

Argent St George, London and
Continental Railways and Exel
King's Cross Central
Transport Assessment

April 2004

Appendix 5

0. APPENDIX 5 – TRIP DISTRIBUTION

0.1 Introduction

0.1.1 The broad approach adopted for the trip distribution of the Kings Cross traffic has been previously outlined in Section 9 of the main report. The assumed boundaries for the distributions for the various land-uses are shown on Figure A5.1 (see Annex 1) and give a general indication of the origins/destinations of the trips to Kings Cross Central.

0.1.2 The assignment of traffic to the immediate highway network is based on the assumed route that people would use to gain access to the Kings Cross Central site from the wider areas based on the road classifications and linkage to the major distributor routes and arterial roads.

0.2 Commercial Trip Distribution

0.2.1 As mentioned in Section 9 the predicted trip distribution for the commercial development has been based on the accessibility of the site from the wider highway network. The overall traffic demand for the commercial development will be limited due to the location of the site and the proposed car parking provision. The assumed commercial distribution is shown on Figure A5.2

0.3 Residential Trip Distribution

0.3.1 The distribution for the majority of vehicle trip movements for the residential development will depend on the future employment areas. Although it is accepted that this may change in the future, it is proposed to use the existing vehicle movements on the local road network as a basis for the trip distribution. The volumes of flows leaving the area in the AM peak and the arrivals in the PM peak give an indication of the proportions and these have been slightly adjusted to reflect the accessibility of Euston Road since it is considered this will be one of the primary routes to/from the site. The assumed residential trip distribution for the peak periods is provided on Figure A5.3

0.4 Retail/Leisure Trip Distribution

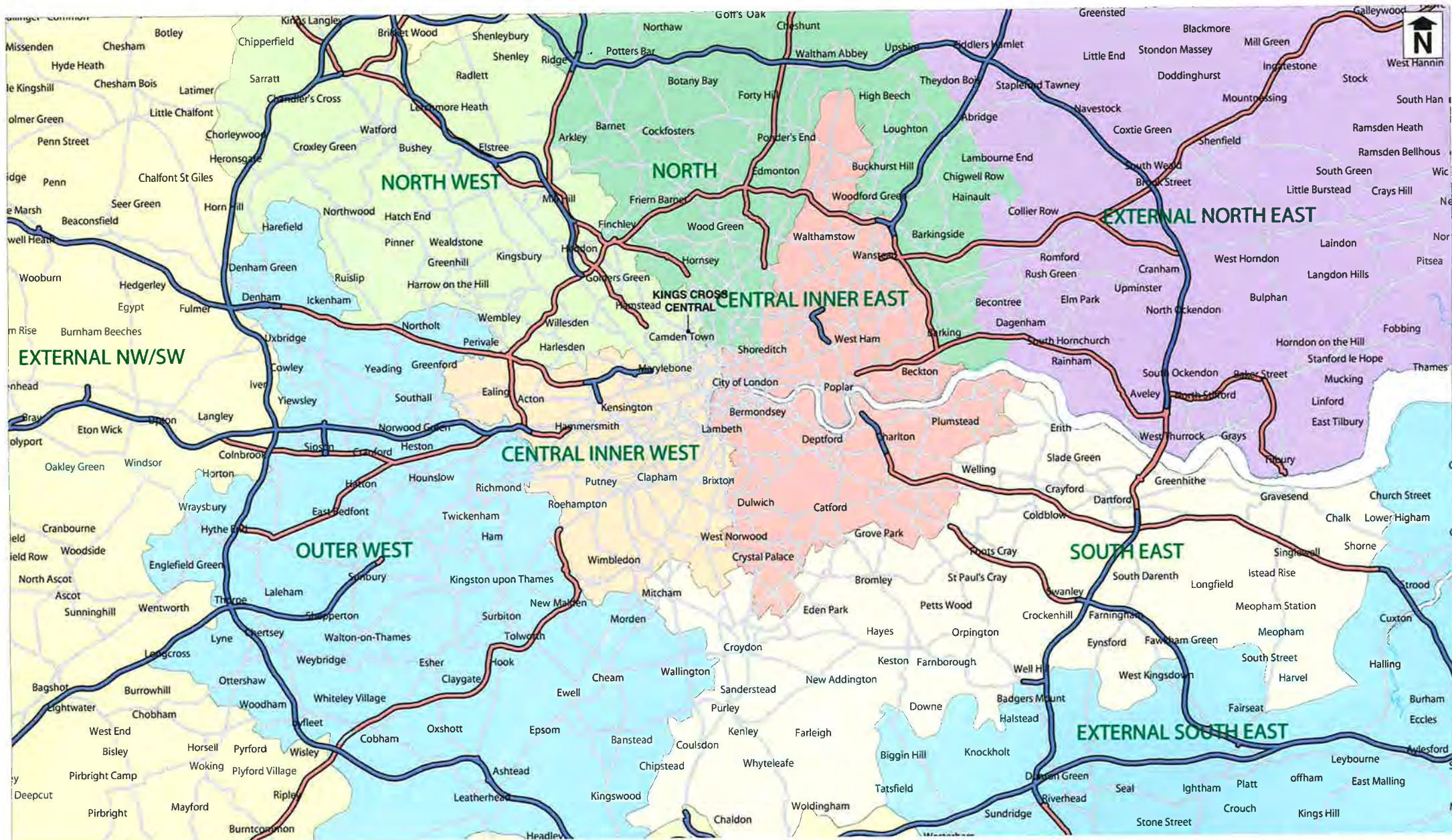
0.4.1 The retail/leisure trip distribution for people visiting the site has been based on a combination of a simple gravity model of the local boroughs and their populations. The plan of the assumed locations of the Borough centroids are provided in Annex 2, which also includes a simple spreadsheet that calculates the assumed proportions for the distribution. The predicted distribution for the Kings Cross Central highway movements are shown on Figure A5.4

