

Transport Characteristics of Non-Food Retail Parks





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Preface

This Research Report has been prepared for TRICS members by JMP Consultants Ltd. The study was funded by TRICS research funds and the surveys and basic analyses were undertaken by Dorset, Kent, Lancashire and Surrey County Councils.

The Report provides data on the transport and shopping characteristics of visitors to four non-food retail parks. The Report does not in any way represent the policies of contributing Councils.

The raw data from which this summary was prepared is held by JMP at the address below.

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1: Introduction

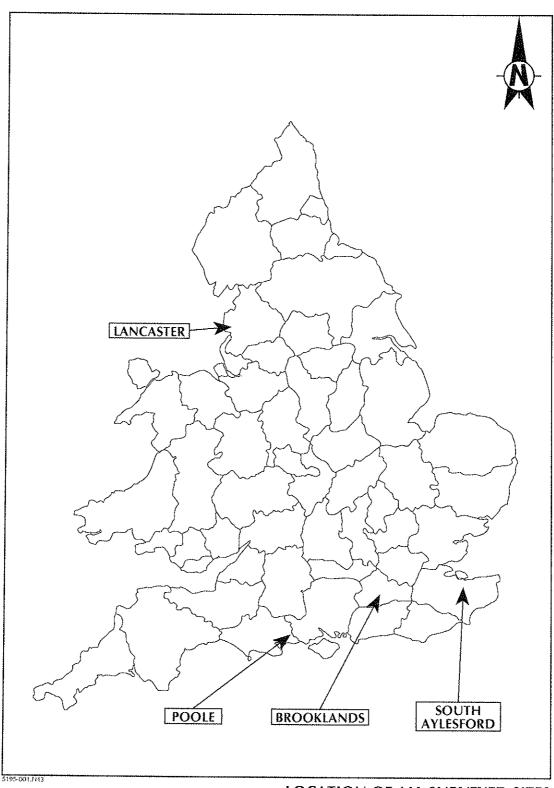
Purpose of this research

- 1.1 The TRICS Management Group commissioned four exploratory ("pilot") surveys of non-food retail parks in 1996. These relatively new forms of development comprise of groups of stores selling consumer durables such as furniture, carpets, electrical goods and other domestic furnishing products. Retail parks are usually located out-of-centre and the stores are accessed via a common entrance/exit. The sites often exclude a major food retailer, the other common out-of-centre operation.
- 1.2 The stores are therefore related by the overall market in which they operate but, whilst there is a degree of direct price and brand competition between them, each has an identifiable place in the market such that they are content to occupy the same site. The ability to conveniently visit more than one store on each visit to a retail park is seen as an advantage.
- 1.3 Such developments are clearly likely to have different total transport demand characteristics compared with the sum of the transport demands of each store in isolation. This research aims to identify such characteristics.
- 1.4 Utilising the origin and destination data, an approximation of the distance travelled can be made in addition to the trip purpose. We can also see the extent to which visits to a retail park are linked with other non-home trips.
- 1.5 The pilot surveys vary slightly in their content and conduct and it was hoped to consolidate the experience gained into a format that could be applied universally in future, allowing easier comparisons to be made.

2: The sites

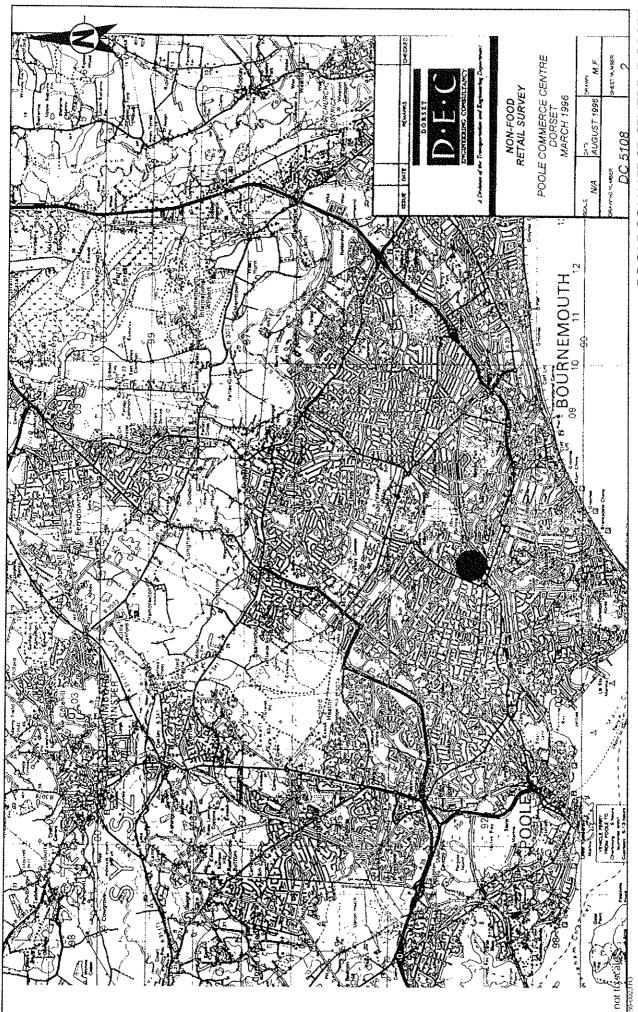
Location of survey sites

- 2.1 The following non-food retail parks were surveyed:
 - Poole Commerce Centre, Poole, Dorset
 - South Aylesford Retail Park, near Maidstone, Kent
 - Brooklands Retail Park, near Weybridge, Surrey
 - Lancaster City Retail Park, Lancaster/Morecambe, Lancashire
- The following figures show the location of the sites in England (Figure 1) and relative to the nearest urban area (Figures 2, 3, 4 and 5).
- 2.3 The subsequent figures show the site layouts (Figures 6, 7, 8 and 9).
- 2.4 The sites are described in more detail below.

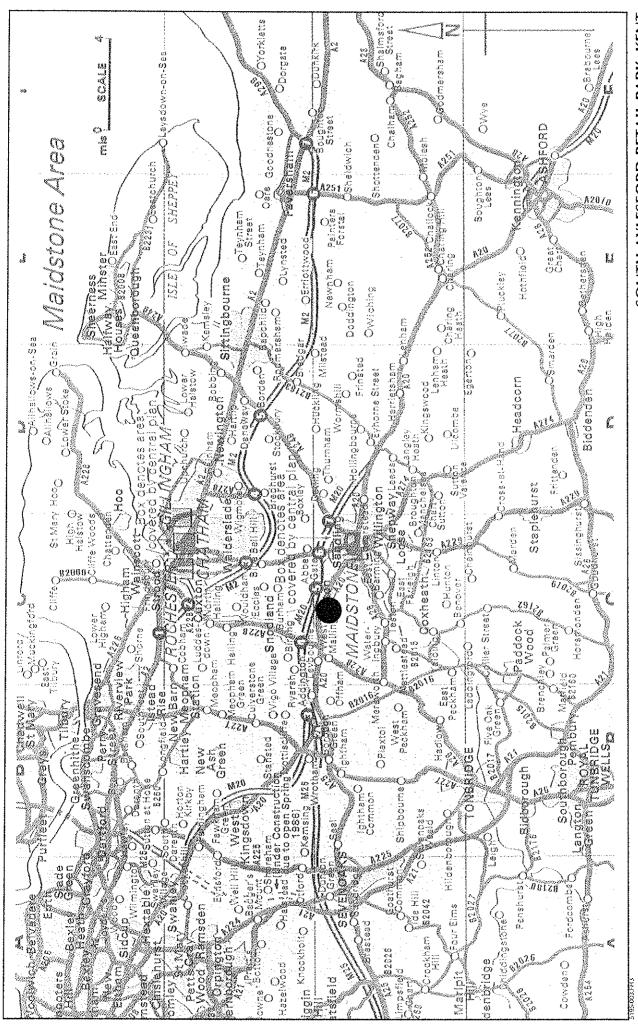


LOCATION OF ALL SURVEYED SITES

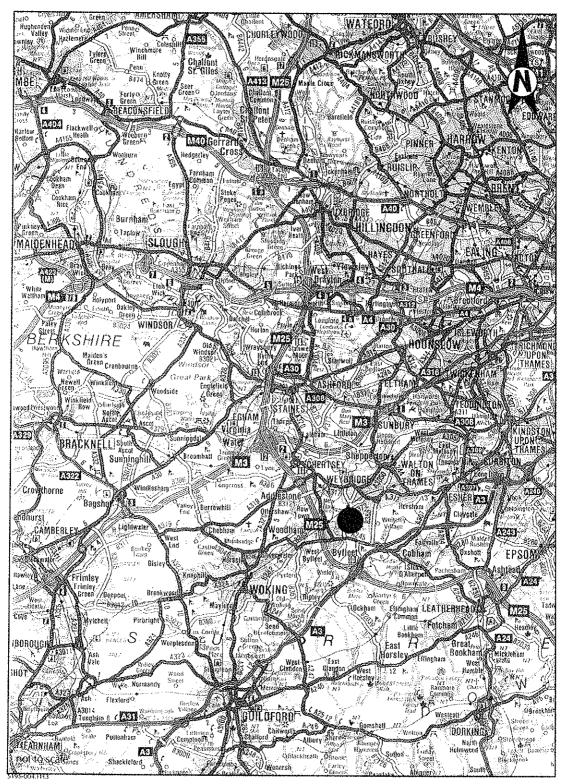
Figure 1



POOLE COMMERCE CENTRE, DORSET

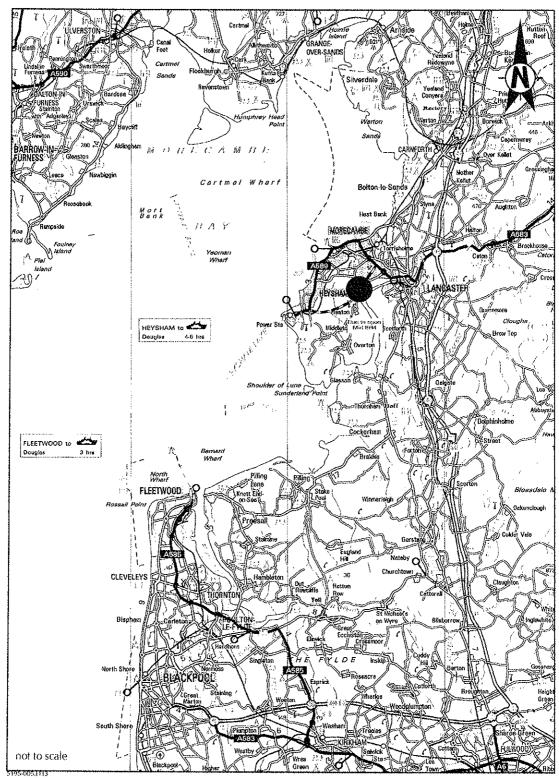


SOUTH AYLESFORD RETAIL PARK, KENT



BROOKLANDS RETAIL PARK, SURREY

Figure 4



LANCASTER CITY RETAIL PARK, LANCASHIRE

Figure 5

Poole Commerce Centre

- 2.5 The Centre is located about 4 km and 3 km from Poole and Bournemouth town centres respectively. The population within a 5 mile (8 km) radius is about 200,000. The site is surrounded by residential properties. The site's nearest competitor is relatively close, about 4 km away at Mannings Heath.
- 2.6 The site is accessed by vehicles off the A35, a main traffic artery running parallel to the south coast between Poole and Bournemouth which is also used by over 300 buses per day (Monday to Saturday) and 200 on Sundays.
- 2.7 The site has been surveyed for TRICS on three occasions as it was developed, starting in 1984. The current content of the site is shown in Table 2.1.

Table 2.1: Content of Poole Commerce Centre

Principal operators	site area (ha)	gross floor space (m²)	net floor space (m²)	car parking spaces	openin g dates
Courts (furniture)	0.84	2787	1821	100	1992
MFI (furniture/electrical) Norweb (electrical)	1.29	3823	2523	252	1985
Texas (DIY etc)	1.22	3370	2810	150	1987
Allied (furniture)	1.27	1786	1500	174	1986
Comet (electrical) Homebase(DIY etc)	1.42	5574	4246	176	1983

South Aylesford Retail Park

- 2.8 The Park is located about 4 km from the centre of Maidstone. The population within a 5 mile (8 km) radius is about 50,000-75,000. The site is adjacent to residential properties. The site's nearest competitor is some 22 km away at Rochester Airport.
- 2.9 The site is accessed by vehicles off the A20 London Road, a main traffic artery which is also used by over 40 buses per day (Monday to Saturday) and 12 on Sundays. The A20 runs parallel to the M20 at this point, about 0.5 km to the south of the motorway, and the two are linked by a spur road off junction 5, about 1 km east of the site.
- 2.10 The current content of the site is shown overleaf in Table 2.2.

Table 2.2: Content of South Aylesford Retail Park

Principal operators	site area (ha)	gross floor space (m²)	net floor space (m²)	car parking spaces	opening dates
Homebase (DIY etc)	n/a	3470	3343	n/a	1988
Carpet Right (carpets)	n/a	980	762	n/a	1991
Harveys (furniture)	n/a	465	332	n/a	1989
Seeboard (electrical)	n/a	1435	836	n/a	1993
Allied Carpets (carpets)	n/a	2374	117	n/a	1989
Allders (furniture)	n/a	3841	2714	10	1990
Halfords (car accessories)	n/a	1456	743	n/a	1990
Comet (electrical)	n/a	604	439	n/a	1990
Furniture Workshop	n/a	465	465	n/a	1989
Total	36.5	15090	9751	620	n/a

Brooklands Retail Park

- 2.11 The Park is located about 3 km and 1 km from the centres of Weybridge and Byfleet respectively, in the heart of the Surrey stockbroker belt. The population within a 5 mile (8 km) radius is 125,000 to 250,000. There are few residential properties within walking distance of the site. There is no comparable site close enough to be considered a competitor. Unlike the other surveyed sites, the Brooklands site includes two leading food retailers: Tesco and Marks & Spencer. The foodstores have a separate vehicle access off the internal circulation system but are linked to the non-food retail stores by a footpath.
- 2.12 The site is accessed by vehicles off the A245 Parvis Road, an important local distributor road. It is over 500m to the nearest bus stop on the A245, over 1200m to the B374 Brooklands Road bus stop and 1200m to the nearest rail station. There is a free bus service to Tesco/Marks & Spencer which experiences a low patronage. The site lies just inside the M25, about 7 km from Junction 10 with the A3. The rail station closest to the site is at Byfleet and New Haw on the Waterloo (London) to Portsmouth main line. Local stopping services use this station. There is no dedicated pedestrian link between the Park and the station.
- 2.13 The current content of the site is shown in Table 2.3.

