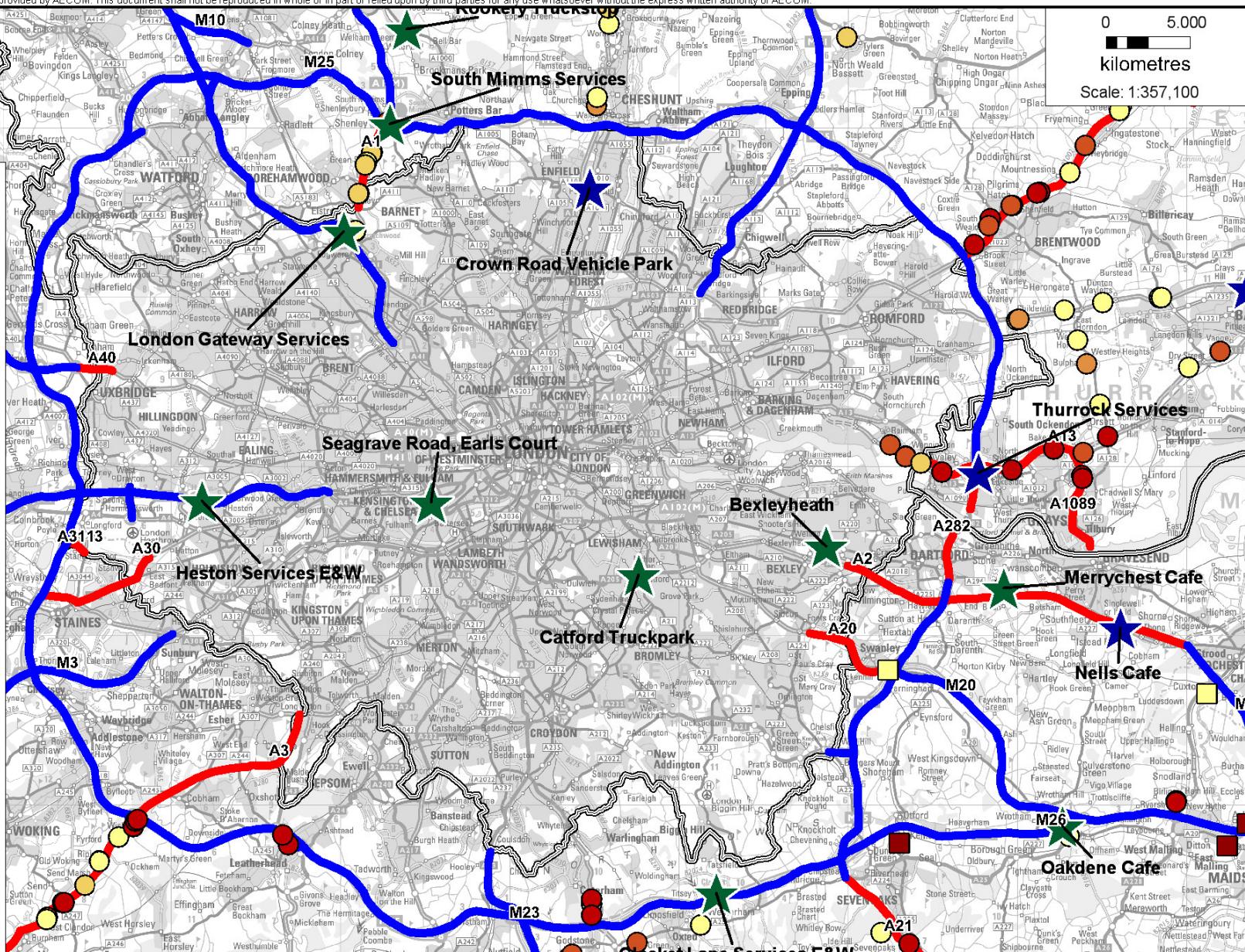
**Figure 4.8 Split of different parking areas across UK and non-UK vehicle types in the London Region**