0.5 The Triangle Trip Distribution

0.5.1 The proposed Triangle development will comprise residential and leisure development. The predicted traffic associated with the development will be predominantly residential and the assumed trip distribution has been based on the existing traffic movements on the immediate highway network.

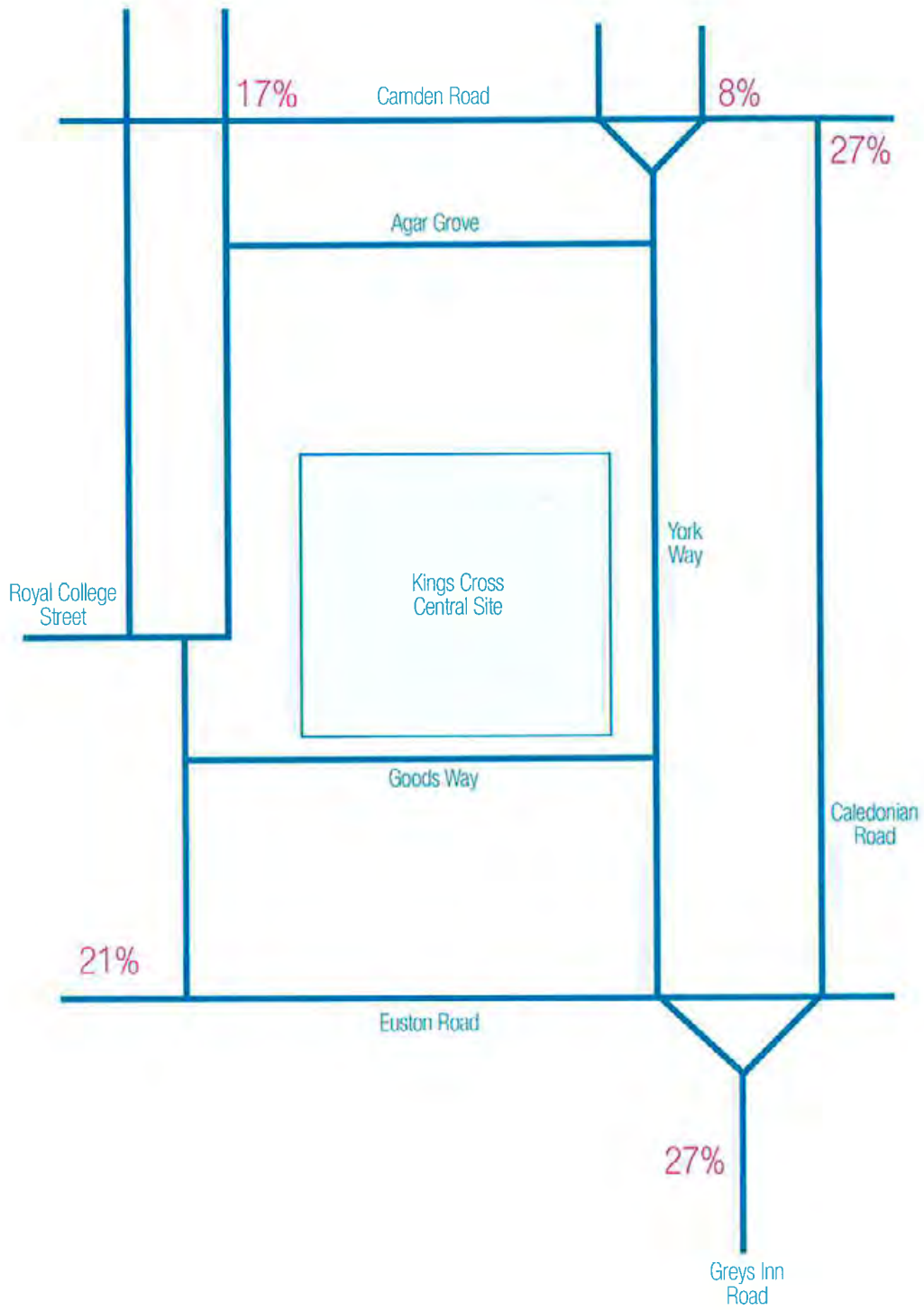