Table 2.3: Content of Brooklands Retail Park

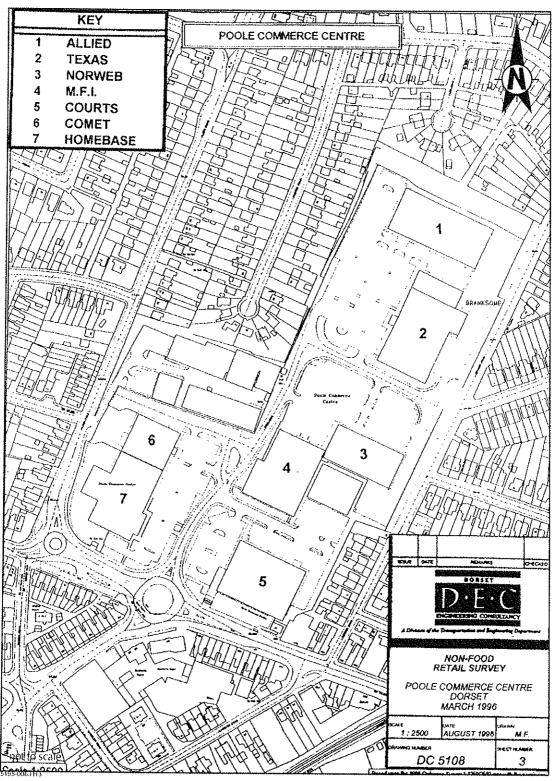
Principal operators	site area (ha)	gross floor space (m²)	net floor space (m²)	car parking spaces	opening dates
Argos (various)	n/a	970	300	59	1994
Childrens World (toys)	n/a	1400	1050	63	1994
Seeboard (electrical)	n/a	1090	930	58	1994
Marks & Spencer	n/a	n/a	n/a	n/a	n/a
Tesco	n/a	n/a	n/a	n/a	n/a
Total of non-food	1.20	3460	2280	180	n/a

Lancaster City Retail Park

- 2.11 The Park is located about 2.5 km from Morecambe town centre and 4 km from Lancaster city centre. The population within a 5 mile (8 km) radius is about 110,000. It is adjacent to the White Lund Trading Estate. The Park is the only one of its type in the area and therefore competes with Lancaster city centre.
- 2.12 The site is accessed by vehicles off the A683, a new link road to Heysham which by-passes Morecambe. Public transport provision is poor. Passing the site are 6 buses per day each way (Monday to Saturday) travelling from Morecambe to Lancaster via Heysham. There is no Sunday service. The nearest rail station is Bare Lane some 3 km away.
- 2.13 The current content of the site is shown overleaf in Table 2.4.

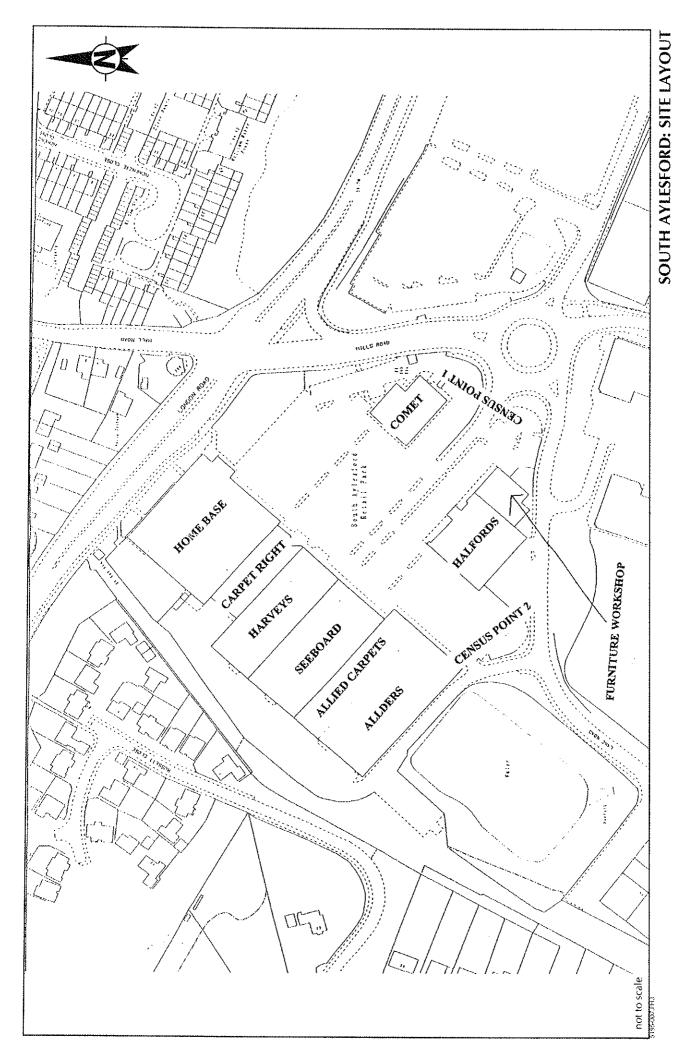
Table 2.4: Content of Lancaster City Retail Park

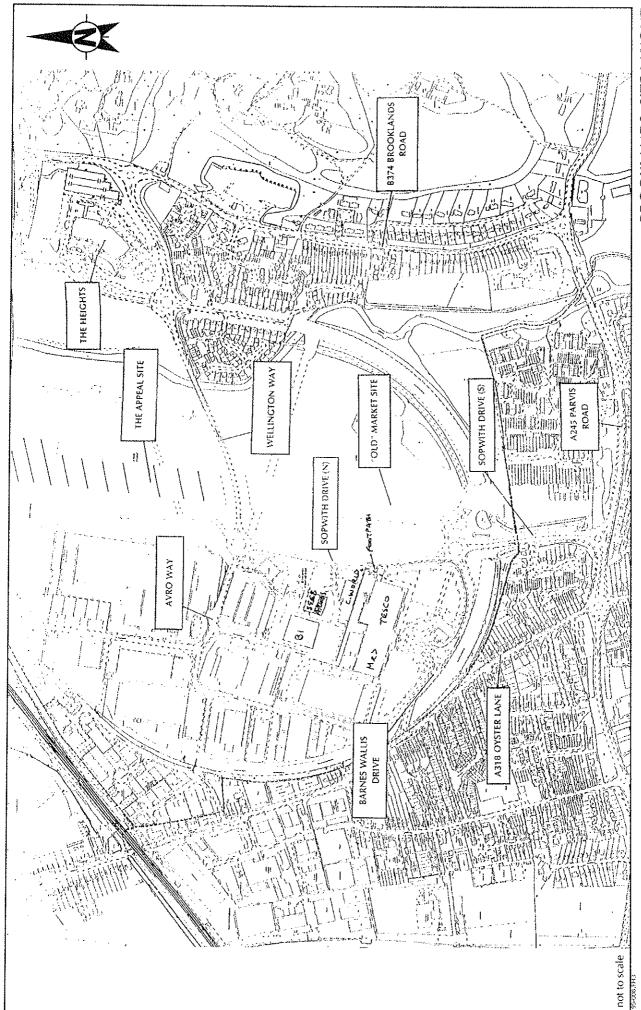
Principal operators	site area (ha)	gross floor space (m²)	net floor space (m²)	car parking spaces	opening dates
Wickes (DIY)	n/a	2475	n/a	n/a	1994
MFI (furniture/electrical)	n/a	2851	n/a	n/a	1994
Fads Homestyle (DIY, etc)	n/a	714	n/a	n/a	1994
Carpet Right (carpets)	n/a	713	n/a	n/a	1994
Cantors Furniture	n/a	954	n/a	n/a	1994
Kingsbury Interiors (furniture)	n/a	950	n/a	n/a	1994
Vacant unit	n/a	1562	n/a	n/a	n/a
Total	3.4	10219	-	472	n/a



POOLE: SITE LAYOUT

Figure 6





BROOKLANDS: SITE LAYOUT

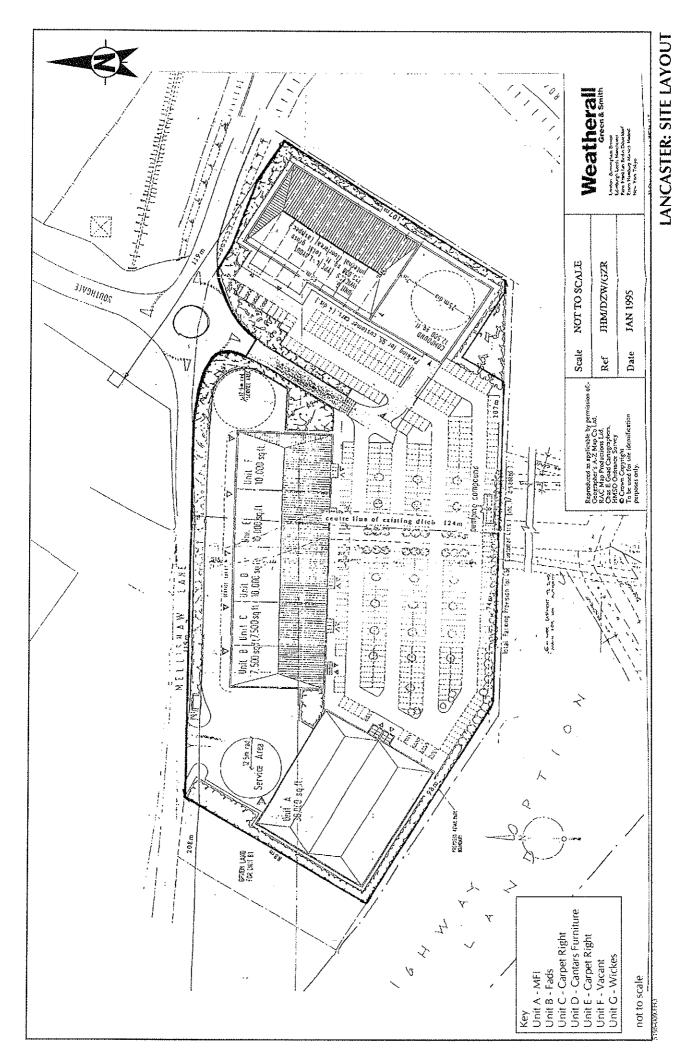
3: The surveys

Methodology

- 3.1 The surveys needed to differentiate visits to individual stores to be of value and therefore an interview-type sample survey was the basis of data collection, supplemented by conventional traffic counts to provide control totals.
- Table 3.1 summarises the content of survey questionnaires. Table 3.2 summarises the survey programmes.
- 3.3 The surveys did not incur any unusual operating difficulties which affected the results and the overall rate of return was adequate. Further details are given in Table 3.3.
- 3.4 The questionnaires used are given in Appendix A.

Table 3.1: Details of questionnaire content

Poole Commerce Centre	South Aylesford Retail Park	Brooklands Retail Park	Lancaster City Retail Park	
Group size	Car occupancy	Group size	Group size	
Stores visited: Comet Norweb Texas Allied/Kingsbury Homebase Courts MFI Parrs Confect'ry	Stores visited: Comet Seeboard Harveys Allders Allied Carpets Homebase Furniture Workshop Carpet Right Halfords Snack Wagon	Main store visited and frequency of visit: SEEB Childrens World Argos Other store(s) visited: as above Also M&S / Tesco	Main store visited: Wickes MFI Fads Carpet Right Cantors Furniture Kingsbury Interiors Other store(s) visited: as above	
Origin (street, town, Postcode)	Origin (street, town, Postcode)	Origin (street, town, Postcode)	Origin (street, town, Postcode)	
Mode of travel (arrival) Car Taxi Motorcycle Cycle Bus Walk Other	Mode of travel (arrival) Car Taxi Motorcycle Cycle Bus Walk Other	Mode of travel (arrival) Car Taxi Motorcycle Cycle Bus Walk Other	Mode of travel (arrival) Car Taxi Motorcycle Cycle Bus Walk Other	
Origin description: Home Work Shopping Personal Other	Origin description: Home Work Shopping Personal Other	Origin description: Home Work Shopping Personal Other	Origin description: Home Work Shopping Personal Other	
Destination (street, town, Postcode)	Destination (street, town, Postcode).	Destination (street, town, Postcode).	Destination (street, town, Postcode)	
Not requested	Mode of travel (departure) Car Taxi Motorcycle Cycle Bus Walk Other	Not requested	Not requested	
Destination description: Home Work Shopping Personal Other	Destination description: Home Work Shopping Personal Other	Destination description: Home Work Shopping Personal Other	Destination description: Home Work Shopping Personal Other	
Purchases to be delivered?	Purchases to be delivered?	Purchases to be delivered by each store?	Purchases to be delivered by each store?	
Frequency of visits	Not requested	Frequency of visits	Frequency of visits	



1

Table 3.2: Details of survey programme

	Poole Commerce Centre	South Aylesford Retail Park	Brooklands Retail Park	Lancaster City Retail Park
method	Manual traffic counts	Manual traffic counts	Manual traffic counts	Manual traffic counts
	Car park occupancy and accumulation	-	-	Car park occupancy and accumulation
	Postcard interviews - motorists - pedestrians	Postcard interviews - motorists	Postcard interviews	Postcard interviews
dates	15, 16, 17 March 1996 Fri, Sat, Sun	17, 19, 20 October 1996 Thu, Sat, Sun	17, 18, 19 May 1996 Fri, Sat, Sun	11, 12, 13 October 1996 Fri, Sat, Sun

Table 3.3: Survey statistics

TO THE PROPERTY OF THE PROPERT	survey population (totals leaving site over whole survey period)		postcards	issued	postcards returned
	cars	pedestrians	cars	pedestrians	
Poole	8370	380	5840	240	1920
South Aylesford	8816	-	4000		3030
Brooklands	3668	526 adults* 185 child'n	1933	-	839
Lancaster	3797	15	3797	-	902

^{*} Note: These figures refer only to people walking between Tesco/M&S and the non-food retailers.