#### 4.4.4 Off-site Parking

There was only a small amount of off-site parking observed during the survey, these were exclusively in lay-bys (see map 4.4.2). The lay-by parking took place in Havering and Barnet (see Figure 4.9). Given the dense urban nature of London it would be difficult to locate all the off-site parking and would require more localised studies that go beyond 5km of the SRN, and that are informed by local knowledge

The off-site parking surveyed in lay-bys in Havering appears to be related to parking in Thurrock and Brentwood. The parking in Barnet was part of the parking in lay-bys on the A1 north of London Gateway Services. This shows that demand for parking near to London was high in certain areas. However, there was only one borough with a lorry parking excess; Havering London Borough.



Client: Department for Transport

Project: Lorry Parking Study

Title: London:  
Off-site parking in  
lay-bys and industrial estates  
and use of lorry parks

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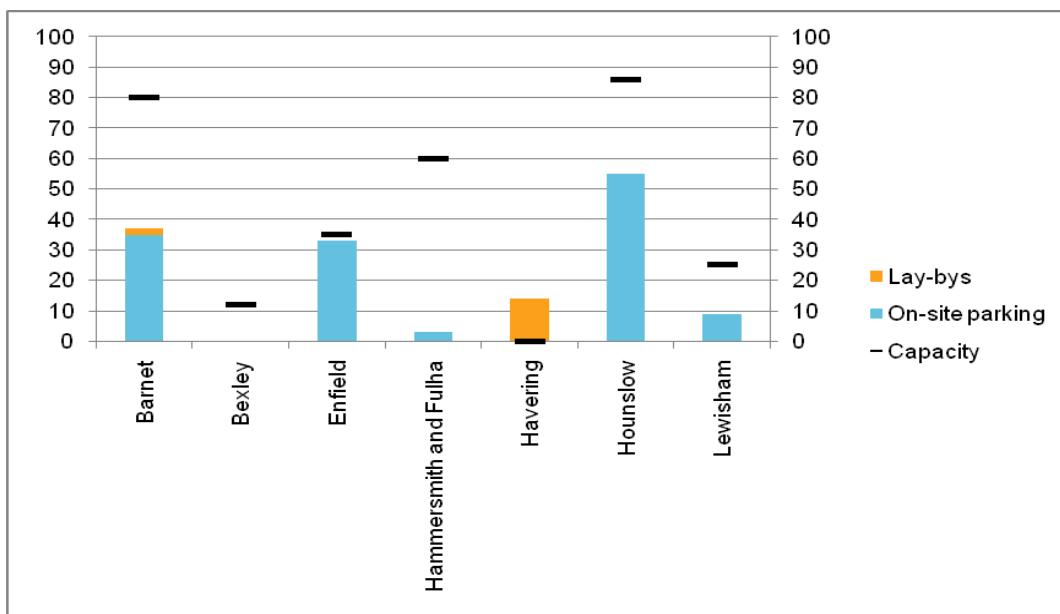
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Capabilities on project:  
Transportation