Annex 1

Figures



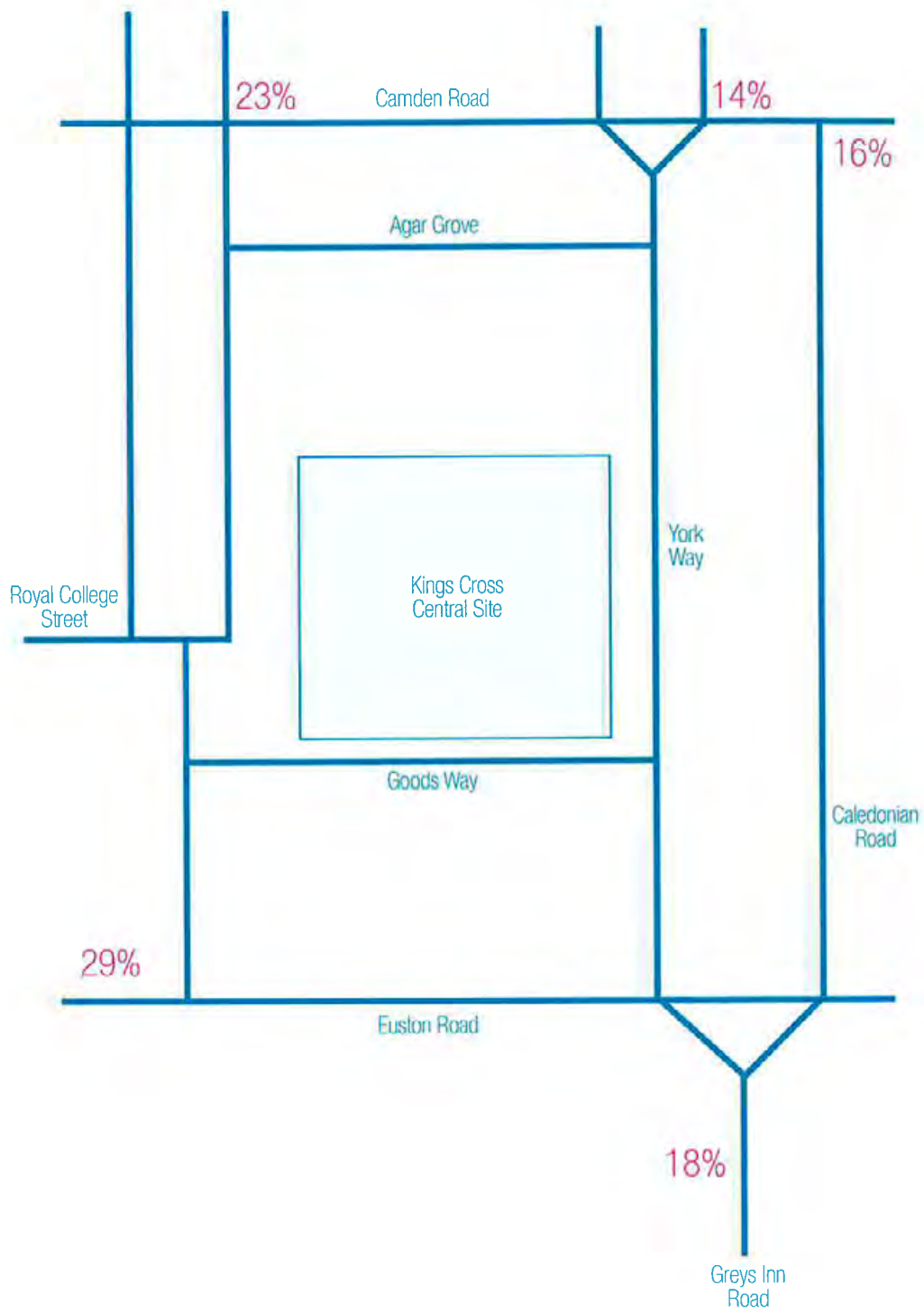
ASSUMED JOURNEY ORIGIN PLAN

FIGURE A5.1



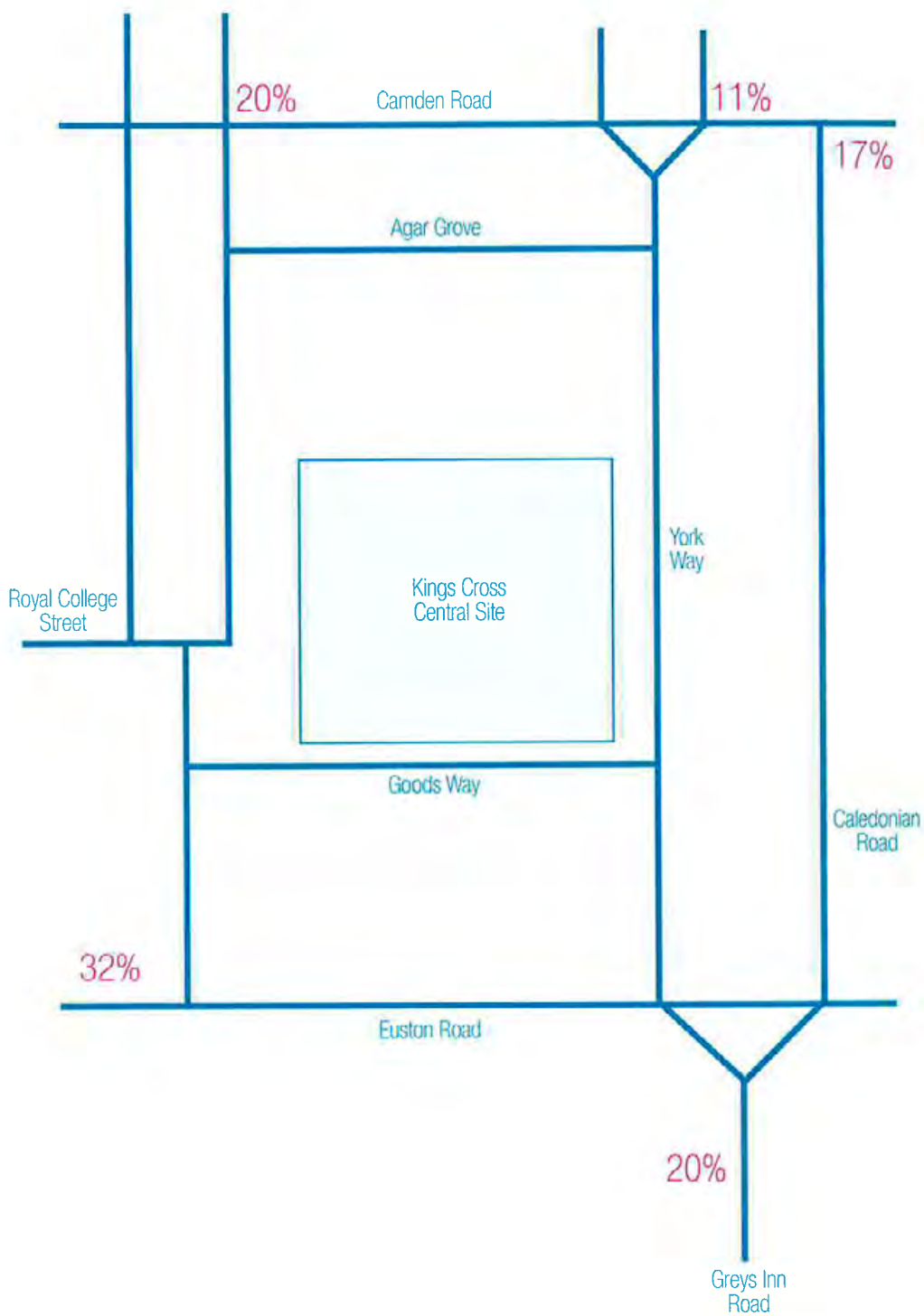
PREDICTED COMMERCIAL DISTRIBUTION

FIGURE A5.2



PREDICTED RESIDENTIAL DISTRIBUTION

FIGURE A5.3

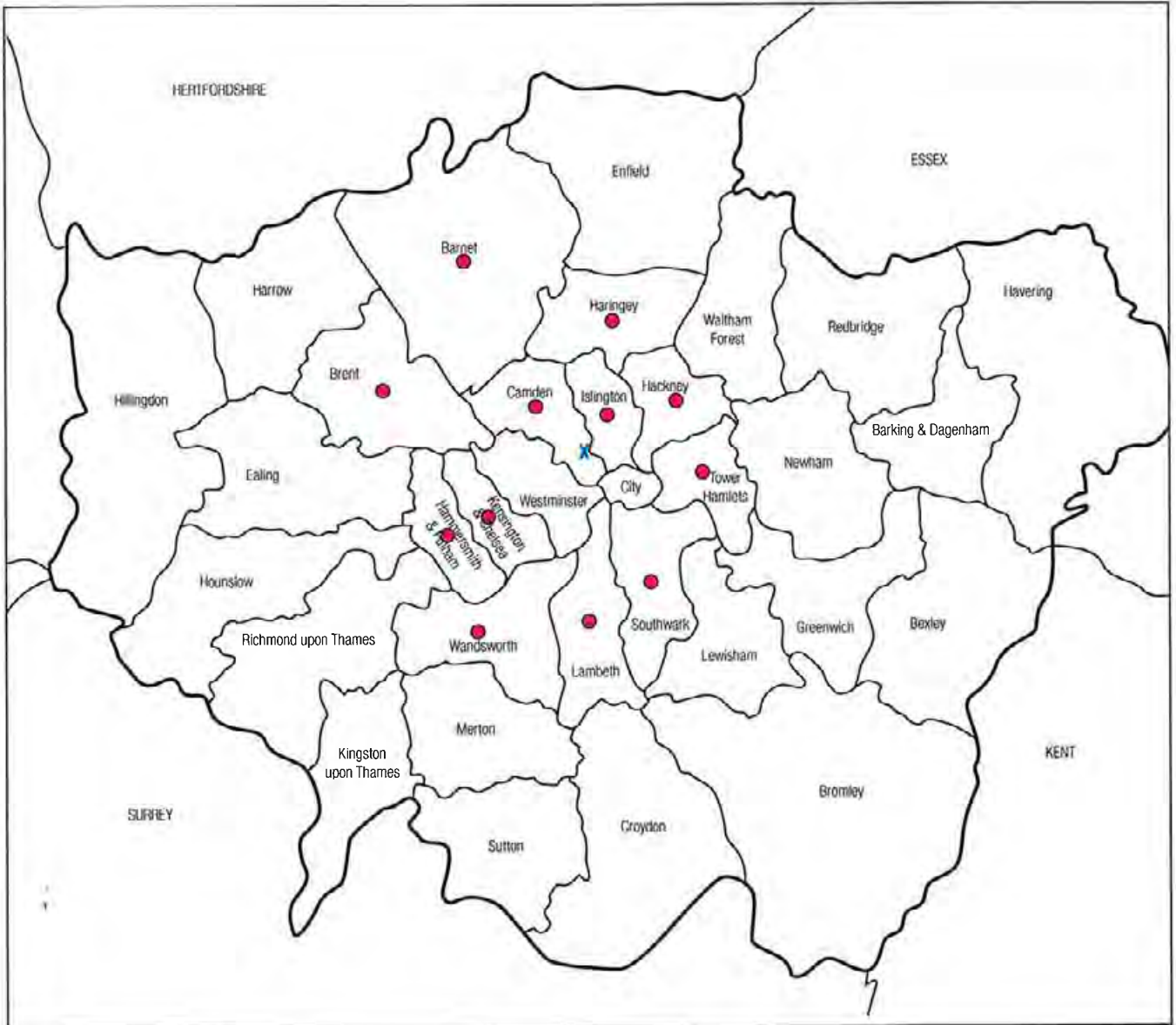


PREDICTED RETAIL & LEISURE DISTRIBUTION

FIGURE A5.4

Annex 2

Residential Distribution Gravity Model