4: The results

Traffic attraction

4.1 Full details of the classified vehicle counts undertaken at all the sites are given in Appendix B. Table 4.1 summarises these results. Survey periods vary but Saturday is the busiest day. Substantial Sunday trading is also evident.

Table 4.1: Classified vehicle count data: vehicles using site accesses

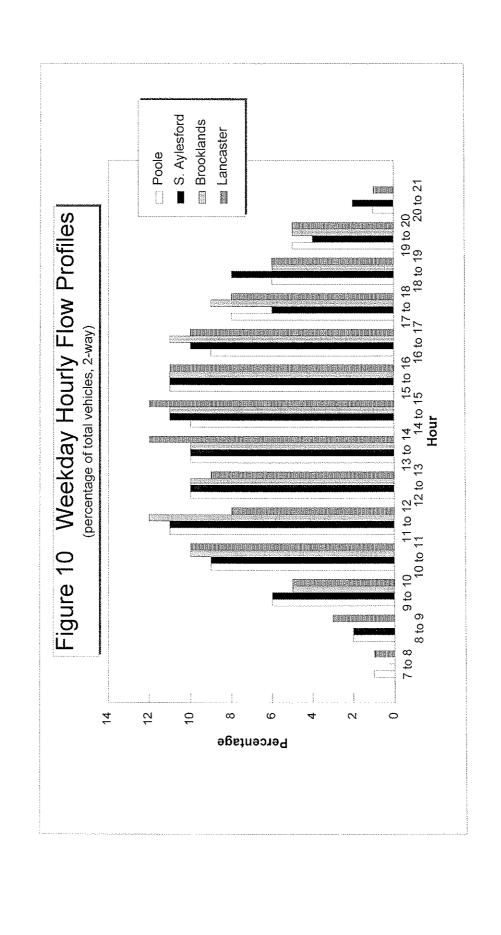
site and time periods	cars and vans	heavy goods vehicles	motor cycles	buses* and coaches	pedal cycles	total motor vehicles
Poole: 2-way total flows						
Friday 0730-2030	5325	114	14	2	10	5445
Saturday 0730-2030	8137	7	28	1	14	8167
Sunday 0930-1900	7890	0	44	1	24	7911
South Aylesford: 2-	-way total flo	ws				
Thursday 0800-2100	3667	28	23	0	27	3718
Saturday 0800-1900	6934	30	29	6	11	6999
Sunday 0900-1800	7032	10	19	2	9	7063
Brooklands: 2-way	total flows					
Friday 0900-2000 Ch. World Argos/SEEB	503 1015	4 14	2 2	0	10 12	509 1031
Saturday 0900-1800 Ch. World Argos/SEEB	1472 1924	2	0 4	0	0 4	1474 1940
Sunday 1000-1630 Ch. World Argos/SEEB	935 1130	0	0 2	2 1	1 12	937 1130
Lancaster: 2-way total flows						
Friday 0700-2100	2172	91	23	0	2	2286
Saturday 0700-2100	3324	34	34	0	5	3392
Sunday 1000-1700	2796	0	20	0	0	2816

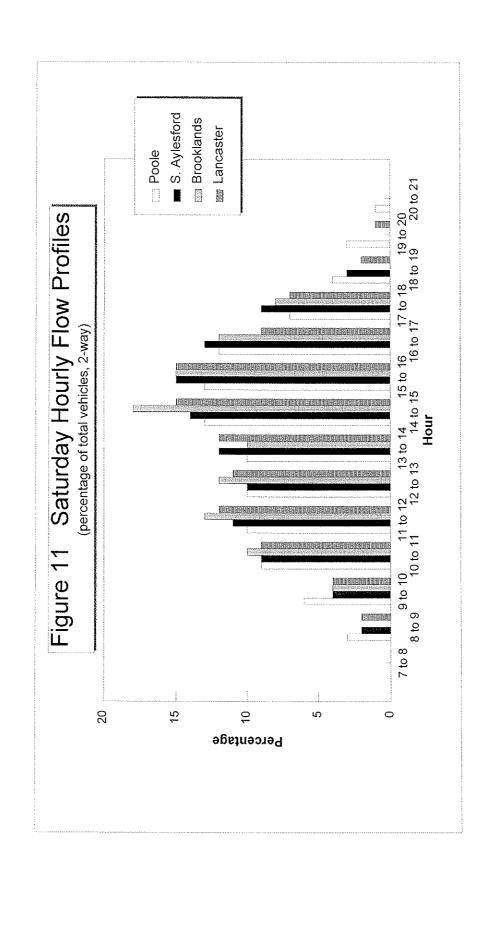
* Note: additional buses also pass the respective sites, thus providing a greater potential for public transport use than this table implies.

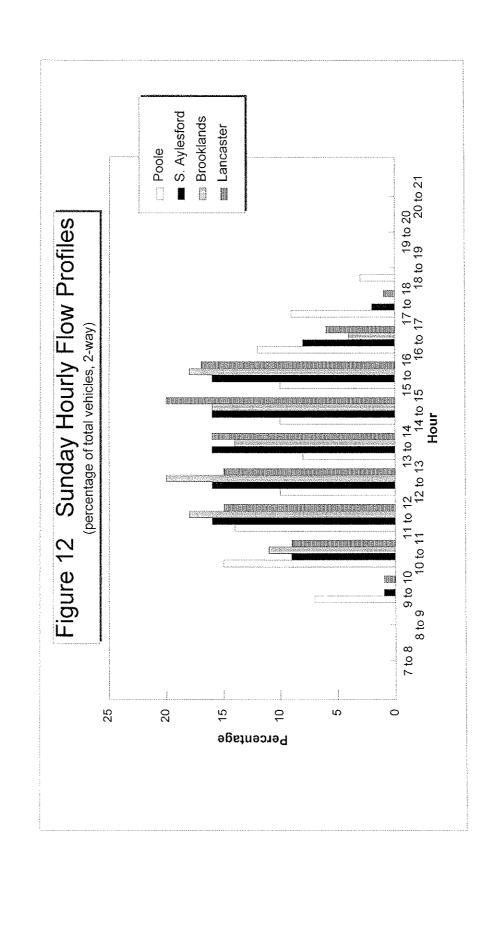
4.2 Trip rates can be summarised as shown in Table 4.2. Hourly vehicle flow profiles are given in Figures 10, 11 and 12 for the weekday, Saturday and Sunday counts respectively. The Brooklands trip rates are interestingly high. This may, in part, be due to the added attractiveness of the site as it is adjacent to Tesco and Marks & Spencer. Additionally, the Brooklands site has no equivalent competitor. Thus the high trip rate at Brooklands appears to support the view in 'TRICS Research Report Trip Rates: Stability and Application', that it is important to understand market competition.

Table 4.2: Daily trip rates for total site contents

location	daily trip rates per 100 m² gfa (combined entry and exit flows)				
Poole	Friday	Saturday	Sunday		
	31.4	47.1	45.6		
South	Thursday	Saturday	Sunday		
Aylesford	24.6	46.4	46.8		
Brooklands	Friday	Saturday	Sunday		
	55.6	97.7	59.5		
Lancaster	Friday	Saturday	Sunday		
	26.4	39.2	32.5		







4.3 Table 4.3 below compares weekday average TRICS trip rates for isolated (free standing) non-food retail stores and non-food retail parks. Further comparison of these figures with those in Table 4.2, indicates (with the exception of Brooklands) that trip rates are higher for isolated stores. This observation can be explained by linked tripmaking during visits to non-food retail parks.

Table 4.3: Daily trip rates for isolated stores (weekdays)

Description		TRICS Weekday daily trip rates per 100 m² gfa
Halfords - motorist DIY	(5 sites)	41.54
DIY stores without garder	centre (17 sites)	41.13
DIY stores with garden centre (11 sites)		54.50
Toys-r-Us	(2 sites)	63.79
Non-food retail parks	(27 sites)	32.77

(Source: TRICS database)

4.4 It is unusual for any visits to the surveyed retail parks to be made on foot. At Poole, only 4 per cent of visits during the survey were on foot. At Brooklands, South Aylesford and Lancaster, the proportion of visit on foot was insignificant. Car is the dominant mode of transport.

Sampling rates

4.5 Unweighted survey data has been used throughout this Summary Report as sampling rates did not vary dramatically throughout the day at any of the three sites for which data is available.

Shopping group size

4.6 Average shopping group sizes have been calculated. The results are summarised in Table 4.4 overleaf. Group sizes vary between weekend and weekdays; this is not surprising considering the likelihood that people in employment will generally not easily be able to make such shopping trips on weekdays. The attraction for children of the Childrens World outlet on the Brooklands site is the likely reason for the higher group size in this instance.

Table 4.4: Shopping group size

site	average number of people in shopping group		
Poole	Friday	Saturday	Sunday
	1.6	1.9	2.1
South Aylesford	Thursday	Saturday	Sunday
	n/a	n/a	n/a
Brooklands	Friday	Saturday	Sunday
	2.0	2.5	2.4
Lancaster	Friday	Saturday	Sunday
	1.7	2.1	2.1

Visitation rates and linked internal trips

- 4.7 One of the most interesting aspects of this research concerns the number of stores visited per site on each visit to a retail park. It is also interesting to examine the extent to which certain stores can be regarded as "anchors" for the rest. Whilst this latter effect cannot be fully examined without in-depth interviewing, it is not unreasonable to regard the most frequently visited stores as anchors. The Surrey County Council survey of Brooklands included reference to "main store visited", which gives a useful indication of this effect.
- 4.8 Table 4.5 shows which stores were visited per site visit on Saturday and a weekday. At Poole, Homebase is the most frequently visited store, by some margin, possibly reflecting the variety of products stocked. At South Aylesford, both Homebase and Allders could be classed as anchor stores on this basis with significant activity at Comet and Seeboard. At Brooklands, both Childrens World and Argos attract over 5 times more visits than Seeboard. At Lancaster, Wickes and MFI are the most popular stores. There are only minor differences in visits to each store between the weekday and Saturday site visits.
- 4.9 Table 4.6 shows the number of stores visited on each trip to a retail park. There is some variation by day of week. Weekday visits appear to be somewhat time-constrained with less time for browsing; thus very few people visit high numbers of stores (eg 5 or more out of the 7 at Poole) on a weekday whereas a significant number do at weekends. Using the Poole site as an example, the most common number of stores visited on a Saturday is 2 (out of 7). This is true for visitors to every Poole store except Homebase; it was quite unusual for Homebase visitors to visit any other store.
- 4.10 South Aylesford, despite having two more stores than Poole, has a lower average number of store visits than Poole. At South Aylesford, more stores are visited on a weekend day than a weekday and on average 2 stores are visited on any day.

Table 4.5 Stores visited

site	stores visited: percentag	percentage of all	le of all store visits on Saturday	Saturday					
Poole	Comet	Norweb	Texas	Allied	Homebase	Courts	MFI		
	10	9	16	7	36	10	14		
South Aylesford	Comet	Seeboard	Harveys	Alfied	Homebase	Aliders	Furniture World	Carpet Right	Halfords
	11	10	8	5	27	26	2	3	8
Brookiands	Argos	Seeboard	Childrens World						
	44	6	47					:	
Lancaster	Wickes	MFI	Fads	Carpet Right	Cantors Furniture	Kingsbury Interiors			
	37	25	12	7	6	6			
site	stores visited: percentag	ம	of all store visits on a weekday	a weekday					
Poole (Friday)	Comet	Norweb	Texas	Allied	Home- base	Courts	MFI		
	11	9	15	7	40	6	12		
South Aylesford	Comet	Seeboard	Harveys	Allied	Home. base	Allders	Furniture World	Carpet Right	Halfords
(Thursday)	12	12.5	6	9	32	14	1	5	8.5
Brooklands (Friday)	Argos	Seeboard	Children's World						
	38	6	53						
Lancaster (Friday)	Wickes	MF	Fads	Carpet Right	Cantors Furniture	Kingsbury Interiors			
	42	25	12	9	7	7			

Table 4.6 Number of stores visited per site visit

location	Average number of stores visited				
Poole	Friday	Saturday	Sunday		
(7 stores)	2.13	2.41	2.46		
South Aylesford	Thursday	Saturday Sunday			
(9 stores)	1.88	2.02	2.21		
Brooklands	Friday	Saturday Sunday			
(3 stores)	1.27	1.33	1.22		
Lancaster (6 stores)	Friday	Saturday	Sunday		
	1.64	1.75	1.76		

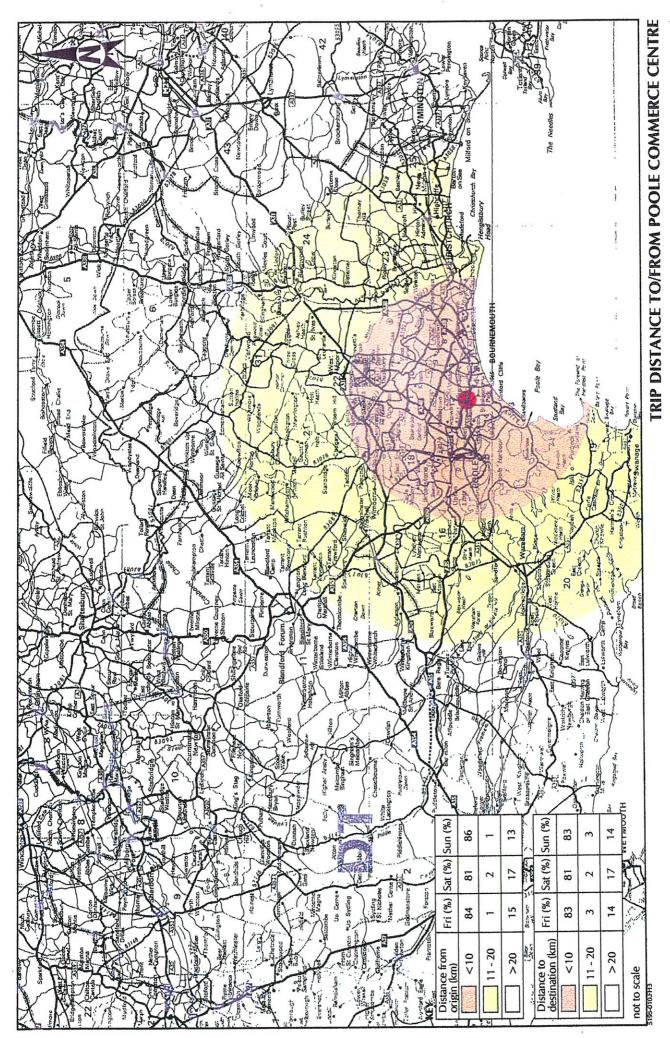
- 4.11 The Brooklands site has fewer non-food stores (just 3) and the visitation picture is complicated by the adjacent foodstores (2). Here, the great majority of visits are to one store only. This is not surprising, given the distinct nature of their markets. About 60 per cent of non-food store visits to Brooklands also included a visit to one or both foodstores on the Saturday. On the Friday, the proportion was up to 70 per cent.
- 4.12 The Lancaster site which offers one less store than Poole has a much lower average number of stores visited. Although, for all three days visitors to the Park are more likely to visit two stores rather than just one.