**Figure 4.9: Graph of parking trends across local authorities in the London Region**

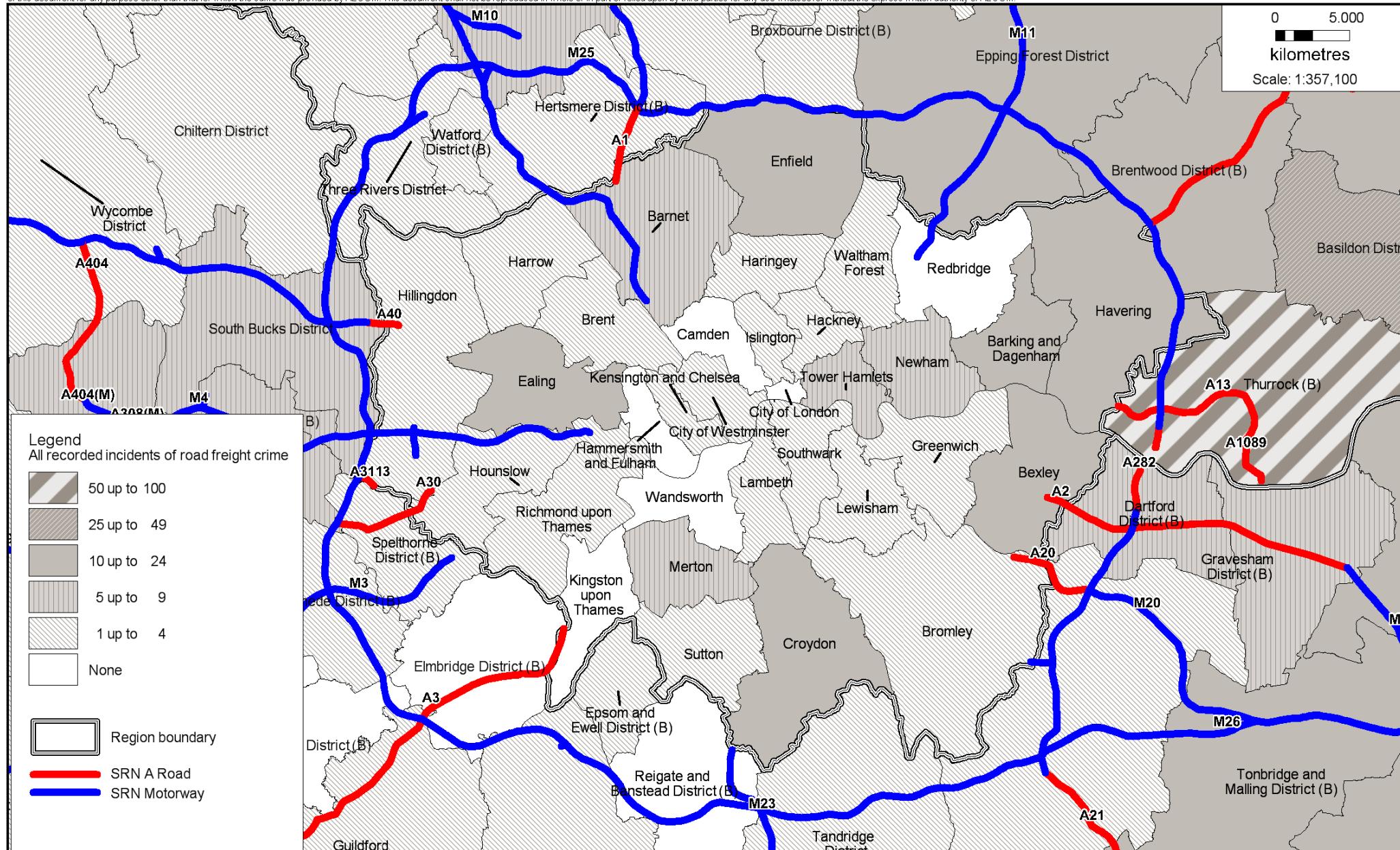


#### 4.4.5 Crime Analysis

As shown in Table 4.9 there were 146 recorded road freight crimes in 2010, costing the industry an estimated £3.6 million. These were spread throughout the region (see map 4.4.3 and 4.4.4). Ealing, Croydon, Enfield, Bexley, Barking and Dagenham and Havering Boroughs had the highest number of recorded crimes. The spread and level of crime does indicate that there may be off-site lorry parking beyond the SRN that the study did not survey.

#### 4.4.6 Summary

The survey found that onsite facilities in London were generally under-utilised and comparatively few vehicles were observed parking off-site, although this was in the context that there are many areas beyond 5km of the SRN that were not surveyed. There was a number of crimes recorded indicating that there is potentially a requirement for secure parking in London in appropriate locations.