KEY	
●	Borough Centroid
X	Kings Cross Central Site

ASSUMED BOROUGH CENTROID LOCATIONS

Dist Assumptions

Retail/Leisure Dev - Trip Distribution

	A	B	C	D	E	F	G
	Population	Proportion	Distance from KXC (km)	Average Distance (ave/dist)	Proportion Factor (B x D)	Adjusted Factor	
Barnet	314561	11%	11	0.60	7%	6%	
Brent	263463	9%	10	0.66	6%	6%	
Camden	198027	7%	4	1.66	12%	11%	
City	7186	0%	2	3.32	1%	1%	
Hackney	202819	7%	5	1.33	9%	9%	
Hammersmith	165243	6%	8	0.83	5%	4%	
Haringey	216510	8%	7	0.95	7%	7%	
Islington	175787	6%	3	2.21	14%	13%	
Kensington & Chelsea	158922	6%	6	1.11	6%	6%	
Lambeth	260383	9%	9	0.74	7%	6%	
Southwark	244867	9%	9	0.74	6%	6%	
Tower Hamlets	196121	7%	6	1.11	8%	7%	
Wandsworth	260383	9%	10	0.66	6%	6%	
Westminster	181279	6%	3	2.21	14%	13%	
TOTAL	2845551	100%			108%	100%	
Average			7				
North	N-W	External N-E	Central Inner East	Central Inner West	South East	External South East	Outer West External NW/SW
Islington	Brent		Tower Hamlets	Wandsworth			Westminster
Barnet	Camden		Southwark	Lambeth			Kensington & Chelsea
Haringey			Hackney	City			Hammersmith
26%	16%		22%	13%			23%
							100%