Catchment areas and origin-destination characteristics

- 4.13 The catchment areas for these retail parks are relatively compact. Figures 13 to 16 show the distance bands travelled by visitors to Poole, South Aylesford, Brooklands and Lancaster respectively. These are provided for the distance from the trip origin and to the trip destination. Additionally, for South Aylesford and Lancaster, the distance between the site and visitors' home postcodes is also displayed (as available).
- 4.14 Well over 70 per cent of visitors to the Poole site started the trip in Poole or Bournemouth, the centres of which are only 3 or 4 km (crowfly) from the site. About 80 per cent of these trips started at home. The distance travelled to the Poole site does not vary between weekday and weekends.
- 4.15 The vast majority of trips to the South Aylesford park are from the Maidstone Postcode area. About 50 per cent of weekday trips are less than 5 km from home. This falls to about 40 per cent during the weekend. About 80 per cent of trips are less than 15 km from home. The distance from the trip origin is similar to that of the home

postcodes. However, the distance bands to the trip destination show more visitors in the shorter distance bands. This is more evident at the weekend.

- 4.16 The catchment area for the Brooklands site is the lowest of all the sites. About 40 per cent of visits started within a 5 km radius of the site but over 95 per cent started their trip less than 15 km from the site. The distance travelled from the site to the next destination is similar to that of the origin. As with the Poole Commerce Centre, the distance travelled to the Brooklands site does not vary between weekday and weekends.
- 4.17 The distance to home of visits to the Lancaster site was higher on weekend days compared to the weekday. Over 65 per cent of visits on a weekday were less than 5 km from the site reducing to about 55 per cent on weekend days. In contrast, the distance from the trip origin and to the trip destination gives a different picture. On the weekday, over 75 per cent of visitors are travelling from an origin and to a destination that is within 5km of the site. During the weekend, about 60 per cent of trips started within 5km of the site and about 70 per cent were less than 5km from their next destination.
- 4.18 Only Lancaster City retail park attracts long distance travel demand but the majority of visitors to this Park are travelling short distances.
- 4.19 The origin and destination trip purposes are provided as a percentage of all trips in Tables 4.7, 4.8 and 4.9 for a weekday, Saturday and Sunday respectively. The percentages in these Tables can be summarised as Primary and Non-Primary trip types. Primary trips are defined simply to be single purpose trips (eg home-shop-home) and Non-Primary trips to be multi-purpose trips (eg work-shop-home).
- 4.20 The Poole data revealed 54 per cent of weekday trips were primary increasing to about 65 per cent during the weekend. The South Aylesford data has similar figures for Friday and Saturday as Poole, but on Sunday there are 10 per cent more primary trips (75 per cent). In contrast, the Lancaster data showed about an equal split of primary and non-primary trips over all three days. The higher number of multipurpose trips at Lancaster may be attributed to it's close proximity to Morecambe and Lancaster shopping centres. The Brooklands data was similar to that at Lancaster in that there was little difference between percentage of primary and non-primary trips over the three days. About 65 per cent of trips to the Brooklands site were primary trips.
- 4.21 Interestingly, a greater percentage of the visitors to all the sites display the pattern home-site-non-home than non-home-site-home for all days. This is most evident at the Lancaster site where 10 to 25 per cent more trips begin at home than finish at home over the three days.



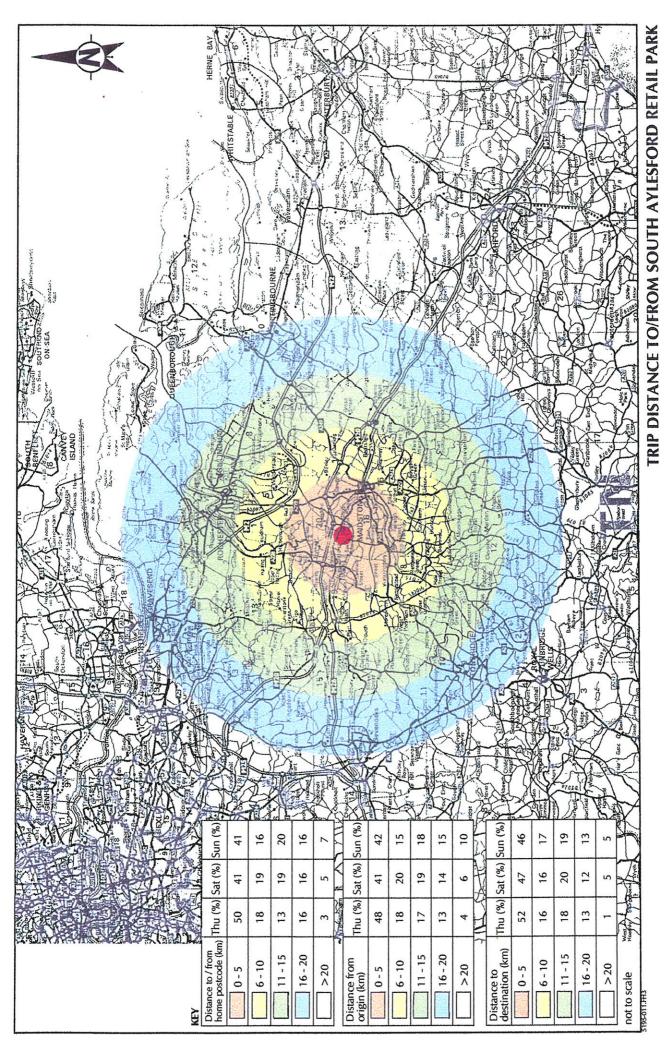
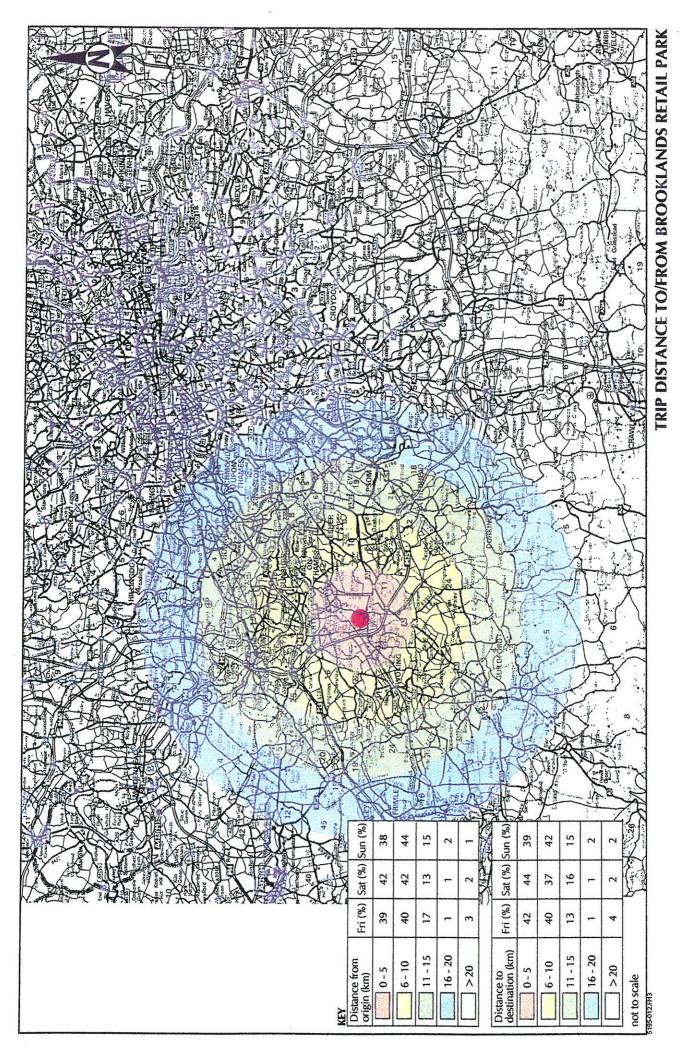


Figure 14



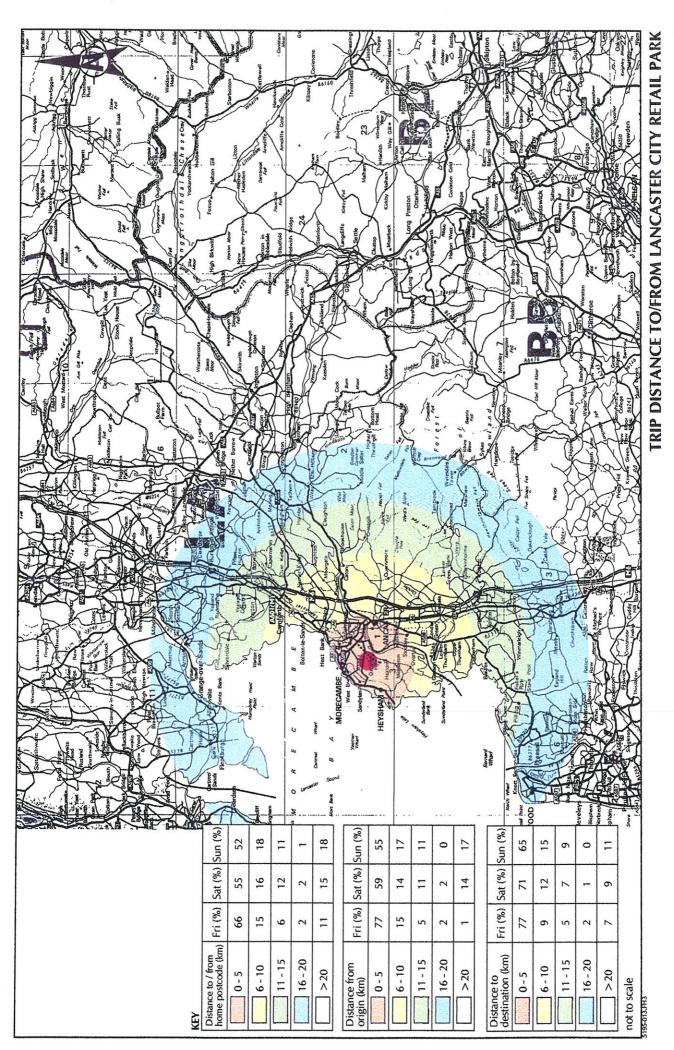


Table 4.7 Trip purpose of origin and destination on a weekday (percentage of trips to site)

Site	Origin\Dest.	Home	Work	Shop/ P.Bus/Other	Total
Poole	Home	49	2	24	75
	Work	3	5	1	9
	Shop/P. Bus/Other	11	1	4	16
	Total	63	8	29	100
S. Aylesford	Home	58	1	18	77
-	Work	6	1	6	13
	Shop/P. Bus/Other	10	0	0	10
	Total	74	2	24	100
Brooklands	Home	59	0	19	78
	Work	6	5	0	11
	Shop/P. Bus/Other	8	0	3	11
	Total	73	5	22	100
Lancaster	Home	43	3	25	71
	Work	6	5	2	13
	Shop/P. Bus/Other	10	1	5	16
	Total	59	9	32	100

Note: Figures in bold are primary trips.

Table 4.8 Trip purpose of origin and destination on a Saturday (percentage of trips to site)

Site	Origin\Dest.	Home	Work	Shop/ P.Bus/Other	Total
Poole	Home	62	0	18	80
	Work	1	1	0	2
	Shop/P. Bus/Other	13	1	4	18
500	Total	76	2	22	100
S. Aylesford	Home	67	0	21	88
	Work	4	1	0	2
	Shop/P. Bus/Other	8	0	2	10
	Total	76	1	23	100
Brooklands	Home	64	0	23	87
7	Work	0	0	1	1
	Shop/P. Bus/Other	8	0	4	12
	Total	72	0	28	100
Lancaster	Home	46	1	31	78
	Work	1	0	1	2
	Shop/P. Bus/Other	13	0	7	20
	Total	60	1	39	100

Note: Figures in bold are primary trips.