Client: Department for Transport

Project: Lorry Parking Study

Title:  
London:  
All recorded incidents of  
road freight crime  
Truckpol 2010

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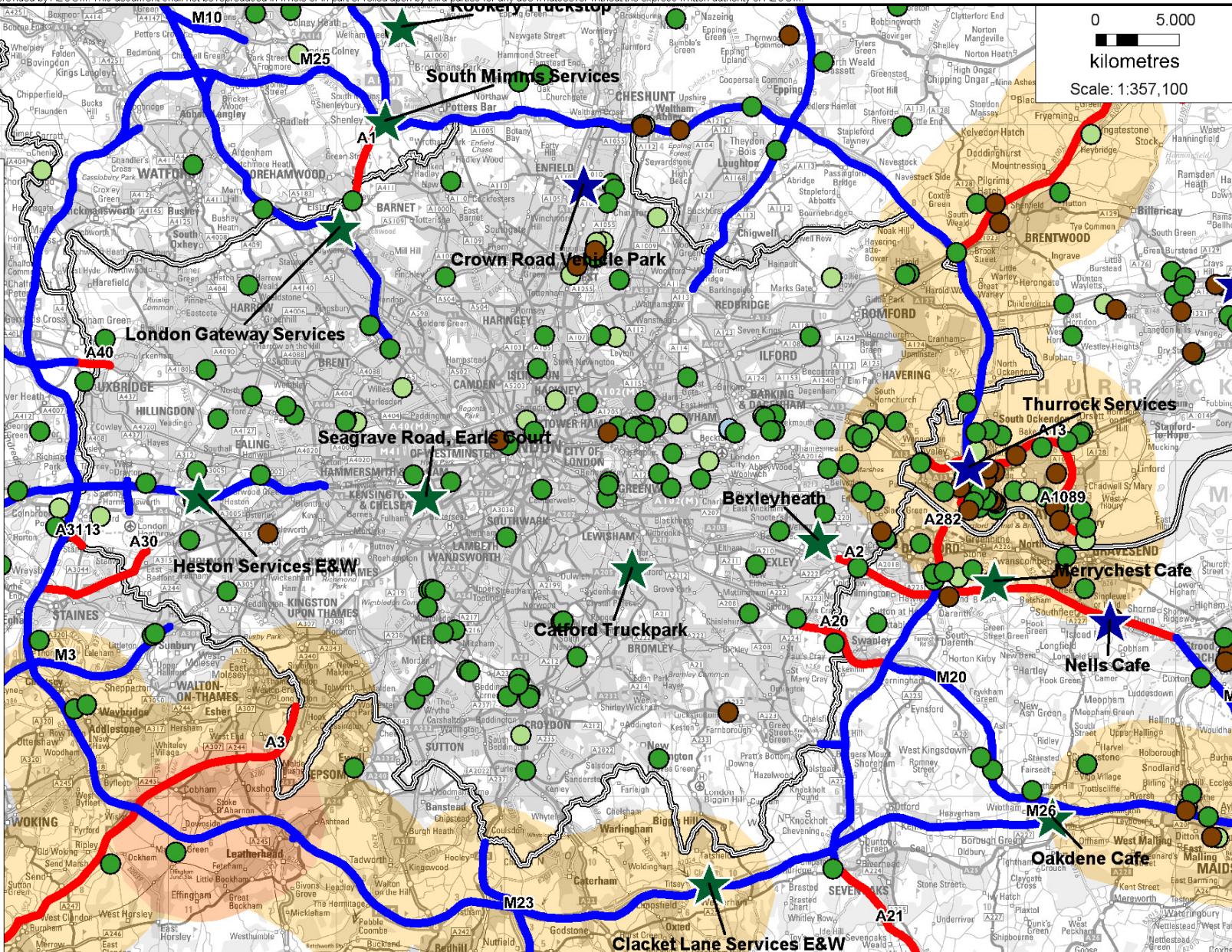
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Scale: 1:357,100

No: Map 4.4.3



Client: Department for Transport

Project: Lorry Parking Study

Title: London:  
Severity of all recorded  
road freight crime in relation  
to off-site parking hotspots  
and on-site utilisation

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Scale: 1: 357,100

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