Table 4.9 Trip purpose of origin and destination on a Sunday (percentage of trips to site)

Site	Origin\Dest.	Home	Work	Shop/ P.Bus/Other	Total
Poole	Home	65	1	20	86
	Work	1	0	0	1
	Shop/P. Bus/Other	8	3	2	13
	Total	74	4	22	100
S. Aylesford	Home	75	1	16	92
	Work	1	0	0	1
	Shop/P. Bus/Other	5	0	2	7
	Total	81	1	18	100
Brooklands	Home	69	0	24	93
	Work	0	0	0	0
10000000	Shop/P. Bus/Other	5	0	2	7
	Total	74	0	26	100
Lancaster	Home	54	1	33	88
-	Work	0	0	0	0
	Shop/P. Bus/Other	8	0	4	12
	Total	62	1	37	100

Note: Figures in bold are primary trips.

Home delivery

- 4.22 Some of the products on sale in non-food retail parks are bulky and heavy (eg ovens, freezers, washing machines, furniture). The survey collected data on the proportion of purchases that were to be delivered by the store, thus generating additional travel demand per purchase.
- 4.23 At Poole, a home delivery was generated by about 7 per cent of site visits. This may be due to the presence of two furniture stores on the site.
- 4.24 At Brooklands, only Seeboard generated significant home deliveries, for about 25 per cent of all purchases. The small share of total site visits attracted by Seeboard means that home delivery is a feature of only about 2 per cent of site visits, even though purchases were made on over 90 per cent of visits to the site.
- 4.25 At South Aylesford, a home delivery was generated by about 13 per cent of visits to the site. This is probably the result of a relatively high proportion of stores selling carpets and furniture, in addition to the usual range of white goods and electrical equipment.

4.26 Information on home delivery was not available for Lancaster.

Frequency of site visits

- 4.27 The Brooklands survey included a question to determine the frequency of visit to the non-food retail part of the Brooklands site. This is not a question which will be answered particularly accurately but it is a good reflection of visitors' general perception of the type of shopping involved.
- 4.28 Table 4.10 shows the frequency of site visits for all three survey days to each store. The most common answer was once per month, regardless of the day of the survey or the main store visited. The next most common frequencies were once every one/two weeks.

Table 4.10 Frequency of site visits at Brooklands

Frequency	Percentag	Percentage of site visits						
	Argos	Seeboard	Children' s World					
> 1/week	9	13	5					
weekly	14	11	19					
fortnightly	7	11	13					
fortnightly - monthly	7	6	6					
monthly	30	32	35					
2 months	16	13	13					
3 months	13	9	5					
other	5	6	5					

5: Conclusions and recommendations

Survey conduct

All surveys successfully provided a detailed insight into the shopping characteristics of non-food retail parks. This demonstrates the value added by questionnaire-based surveys relative to counts. The complexities of linked trips both on-site and off-site cannot be unravelled by count surveys. There is a cost premium incurred however; such surveys are likely to cost between £3,000 and £5,000 for three days. The cost could be reduced (largely pro-rata) by reducing the number of survey days. There is apparently little to be gained by including Sunday surveys, on the basis of this pilot exercise. It seems to be appropriate to survey a weekday and a Saturday, however, in order to identify worst cases; their characteristics are different, as are those of non-development-related traffic on these days.

Application of results

- The surveys also show that each store has its own shopping characteristics and the mix of stores is relevant. Some stores are anchors for the rest. Some stores compete directly on the same Park (eg two carpet retailers at South Aylesford). In other circumstances, the stores seem to simply co-exist on the same site, with little linkage between them (eg Brooklands).
- 5.3 The general lesson to be learnt from the above is that a transport impact assessment of a non-food retail park should demonstrate an understanding of the shopping characteristics of different operator mixes before trip making calculations are attempted.
- 5.4 Thus site selection in TRICS should ideally be based on specific examples rather than averages from a ranked list. However, it is important to note that future operators for a given site cannot always be identified with certainty at the Planning Application stage. Furthermore, permissions can cover a wide variety of uses with varying trip attraction rates. Operators can also change over time.
- 5.5 We recommend that trip rates for the Brooklands non-food retail park are used with caution given the high number of pedestrian trips between the non-food car park and the Marks & Spencer/Tesco stores. Furthermore, this is evidence that a combination of adjacent retail (food and non-food retail) leads to a greater propensity for linked trips, as in town centres, rather than isolated stores which encourage greater overall travel.

Transport impacts

- 5.6 The transport impact of multi-store retail parks is likely to be less than that of the total impact of the parts in isolation; a lot of linked trip-making takes place on site, in exactly the same way as in a conventional town centre (as above).
- 5.7 What an out-of-town retail park often cannot provide is the access to public transport available in many a town centre. These non-food retail parks are highly car-dependent, despite the fact that delivery services exist for many of the bulkier items on sale. These pilot surveys show that less use is made of delivery services than might be expected. This may be to do with the reluctance of operators to agree specific delivery times with customers (which can result in customers waiting at home all day for a delivery).
- In terms of store catchment areas and origin-destination characteristics, the survey results indicate that non-food retail parks do not attract long distance travel demand. The proportion of non-primary trips on weekdays (35 to 50 per cent of total trips) and weekends (25 to 50 per cent of total trips) is somewhat higher than the findings of earlier retail research (documented in 'TRICS Research Report 95/2 Passby and diverted traffic: A resume').
- 5.9 The conclusion of 'TRICS Research Report 95/2' states that 'the proportion of retail trips generally accepted to be non-primary is 30 per cent'. It further states that 'Most of the non-primary trips tend to be home-work-site-home and hence values are generally lower than this at weekends when there is less home commuting'. In contrast, this current research has shown that on all days at all 4 sites, a greater percentage of visitors displayed the pattern home-site-non-home than non-home-site-home. This difference in findings could partly be explained by the fact that most (but not all) sites included in Report 95/2 were foodstores; foodstore shopping may require return to home immediately after food has been purchased due to the need for refrigeration of goods, hunger, etc, unlike non-food shopping.
- 5.10 In terms of vehicle kilometre implications, the non-food retail park land use category would therefore appear to have some merits with respect to PPG6/PPG13 principles. This is because the parks attract short distance shoppers and display a good proportion of linked trip making. However, it is important to remember that out-of-town non-food retail parks do not sit easily alongside the locational requirements of Government guidance, particularly PPG6 and the sequential test.
- We do not propose that future TRICS retail research should investigate vehicle kilometre issues in any greater depth; it is virtually impossible to quantify (with any certainty) the vehicle kilometre implications of a proposed retail development. This view is reinforced by recent decisions made by the Secretary of State and Planning Inspectors at Appeal (summarised in the TRICS Appeals Journal). The Secretary of State and Inspectors have tended to make qualitative judgements on such matters rather than adopt any of the numerical estimates

presented in evidence.

Recommended questionnaire contents

5.12 It is recommended that questionnaires for surveys of non-food retail parks include the following questions:

Total number in the shopping group

Main store visited

Other stores visited

Frequency of visiting site (1+ per week, every week, every 2 weeks, every month, less than once per month but more than once per year)

Origin

(Street, area, town, Postcode)

Origin purpose/land use (home, work, shopping, personal business, other)

Mode of transport (arrival) (car, motorcycle, bus, taxi, pedal cycle, train, walk, other)

Destination (as above)

Destination purpose/land use (as above)

Mode of transport (departure)......OPTIONAL (as above)

Home delivery used

Appendix A

Questionaires





office

The County Council is undertaking research into the journeys you make when you shop at non-food retail centres. Please help us by completing the questionnaire below and returning it in the post as soon as possible. There is no need for a stamp. Thankyou for for your time

If you require any further information about this survey please call Dorchester (01305) 225300	use
Time questionnaire received: If you came here with other people, how many were in the group?	5 6
Which was the MAIN store you visited? (please tick) Carpet Depot COMET HOMEBASE COMET Which other store(s) did you visit? (please tick) Carpet Depot COMET	,
Halfords Petsmart Halfords Tempo Harveys Tempo	
How often do you visit this retail park? (Please tick) More than once a week Every 2 weeks Other Every month Every month	
Prior to visiting this retail park today, where did you travel from? (House number not required)]
Town Post code	11 12 13
Was this from (please tick) HOME WORK SHOPPING PERSONAL BUSINESS OTHER (Please specify)	[,7
By what mode of transport did you arrive at the retail park? Car Taxi Cycle	
Motorcycle Walk Train Other (specify)	<u>. </u>
After leaving this retail park, where will you travel to? (House number not required)	
Town Post code	20 21 22
On your departure, will you be going (please tick) HOME WORK SHOPPING PERSONAL BUSINESS OTHER (Please specify)	
By what mode of transport will you leave? Car Taxi Motorcycle	
Cycle Walk Train Other (specify)	17
Are some of your purchases going to be delivered by the store?	



	by car, now	v many people	did it car	ry, including d	lriver ?			
Which store	(s) did you v	visit ? (please	e tick)	HARVEYS	1	SNACK W	/AGON□2	7
ALLDERS	3	COMET	[]·	SEEBOARD	_ 			
ALLIED CAR	PETS 🗀	HOMEBASE		FURNITURE	:	HALFOR		4 5 6
				WORKSHOP		· · · · · · · · · · · · · · · · · · ·	RIGHT 🗀 10	
Prior to visit	ing these st	ores, where d	id you tra	vel from ? (Ho	Ouse numi	er not requir	ed l	7
treet Name	only		A	rea		or not rogan	cuj	
Tour		-						
TOWN			P	ost code	····			12 13 14
What mode o	f transport	did you use ?	(please	tick) OTHER		•		18_
	MOTORCYC		JS []₄					
				TAXI 🗀s	CYCLE	:6 V	VALK 🕞	
Was this from	(please	tick)			·			
HOME 📑	WOR	K <u>□</u> ²	SHOPP	ING □	DEDCC	MAL DUOIS		17
Other (please	specify)				1 LIVOC	MAE BOSIN	ESS L	
Other (please	-711.5 /							
							5	
After leaving t							5	
After leaving t	hese stores	, where did yo	ou travel t	o? (Housen	umber not	required)		
`treet Name o	hese stores	, where did yo	ou travel t	o? (Housen	umber not	required)		
treet Name o	hese stores	s, where did yo	ou travel t	o? (House n reaost code	umber not	required)		18 19 20
treet Name o	hese stores	s, where did yo	ou travel t	o? (House n reaost code	umber not	required)		18 19 20
treet Name o own Vhat mode of	nly transport d	id you use ?	ou travel t An Po	o? (House n rea ost code ick) OTHER	umber not	required)		, 13 20
treet Name o own Vhat mode of	hese stores	id you use ?	ou travel t	o? (House n reaost code	umber not	required)		, 13 20
treet Name o own Vhat mode of	hese stores nly transport d	id you use ? -E □□ BU	ou travel t An Po	o? (House n rea ost code ick) OTHER	umber not	required)	1	, 13 20
treet Name o own Vhat mode of AR □² M	transport di	id you use ? _E □□ BU	ou travel t	o? (House n rea ost code ick) OTHER TAXI s	umber not	required)	1 ALK	, 13 20
Treet Name of Own What mode of AR2 M Or what purpo	transport disconse ? (plea	id you use ? -E □□ BU	Pou travel to Pour please to SHOPPI	o? (House n rea ost code ick) OTHER TAXI s	CYCLE PERSO	required) □₅ W	1 ALK	, 13 20
Treet Name of Own What mode of AR2 M Or what purpo	transport disconse ? (plea	id you use ? -E □□ BU	Pou travel to Pour please to SHOPPI	o? (House n rea ost code ick) OTHER TAXI s	CYCLE PERSO	required) □₅ W	1 ALK	, 13 20
Treet Name of Own Vhat mode of AR2 M for what purport OME1	transport di OTORCYCL OSE ? (plea WOR	id you use ? LE □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	Pou travel to An Pool (please to S 1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S	o? (House n rea Ost code ick) OTHER TAXI NG 3	CYCLE PERSO	required) □6 W	1 ALK	, 13 20
Treet Name of Own Vhat mode of AR2 M for what purport OME1	transport disconse? (please WORK	id you use ? LE □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	Pou travel to An Pool (please to S 🗀 4	o? (House n rea ost code ick) OTHER TAXI s	CYCLE PERSO	required) □6 W	1 ALK	, 13 20

Thank you for your time.



The County Council is often considering planning applications for developments such as this one at Brooklands. Knowing how and why you made your shopping trip will help us to get the design right for pedestrians and bus passengers as well as car users.

Please help us by completing the questionnaire below and returning it to us as soon as possible.

Thank you for your time.

If you require any further information about this survey please call 0181-541 9388	Picaso tear along perforations
How many people were in your car/group? Card issued 1/2hr card is	omin:
Did you arrive by? CARVAN P/CYCLE WAI please tick (/) M/CYCLE BUS OTHE	<u> </u>
please tick (/) Which was the main store(s) you came to visit? Which other store(s) did you visit? From which store(s) did you buy something? Are any of these goods to be delivered? Approximately how often do you come to Brooklands to visit one or more of these Once every (how many)	se delete)
Just prior to this visit to the site where did you travel from? Street Name only	THER
After leaving this site where did you next stop?	
Post Code (if known) Was this to? please tick (
HOME WORK SHOP PERSONAL BUSINESS OT	HER

Details provided by you are confidential and will not be passed to any third party.

Card issued: Fri./ Sat./ Sun.	¹ / ₂ hr comm:	
		}



Lancashire County Council is often considering planning applications for developments such as this one in Lancaster. Knowing how and why you made your shopping trip will help us to get the design right for pedestrians and bus passengers as well as car users.

Please help us by completing the questionnaire below and returning it to us by 31st October 1996. If you require any further information about this survey, please call 01772 264601.

Thank you for your time.

DETAILS PROVIDED BY YOU ARE CONFIDENTIAL AND WILL NOT BE PASSED TO ANY THIRD PARTY

Approximately how much t	ime did you spend at t	he Retail	l Park?		Hours		linutes	
Did you arrive by?	(Please tick the appropria	ite box)	CAR/V/	AN 🔲		BICYCL	E 🔲	WALK 🔲
		MO	TORCYC	CLE 🔲		BL	JS 🔲	OTHER 🔲
		Ţ	Vickes	MFI	Fads	Carpet Right	Cantors Furniture	Kingsbury Interiors
(<i>Please tick the appropriate bo</i> . The main store(s) you came						Kigiti 	ranmare	
Which other store(s) did yo								
From which store(s) did yo								
Are any of these goods to b	e delivered?							
Was this from? (Please tick the appropriate bo	v) HOME WORK	· 🗖				n)		OTHER []
	_	` 🖵	51101	•	DIOC: 12	12 000		
After leaving this site, wher	e did you next stop?		To	treet Nai	ĺ	14 45	- / ** **	
Was this to?			17	ost Coae	e (15 K110W	71)		
(Please tick the appropriate bo	x) HOME WORK		SHOP	P	ERSON	AL BUSIN	ESS 🔲 C	OTHER 🔲
What other uses would you	ı like to see on the Reta	il Park?						
•								

Appendix B

Classified traffic counts

Count No.:

Results:

96050

Location:

Classified vehicle link flows in half hours

Redlands

Date: Friday 15 March 1996

Weather: wet/dull

Time: 07:30 - 20:00

Nos IN CARPARK AM. 353

pm - 10

FRIDAY OUT TOWARDS ROUNDABOUT

18:30 19:00 19:30	83 111 91	9 6 12	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	92 117 103	0 0 0	0 0 0
17:30 18:00	111 125	10 6	0	4	0	0	0	0	0	0	132	4	0
17:00	112	8	0	0	0	0	0	0	ì 1	0	121 126	0	0
16:30	111	4	0	0	0	0	0	0	0	0	115	0	0
16:00	145	8	0	0	0	0	0	0	0	0	153	0	0
15:30	171	8	1	1	0	0	0	0	0	0	181	1	0
15:00	171	5	1	0	0	0	0	0	0	1	178	0	3
14:30	142	2	2	5	0	0	0	0	0	0	151	5	0
14:00	114	12	1	3	0	0	0	0	0	0	130	3	0
13:30	124	7	2	3	0	0	0	0	0	0	136	3	1
13:00	129	9	1	2	0	0	0	0	0	0	141	2	0
12:30	151	10	1	ì	0	0	0	0	1	0	164	1	0
12:00	125	10	3	2	0	1	0	0	0	0	141	3	0
11:30	153	5	4	1	1	0	0	0	1	0	165	2	0
11:00	114	4	3	4	1	i	0	1	0	0	128	7	0
10:30	95	7	1	4	0	1	2	0)	0	111	7	0
10:00	85	13	4	3	0	2	1	0	0	0	108	6	0
09:00 09:30	30 60	10 6	0	0 7	0 2	0	0 2	0	0	0	77	11	0
08:30	8	2	0	0	0	0	1	0	0	0	11 41	1	0
08:00	12	5	0	0	0	0	0	0	0	0		0	0
07:30	3	0	2	1	0	0	0	0	0	0	6 17	1	0
Hour begin	Car	Light Van	Medium Van	2 Axle Rigid	3/4 Axle Rigid	Artic.	5 Axle Artic.	6 Axle Artic	Motor cycle	Bus & coach	Total V'cles	Total HGVs	Cycle

FRIDAY IN AWAY FROM ROUNDABOUT

Hour begin	Car	Light Van	Medium Van	2 Axle Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axle Artic.	6 Axle Artic.	Motor cycle	Bus &	Total V*cles	Total HGVs	Cycle
07:30	17	0	1	1	0	0	0	0	0	Ó	19	1	0
08:00	37	8	Ü	0	0	1	2	0	2	0	50	3	0
08:30	50	5	2	2	0	0	1	0	0	0	60	3	0
09:00	70	8	2	1	0	2	2	0	0	0	85	5	0
09:30	99	13	0	8	1	0	0	0	0	1	122	9	0
10:00	120	10	2	3	0	0	0	0	0	0	135	3	0
10:30	106	5	2	2	ł	0	0	1	1	0	118	4	0
11:00	136	6	4	3	1	0	0	0	1	0	151	4	0
11:30	122	11	3	1	0	0	0	0	0	0	137	1	0
12:00	125	7	2	2	0	0	0	0	0	0	136	2	0
12:30	96	4	}	1	0	0	0	0	0	0	102	1	0
13:00	146	9	1	3	0	0	0	0	0	0	157	1	0
13:30	121	9	2	4	0	0	0	0	0	0	136	4	0
14:00	128	9	1	5	0	0	0	0	ì	0	144	5	0
14:30	132	.5	1	3	0	0	0	0	0	0	141	3	0
15:00	140	5	1	2	0	0	0	0	2	0	150 -	2	1
15:30	102	6	0	0	0	0	0	0	0	0	108	0	0
16:00	100	6	0	1	0	0	0	0	0	0	107	1	0
16:30	100	8	4	0	0	0	0	0	1	0	113	()	0
17:00	99	5	0	0	0	0	0	1	0	0	105	1	0
17:30	103	6	0	0	0	0	0	0	0	0	109	0	2
18:00	72	5	0	0	0	0	0	0	0	0	77	0	1
18:30	44	2	0	0	0	0	0	0	0	0	46	0	0
19:00	23	0	0	0	1	0	0	0	0	0	24	ì	0
19:30	15	2	0	0	0	0	1	0	0	0	18	1	O
20:00	5	0	0	0	0	0	0	0	0	0	5	0	0
Total :	2308	154	29	40	4	3	6	2	8	1	2555	55	4

COMBINED 2-WAY FLOW

Hour begin	Car	Light Van	Medium Van	2 Axle Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axle Artic.	6 Axie Artic.	Motor cycle	Bus & coach	Total V'cles	Total HGVs	Cycle
07:30	20	0	3	2	0	0	0	0	0	0	25	2	0
08:00	49	13	0	0	0	1	2	0	2	0	67	3	0
08:30	58	7	2	2	0	0	2	0	0	0	71	4	2
09:00	100	18	2	1	0	3	2	0	0	0	126	6	0
09:30	159	19	0	15	3	0	2	0	0	1	199	20	0
10:00	205	23	6	6	0	2	1	0	0	0	243	9	0
10:30	201	12	3	6	1	1	2	1	2	0	229	11	0
11:00	250	10	7	7	2	1	0	ì	1	0	279	11	0
11:30	275	16	7	2	1	0	0	0	1	0	302	3	0
12:00	250	17	5	4	0	1	0	0	0	0	277	5	0
12:30	247	14	2	2	0	0	0	0	1	0	266	2	0
13:00	275	18	2	3	0	0	0	0	0	0	298	3	0
13:30	245	16	4	7	0	0	0	0	0	0	272	7	1
14:00	242	21	2	8	0	0	0	0	1	0	274	8	0
14:30	274	7	3	8	0	0	0	0	0	0	292	8	0
15:00	311	10	2	2	0	0	0	0	2	1	328	2	4
15:30	273	14	1	1	0	0	0	0	0	0	289	1	0
16:00	245	14	0	1	0	0	0	0	0	0	260	1	0
16:30	211	12	4	0	0	0	0	0	1	0	228	0	0
17:00	211	13	0	0	0	0	0	1	1	0	226	1	0
17:30	214	16	0	4	0	0	0	0	1	0	235	4	2
18.00	197	11	0	1	0	0	0	0	0	0	209	1	1
18:30	127	11	0	0	0	0	0	0	0	0	138	0	0
19:00	134	6	0	0	1	0	0	0	0	0	141	1	0
19:30	106	14	o	0	0	0	1	0	0	0	121	1	0
20:00	57	2	0	0	0	0	0	0	ì	0	60	0	0
Total :	4936	334	55	82	8	9	12	3	14	2	5455	114	10

Notes: Please note Total Vehicles exclude cycles

Count No. :

Results:

96051

Location:

Classified vehicle link flows in half hours

Redlands

Date: Saturday 16 March 1996

Weather: dry/bright

Time: 07:30 - 20:30

Nos IN CAR PARK AM: 224

PM : 3

SATURDAY OUT TOWARDS ROUNDABOUT

Hour begin	Car	Light Van	Medium Van	2 Axie Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axle Artic.	6 Axle Artic.	Motor cycle	Bus & coach	Total V'eles	Total HGVs	Cycle
07:30	5	1	1	0	0	0	0	0	0	0	7	0	0
08:00	11	5	0	0	0	0	0	0	0	0	16	0	0
08.30	33	6	1	0	0	0	0	0	0	0	40	0	0
09:00	72	5	2	0	0	0	0	0	0	0	79	0	0
09:30	104	10	2	0	0	0	0	0	0	o	116	0	
10:00	148	13	0	1	0	0	0	0	4	0	166	1	1
10:30	146	6	1	0	0	0	0	0	0	0	153	0	0
11:00	199	6	2	0	0	0	0	0	0	0	207	0	0
11:30	208	4	3	0	0	0	0	o	1	0	216	0	0
12:00	218	12	3	0	0	0	0	ő	2	o	235	0	
12:30	185	9	0	1	0	0	0	0	0	0	195		0
13:00	159	8	3	0	0	0	0	ō	0	0	170	0	0
13:30	191	5	i	0	0	0	0	0	0	0	197		0
14:00	210	5	0	0	0	0	o	0	1	1	217	0	0
14:30	293	12	1	0	0	0	0	0	2	0	308	0	0
15:00	288	9	1	0	0	0	0	0	0	0	298	0	0
15:30	306	6	0	0	0	0	0	0	3	0	315	0	0
16:00	286	4	0	0	0	0	0	0	1	0	291	0	0
16:30	234	8	1	0	0	0	0	0	0	0	243	0	0
17:00	113	8	0	0	0	0	o	1	0	0	122	0	0
17:30	111	10	0	4	0	0	0	1	0	0	126	0	0
18:00	125	6	0	1	0	0	ó	0	0	0	132	0	0
18:30	83	3	0	0	0	ō	0	0	0	0		0	0
19:00	111	6	0	0	0	0	0	0	0		86	0	1
19:30	91	23	0	0	0	0	0	0	0	0	117	0	0
20:00	52	2	0	0	0	0	0	0	1	0	114 55	0	0
Total :	3982	192	22	7	0	0	0	2	15	1	4221	2	

SATURDAY IN AWAY FROM ROUNDABOUT

Hour begin	Car	Light Van	Medium Van	2 Axle Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axle Artic.	6 Axle Artic.	Motor cycle	Bus & coach	Total Veles	Total HGVs	Cycle
07:30	10	2	ì	0	0	0	0	0	0	0	13	0	1
08:00	40	7	1	0	0	0	0	0	0	0	48	0	1
08:30	90	8	4	0	0	0	0	1	1	0	104	0	3
09:00	108	4	0	0	0	0	0	0	1	0	113	0	0
09:30	155	14	1	0	0	0	0	0	0	0	170	0	1
10:00	199	7	1	1	0	0	0	0	2	0	210	0	0
10:30	188	7	0	0	0	0	0	0	0	0	195	0	0
11:00	189	6	3	0	0	o	0	0	1	0	199	0	1
11:30	208	7	1	0	0	0	0	1	1	0	218	1	0
12:00	214	4	2	0	0	0	0	0	0	o	220	0	0
12:30	177	7	2	0	0	0	0	0	0	ō	186	0	0
13:00	200	9	2	0	0	0	0	0	o	0	211	0	0
13:30	196	5	0	0	0	0	0	0	1	ō	202	0	0
14:00	236	11	1	0	0	0	0	0	1	ō	249	0	1
14:30	268	8	1	0	0	0	0	0	1	ő	278	0	1
15:00	223	5	0	0	0	0	0	0	2	0	230	0	0
15:30	203	7	0	0	0	0	0	0	0	0	210	0	0
16:00	210	9	0	0	0	0	0	0	1	0	220	0	0
16:30	185	8	4	0	0	0	0	Ö	1	0	198	1	0
17:00	199	5	0	0	0	0	0	1	0	0	205	1	0
17:30	103	6	0	0	0	0	0	0	0	0	109	0	2
18:00	72	5	0	0	0	0	0	0	0	o	77	0	
18:30	44	2	0	0	0	0	0	0	Ö	0	46	0	1
19:00	23	0	0	0)	0	0	0	ő	o o	24	1	
19:30	15	2	0	0	0	0	1	0	ō	0	18	1	0
20:00	7	0	0	0	0	0	0	0	0	o	7	0	0
Total :	3762	155	24	1	1	0	1	3	13	0	3960	5	12

COMBINED 2-WAY FLOW

Hour begin	Car	Light Van	Medium Van	2 Axle Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axle Artic.	6 Axle Artic	Motor cycle	Bus & coach	Total V'cles	Total HGVs	Cycle
07:30	15	3	2	0	0	0	0	0	0	0	20	0	1
08:00	51	12	1	0	0	0	0	0	0	0	64	0	1
08:30	123	14	5	0	0	0	0	1	1	0	144	0	3
09:00	180	9	2	0	Û	0	0	0	1	0	192	0	0
09:30	259	24	3	0	0	0	0	0	0	0	286	0	2
10:00	347	20	1	2	0	0	0	0	6	0	376	ì	0
10:30	334	13	1	0	0	0	0	0	0	0	348	0	o
11:00	388	12	5	0	0	0	0	0	1	0	406	0	1
11:30	416	11	4	0	0	0	0	1	2	0	434	1	0
12:00	432	16	5	0	0	0	0	0	2	0	455	0	0
12:30	362	16	2	ì	0	0	0	0	0	0	381	i	0
13:00	359	17	5	0	0	0	0	0	0	0	381	0	0
13:30	387	10	1	0	0	0	0	0	1	0	399	0	0
14:00	446	16	1	0	0	0	0	0	2	1	466	0	1
14:30	561	20	2	0	0	0	0	0	3	0	586	0	1
15:00	511	14	1	0	0	0	0	0	2	0	528	0	0
15:30	509	13	0	0	0	0	0	0	3	0	525	0	0
16:00	496	13	0	0	0	0	0	0	2	0	511	0	0
16:30	419	16	5	0	0	O	0	0	1	0	441	1	0
17:00	312	13	0	0	0	0	0	2	0	0	327	1	0
17:30	214	16	0	4	0	0	0	1	0	0	235	0	2
18:00	197	11	0	1	0	0	0	0	0	0	209	0	1
18:30	127	5	0	0	0	0	0	0	0	0	132	0	1
19:00	134	6	0	0	1	0	0	0	0	0	141	1	0
19:30	106	25	0	0	0	0	1	0	0	0	132	1	0
20:00	59	2	0	0	0	0	0	0	1	0	62	0	0
Total :	7744	347	46	8	1	0	1	5	28	1	8181	7	14

Notes:

Please note. Total Vehicles exclude cycles

Count No. :

Results:

96052

Location:

Redlands

Date: Sunday 17 March 1996

Weather: dry/bright

Time:

10:00 - 19:00

Nos. CARS IN CAR PARK AU: 500

PM: 15

Classified vehicle link flows in half hours

SUNDAY OUT TOWARDS ROUNDABOUT

Hour begin	Car	Light Van	Medium Van	2 Axle Rigid	3/4 Axle Rigid	3/4 Axle Artic,	5 Axle Artic.	6 Axle Artic.	Motor cycle	Bus & coach	Total V'cles	Total HGVs	Cycle
09:30	129	8	0	0	0	0	0	o	0	0	137	0	0
10:00	267	17	1	0	0	0	0	0	1	1	287	0	
10:30	287	7	3	0	0	0	0	0	5	0	302	0	0
11:00	337	13	0	0	0	0	0	0	1	0	351	0	1
11:30	283	16	0	0	0	0	0	0	4	0	303	0	2
12:00	257	21	0	0	0	0	0	0	0	0	278	0	0
12:30	213	5	0	0	0	0	0	0	1	0	219		0
13:00	185	4	0	0	0	0	0	ő	0	0	189	0	0
13:30	148	6	0	0	0	ò	0	0	I	0		0	1
14:00	193	1	0	0	0	0	0	0	0	0	155	0	0
14:30	185	6	1	0	0	0	0	0	I	0	194	0	0
15:00	223	7	0	0	0	0	0	o	0		193	0	1
15:30	221	3	0	0	0	0	0	0	2	0	230	0	2
16:00	244	5	1	0	0	0	0	0	1	0	226	0	0
16:30	284	7	1	0	0	0	0	0	0		251	0	0
17:00	261	12	1	0	0	0	0	0	0	0	292	0	1
17:30	237	4	0	0	ő	0	0	0		0	274	0	1
18:00	100	3	0	0	0	0	0	0	1	0	242	0	1
18:30	51	2	0	0	0	0	0	0]	0	104	0	0
_					Ü	U	U	U]	0	54	0	0
Total:	4105	147	8	0	0	0	0	0	20	1	4281	0	10

SUNDAY IN AWAY FROM ROUNDABOUT

Hour begin	Car	Light Van	Medium Van	2 Axle	3/4 Axic	3/4 Axle	5 Axle		Motor	Bus &	Total	'Total	0.1
			van	Rigid	Rigid	Artic.	Artic.	Artic.	cycle	coach	Vicles	HGVs	Cycle
09:30	448	4	0	0	0	0	0	0	2	0	454		
10:00	305	10	1	0	0	0	0	0	5	0	321	0	0
10:30	274	11	0	0	0	0	0	0	5	0		0	3
11:00	236	11	0	0	0	0	0	0	2		290	0	3
11:30	197	5	0	0	0	0	0	0	1	0	249	0	3
12:00	169	7	0	0	0	0	0	0	,	0	203	0	0
12:30	150	5	0	Ö	0	0	0	0	1	0	177	0	1
13:00	148	3	0	0	0	0	0		1	0	156	0	0
13:30	167	7	0	o	0	0		0	1	0	152	0	1
14:00	203	4	1	0	0	0	0	0	0	0	174	0	0
14:30	202	4	0	0	0	0	0	0	0	0	208	0	1
15:00	198	4	0	0	0		0	0	0	0	206	0	0
15:30	145	2	2	0		0	0	0	2	0	204	0	1
16:00	199	4	0	0	0	0	0	0	Û	0	149	0	0
16:30	190	12	1		0	0	0	0	1	0	204	0	0
17:00	147	5	0	0	0	0	0	0	0	0	203	0	0
17:30	80	1		0	0	0	0	0	0	0	152	0	1
18:00	48	1	0	0	0	0	0	0	1	0	82	0	0 .
18:30		-	0	0	0	0	0	0	0	0	49	0	0
16:30	16	3	0	0	0	0	0	0	2	0	21	0	0
Total:	3522	103	5	0	0	0	0	0	24	0	3654	0	14

COMBINED 2-WAY FLOW

Hour begin	Саг	Light Van	Medium Van	2 Axic Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axle Artic.	6 Axle Artic.	Motor cycle	Bus & coach	Total V'cles	Total HGVs	Cycle
09:30	577	12	0	0	0	0	0	0	2	0	591	0	0
10:00	572	27	2	0	0	0	0	0	6	1	608	0	3
10:30	561	18	3	0	0	0	0	0	10	0	592	0	4
11:00	573	24	0	0	0	0	0	0	3	0	600	0	5
11:30	480	21	0	0	0	0	0	0	5	0	506	0	0
12:00	426	28	0	0	0	0	0	0	1	0	455	0	1
12:30	363	10	0	0	0	0	0	0	2	0	375	0	0
13:00	333	7	0	0	0	0	0	0	1	0	341	0	2
13:30	315	13	0	0	0	0	0	0	1	0	329	0	0
14:00	396	5	1	0	0	0	0	0	0	0	402	0	1
14:30	387	10	1	0	0	0	0	0	1	0	399	0	1
15:00	421	11	0	0	0	0	0	0	2	0	434	0	3
15:30	366	5	2	0	0	0	0	0	2	0	375	0	0
16:00	443	9	1	0	0	0	0	0	2	0	455	0	0
16:30	474	19	2	0	0	0	0	0	0	0	495	0	1
17:00	408	17	1	0	0	0	0	0	0	0	426	0	2
17:30	317	5	0	0	0	0	0	0	2	0	324	0	1
18:00	148	4	0	0	0	0	0	0	1	0	153	0	0
18:30	67	5	0	0	0	0	0	0	3	0	75	0	0
Total:	7627	250	13	0	0	0	0	0	44	1	7935	0	24

Notes: Please note. Total Vehicles exclude cycles

Comment:

Due to excessive traffic volumes, caused by the car boot sale, counting the vehicles in the car park at the start of the survey was difficult.

Site Reference: 00-01-K-01 Survey Date: 17/10/96 Day Of Week: Thursd

Survey Type: Manual Count

Car Park Occupancy - Initial: 17 Final: 20
Data Proportions - (Total = 0):

Motor Cars: 0 Motor Cycles: 0 Public Service: 0
Light Goods: 0 Heavy Goods(1): 0 Heavy Goods(2): 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	-1	-1	-1	-1
01:00 to 02:00	-1	-1	-1	-1
02:00 to 03:00	- 1.	-1	-1	-1
03:00 to 04:00	-1	-1	-1	-1
04:00 to 05:00	- 1	-1	-1	-1
05:00 to 06:00	-1	-1	-1	-1
06:00 to 07:00	- 1	-1	- 1	-1
07:00 to 08:00	-1	-1	-1	-1
08:00 to 09:00	72	23	95	66
09:00 to 10:00	159	86	245	139
10:00 to 11:00	195	162	357	172
11:00 to 12:00	201	203	404	170
12:00 to 13:00	201	190	391	181
13:00 to 14:00	184	206	390	159
14:00 to 15:00	192	215	407	136
15:00 to 16:00	187	223	410	100
16:00 to 17:00	163	207	370	56
17:00 to 18:00	149	89	238	116
18:00 to 19:00	133	159	292	90
19:00 to 20:00	62	94	156	58
20:00 to 21:00	16	64	80	10
21:00 to 22:00	-1	-1	-1	<u>- 1</u>
22:00 to 23:00	-1	- 1	- 1	-1
23:00 to 24:00	- 1	-1	-1	-1

Site Reference: 00-01-K-01 Survey Date: 19/10/96 Day Of Week: Saturd

Survey Type: Two-Way ATC Count

Car Park Occupancy - Initial: 17 Final: 133

Data Proportions - (Total = 0):

Motor Cars: 0 Motor Cycles: 0 Public Service: 0 Light Goods: 0 Heavy Goods(1): 0 Heavy Goods(2): 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	- 1	- 1	-1	-1
01:00 to 02:00	-1	-1	-1	-1
02:00 to 03:00	-1	-1	-1	-1
03:00 to 04:00	-1	-1	-1	-1
04:00 to 05:00	-1	- 1	<u>-1</u>	-1
05:00 to 06:00	- 1	- 1	-1	- 1
06:00 to 07:00	-1	- 1	-1	- 1
07:00 to 08:00	~1	-1	- 1.	- 1
08:00 to 09:00	118	31	149	104
09:00 to 10:00	152	134	286	122
10:00 to 11:00	373	255	628	240
11:00 to 12:00	447	390	837	. 297
12:00 to 13:00	385	329	714	353
13:00 to 14:00	449	420	869	382
14:00 to 15:00	555	477	1032	460
15:00 to 16:00	563	547	1110	476
16:00 to 17:00	412	514	926	374
17:00 to 18:00	237	394	631	217
18:00 to 19:00	21	179	200	59
19:00 to 20:00	-1	- 1	- 1	-1
20:00 to 21:00	- 1	- 1	-1	-1
21:00 to 22:00	-1	1	-1	-1
22:00 to 23:00	-1	-1	-1	-1
23:00 to 24:00	-1	-1	-1	-1

Site Reference: 00-01-K-01 Survey Date: 20/10/96 Day Of Week: Sunday

Survey Type: Manual Count

Car Park Occupancy - Initial: 20 Final: 13

Data Proportions - (Total = 0):

Motor Cars: 0 Motor Cycles: 0 Public Service: 0

Light Goods: 0 Heavy Goods(1): 0 Heavy Goods(2): 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	- 1	-1	-1	-1
01:00 to 02:00	-1	- 1	-1	- 1
02:00 to 03:00	-1	-1	-1	-1
03:00 to 04:00	-1	-1	- 1	-1
04:00 to 05:00	-1	-1	- 1	-1
05:00 to 06:00	- 1	-1	-1	- 1
06:00 to 07:00	- 1	- 1	-1	- 1
07:00 to 08:00	- 1	-1	-1	-1
08:00 to 09:00	- 1	<u>- 1</u>	-1	-1
09:00 to 10:00	74	30	104	64
10:00 to 11:00	427	212	639	279
11:00 to 12:00	654	531	1185	402
12:00 to 13:00	567	587	1154	382
13:00 to 14:00	563	625	1188	320
14:00 to 15:00	610	577	1187	353
15:00 to 16:00	553	649	1202	257
16:00 to 17:00	143	428	571	-28
17:00 to 18:00	63	99	162	-64
18:00 to 19:00	-1	-1	- 1	-1
19:00 to 20:00	-1	-1	-1	- 1
20:00 to 21:00	-1	- 1	-1	- 1
21:00 to 22:00	-1	-1	-1	- 1
22:00 to 23:00	-1	-1	-1	- 1
23:00 to 24:00	-1	- 1	-1	-1

TRICS v3.8 Copyright(C) 1993-1997, JMP Consultants Ltd Friday 09/01/98 Survey Day Details for 00-01-K-02 / 01 · Page 2:

Site Reference: 00-01-K-02 Survey Date: 17/05/96 Day Of Week: Friday

Survey Type: Manual Count

Car Park Occupancy - Initial: 10 Final: -1
Data Proportions - (Total = 0):
Motor Cars: 97 Motor Cycles:

Motor Cycles: 0 Public Service: 0 Light Goods: 2 Heavy Goods(1): 1 Heavy Goods(2); 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	-1	-1	-1	-1
01:00 to 02:00	-1	-1	-1	- 1
02:00 to 03:00	-1	-1	-1	-1
03:00 to 04:00	-1	-1	-1	-1
04:00 to 05:00	-1	-1	-1	-1
05:00 to 06:00	-1	-1	-1	- <u>1</u>
06:00 to 07:00	-1	-1	-1	1
07:00 to 08:00	· -1	-1	-1	- 1
08:00 to 09:00	-1	-1	-1	-1
09:00 to 10:00	66	38	104	38
10:00 to 11:00	104	91	195	51
11:00 to 12:00	120	116	236	55
12:00 to 13:00	96	101	197	50
13:00 to 14:00	100	96	196	54
14:00 to 15:00	109	100	209	63
15:00 to 16:00	118	99	217	82
16:00 to 17:00	101	105	206	78
17:00 to 18:00	77	94	$\overline{171}$	61
18:00 to 19:00	44	62	106	43
19:00 to 20:00	40	48	88	35
20:00 to 21:00	-1	-1	1	-1
21:00 to 22:00	~ 1	-1	- 1	-1
22:00 to 23:00	-I	-1	-1	-1
23:00 to 24:00	-1	-1	-1	-1

Comment:

THERE IS A TESCO/M&S NEARBY WITH CONNECTING FOOTPATH TO THIS SITE THESE ARE THE PEDESTRIAN MOVEMENTS BETWEEN THE TWO

RETAIL PARK	I	N	OUT		
	ADS	CH	ADS	CH	
0900-1000	15	1	7	2	
1000-1100	16	8	10	4	
1100-1200	22	9	17	9	
1200-1300	19	6	29	б	
1300-1400	29	1	18	1	
1400-1500	26	6	17	5	
1500-1600	12	9	18	8	
1600-1700	16	4	8	7	
1700-1800	3	4	7	3	
1800-1900	3	1	3	1	
1900-2000	4	0	6	0	
TOTALS	165	49	140	46	

TO

TRICS v3.8 Copyright(C) 1993-1997, JMP Consultants Ltd Survey Day Details for OO-01-K-02 / 02 Friday 09/01/98 · widPagema. ...

Site Reference: 00-01-K-02 Survey Date: 18/05/96 Day Of Week: Saturd

Survey Type: Manual Count

Car Park Occupancy - Initial: 14 Final: 19

Data Proportions - (Total = 0):

Motor Cars: 98 Motor Cycles: 0 Public Service: Light Goods: 2 Heavy Goods(1): Heavy Goods(2): 0 0

		• ,	- neavy	/ Goods(2):
Time Range	Arrivals	Departures		(-,,
00:00 to 01:00	-1		Totals	Park.Acc.
01:00 to 02:00	~Î	-1	-1	-1
02:00 to 03:00	-1	-1	-1	- î
03±00 to 04±00	-1 -1	-1	-1	~ ĵ
04:00 to 05:00	-1 -1	-1	~1	-1
05:00 to 06:00	-1 -1	~1	I	-1
06:00 to 07:00	- 1 - 1	-1	-1	-1
07:00 to 08:00	-1	~1	-1	-1
08:00 to 09:00	1 1	-1	-1	- î
09:00 to 10:00	88	_1	-1	-1
10:00 to 11:00		61	149	41 .
11:00 to 12:00	174	151	325	64
12:00 to 13:00	222	211	433	75
13:00 to 14:00	188	210	398	53
14:00 to 15:00	175	163	338	65
15:00 to 16:00	314	284	59.8	95
16:00 to 17:00	236	254	490	77
17:00 to 18:00	192	199	391	
18:00 to 19:00	103	154	257	70
19:00 to 20:00	-1	-1	-1	19
20:00 to 21:00	-1	-1	- 1	-1
21:00 to 22:00	-1	-1	-1	~1
22:00 to 23:00	-1	-1	-1	$-\frac{1}{2}$
	-1	-1	- 1 - 1	-1
23:00 to 24:00	-1	-1	1 1	- Ĭ
~			1	-1

Comment:

THERE IS A TESCO/M&S NEARBY WITH CONNECTING FOOTPATH TO THIS SITE THESE ARE THE PEDESTRIAN MOVEMENTS BETWEEN THE TWO

DEGENERAL TOP		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	TITETTA	コンフレナル
RETAIL PA	RK 1	N	C	UT
0000 1000	ADS	CH	ADS	CH
0900-1000	7	0	8	7
1000-1100	15	5	7	ā
1100-1200	17	15	20	13
1200-1300	29	12	22	17
1300-1400	19	5	26	
1400-1500	26	7	36	4
1500-1600	34	23		6
1600-1700	42		34	19
1700~1800		12	49	16
TOTALS	7	5	4	1
TOTWING	196	84	206	77

TRICS v3.8 Copyright(C) 1993-1997, JMP Consultants Ltd Survey Day Details for OO-01-K-02 / 03

Friday 09/01/98 Page 4

Site Reference: 00-01-K-02 Survey Date: 19/05/96 Day Of Week: Sunday

TO

Survey Type: Manual Count

Car Park Occupancy - Initial: 8 Final: -1

Data Proportions - (Total = 0):

Motor Cars: 98 Motor Cycles: 0 Public Service: 0 Light Goods: 2 Heavy Goods(1): 0 Heavy Goods(2): 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	-1	<u>-1</u>	-1	
01:00 to 02:00	-1	-1	-1. -1	-1
02:00 to 03:00	-1	- 1	-1 -1	-1
03:00 to 04:00	-1]		-1
04:00 to 05:00	1	-1	-1	-1
05:00 to 06:00	-î	-1 -1	-1	-1
06:00 to 07:00	-1	-1	<u>1</u>	-1
07:00 to 08:00	-1		-1	-1
08:00 to 09:00	-1	<u>1</u>	-1	-1
09:00 to 10:00	-1 -1	-1	1	-1
10:00 to 11:00	138	-1	-1	-1
11:00 to 12:00		85	223	61
12:00 to 13:00	196	173	369	84
13:00 to 14:00	196	212	408	68
14:00 to 15:00	134	145	279	57
	1.84	146	330	95
	161	211	372	45
	19	59	78	5
17:00 to 18:00	- 1	-1	-1	-1
18:00 to 19:00	-1	-1	-1	-1
19:00 to 20:00	-1	- 1	1	-1
20:00 to 21:00	-1	-1	- 1	~Ĩ
21:00 to 22:00	-1	-1	_1 _1	1
22:00 to 23:00	- l	- 1	<u>- 1</u>	1
23:00 to 24:00	-1	••• Î	-1	-1 -1

Comment:

THE LAST COUNT PERIOD WAS 1600-1630 I.E. HALF AN HOUR ONLY THERE IS A TESCO/M&S NEARBY WITH CONNECTING FOOTPATH TO THIS SITE THESE ARE THE PEDESTRIAN MOVEMENTS BETWEEN THE TWO

RETAIL PARK	I	N	OUT		
	ADS	CH	ADS	CH	
1000-1100	<i>31</i>	7	13	4	
1100-1200	32	9	43	13	
1200-1300	31	6	32	7	
1300~1400	23	2	17	5	
1400-1500	47	18	31	10	
1500-1600	21	15	36	21	
1600-1630	5	2	8		
TOTALS	190	59	180	62	

Site Reference: LC-01-K-03 Survey Date: 11/10/96 Day Of Week: Friday

Survey Type: Manual Count

Car Park Occupancy - Initial: 0 Final: 0
Data Proportions - (Total = 0):

Motor Cars: 84 Motor Cycles: 1 Public Service: 0
Light Goods: 11 Heavy Goods(1): 3 Heavy Goods(2): 1

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	- 1	-1	-1	-1
01:00 to 02:00	- 1	- 1	-1	-1
02:00 to 03:00	-1	-1	-1	-1
03:00 to 04:00	- <u>1</u>	-1	-1	-1
04:00 to 05:00	-1	<u>- 1</u>	- 1	-1
05:00 to 06:00	- 1.	-1	-1	-1
06:00 to 07:00	-1	- 1	-1	-1
07:00 to 08:00	14	6	20	8
08:00 to 09:00	43	23	66	28
09:00 to 10:00	61	46	107	43
10:00 to 11:00	116	102	218	57
11:00 to 12:00	95	98	193	54
12:00 to 13:00	108	107	215	55
13:00 to 14:00	141	123	264	73
14:00 to 15:00	134	143	277	64
15:00 to 16:00	127	117	244	74
16:00 to 17:00	114	125	239	63
17:00 to 18:00	87	92	179	58
18:00 to 19:00	54	72	126	40
19:00 to 20:00	49	72	121	17
20:00 to 21:00	0	17	17	0
21:00 to 22:00	-1	-1	-1	-1
22:00 to 23:00	-1	- 1	-1	-1
23:00 to 24:00	-1	~ 1	-1	- 1

⁵ pedestrians and 2 pedal cycles were also counted. This count includes the staff/goods entrance.

TRICS v3.8 Copyright(C) 1993-1997, JMP Consultants Ltd Wednesday 12/11/97 Survey Day Details for LC-01-K-03 / 02 Page 3

Site Reference: LC-01-K-03 Survey Date: 12/10/96 Day Of Week: Saturd

Survey Type: Manual Count

Car Park Occupancy - Initial: 0 Final: 0

Data Proportions - (Total = 0):

Motor Cars: 91 Motor Cycles: 1 Public Service: 0 Light Goods: 7 Heavy Goods(1): 1 Heavy Goods(2): 0

Time Rang	e Arrivals	Departures	Totals	Park.Acc.
00:00 to 01	:00 -1	-1	-1	-1
01:00 to 02	:00 -1	-1	-1	~ 1
02:00 to 03	:00 -1	-1	-1	- 1.
03:00 to 04	:00 -1	- 1	-1	-1
04:00 to 05	:00 -1	- 1	-1	-1
05:00 to 06	:00 -1	- 1	-1	-1
06:00 to 07	:00 -1	- 1	- 1	-1
07:00 to 08	:00 7	3	10	4
08:00 to 09	:00 46	24	70	26
09:00 to 10	:00 87	52	139	61
10:00 to 11	:00 161	130	291	92
	:00 210	202	412	100
12:00 to 13	:00 194	183	377	111
13:00 to 14	:00 227	192	419	146
14:00 to 15	:00 255	251	506	150
15:00 to 16	:00 226	275	501	101
16:00 to 17	:00 140	157	297	84
17:00 to 18	:00 88	149	237	23
18:00 to 19	:00 33	47	80	9
19:00 to 20	:00 22	25	47	6
20:00 to 21	:00	6	6	0
21:00 to 22	:00 -1	- 1	-1	-1
22:00 to 23	:00 -1	-1	- 1	- 1
23:00 to 24	:00 -1	-1	-1	- 1

Comment:

This count includes the staff/goods entrance.

⁵ pedal cycles were also counted.

Site Reference: LC-01-K-03 Survey Date: 13/10/96 Day Of Week: Sunday

Survey Type: Manual Count

Car Park Occupancy - Initial: 2 Final: 3
Data Proportions - (Total = 0):

Motor Cars: 92 Motor Cycles: 0 Public Service: 0
Light Goods: 7 Heavy Goods(1): 1 Heavy Goods(2): 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	-1	-1	-1	-1
01:00 to 02:00	-1	-1	-1	- 1
02:00 to 03:00	-1	-1	-1	- 1
03:00 to 04:00	-1	-1	- 1	- 1
04:00 to 05:00	-1	-1	- 1	-1
05:00 to 06:00	-1	- 1	-1	-1
06:00 to 07:00	-1	-1	- <u>1</u>	-1
07:00 to 08:00	-1	- 1	- 1	- 1
08:00 to 09:00	-1	- 1	-1	-1
09:00 to 10:00	14	7	21	9
10:00 to 11:00	163	98	261	74
11:00 to 12:00	233	197	430	110
12:00 to 13:00	211	198	409	123
13:00 to 14:00	230	223	453	130
14:00 to 15:00	274	287	561	117
15:00 to 16:00	224	240	464	101
16:00 to 17:00	54	127	181	28
17:00 to 18:00	3	28	31	3
18:00 to 19:00	- 1.	-1	-1	- 1
19:00 to 20:00	-1	-1	-1	- 1
20:00 to 21:00	-1	- 1	-1	- 1
21:00 to 22:00	-1	-1	-1	-1
22:00 to 23:00	-1	-1	-1	-1
23:00 to 24:00	-1	- 1	-1	-1

⁹ pedestrians and 10 pedal cycles were also counted. This count includes the staff/goods entrance.

Count No. :

96051

Location :

Redlands

Date: Saturday 16 March 1996

Weather: dry/bnghi

Time: 07 30 - 20:30

Nos IN CAR PARK AM: 224

Results ;

Classified vehicle link flows in half hours

Pm : 3

SATURDAY OUT TOWARDS ROUNDABOUT

Hour begin	Car	Light Van	Medium Van	2 Axlo Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axlo Artic.	6 Axle Artic	Motor cycle	Bus & coach	Total V°cles	Total HGVs	Cycle
07.30	5	ı	1	0	0	0	0	0	0	0	7	0	0
08:00	11	5	0	0	o	0	o	0	0	0	16	0	0
08.30	33	6	1	0	0	0	0	0	0	0	40	0	0
09:00	72	5	2	0	0	0	0	o	0	0	79	0	0
09:30	104	10	2	0	0	0	0	0	0	0	116	0	1
10:00	148	13	0	1	0	0	0	ő	4	0	166	1	0
10:30	146	6	1	0	0	0	0	0	0	0	153	0	0
11:00	199	6	2	0	0	0	0	0	ő	0	207	0	0
11:30	208	4	3	0	0	0	0	ō	1	0	216	0	0
12:00	218	12	3	0	0	0	o o	0	2	0	235	0	0
12:30	185	9	0	1	0	0	ō	0	0	0	195	1	0
13:00	159	8	3	0	0	o	o	0	o	0	170	0	0
13:30	191	5	1	0	0	0	Ö	0	0	0	197	0	0
14:00	210	5	0	0	0	0	ő	0	1	Ĭ	217	0	0
14:30	293	12	1	0	0	0	0	0	2	0	308	0	0
15:00	288	9	1	0	0	0	0	0	0	0	298	0	0
15:30	306	6	Q	0	0	0	0	0	3	0	315	0	0
16:00	286	4	0	0	0	0	0	0	1	0	291	0	0
16:30	234	8	1	0	0	0	ő	0	0	0	243	o	0
17:00	113	8	0	0	0	0	ů	1	0	0	122	0	0
17:30	111	10	0	4	0	0	Ó	ì	0	0	126	0	0
18:00	125	6	0	}	0	0	0	0	0	0	132	0	0
18:30	83	3	0	0	0	0	ő	0	o o	0	86	0	
19:00	111	6	0	0	0	0	ő	0	0	0	117		0
19:30	91	23	0	0	0	0	0	o o	0	0	114	0	
20:00	52	2	0	0	0	o	0	0	1	0	55	0	0
Total:	3982	192	22	7	0	0	0		15	1	4221	2	2

SATURDAY IN AWAY FROM ROUNDABOUT

Hour begin	Car	Light Van	Medium Van	2 Axle Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axle Artic.	6 Axle Artic.	Motor cycle	Bus &	Total V'eles	Total HGVs	Cycle
07:30	10	2	1	0	0	0	0	0	0	0	13	0	1
08:00	40	7	1	0	0	0	0	0	ŏ	0	48	0	1
08:30	90	8	4	0	0	0	0	1	ı I	0	104	0	3
09:00	108	4	0	0	0	0	0	0	1	0	113	0	0
09:30	155	14	1	0	0	0	0	0	0	0	170	0	1
10:00	199	7	1	1	0	0	0	0	2	0	210	0	0
10:30	188	7	0	0	0	0	0	0	0	0	195	0	0
11:00	189	6	3	0	0	0	0	0	1	0	199	0	
11.30	208	7	1	0	0	0	0	1	1	0	218	1	0
12:00	214	4	2	0	0	0	0	0	0	0	220	0	0
12:30	177	7	2	0	0	0	0	o	0	0	186	0	
13:00	200	9	2	0	0	0	0	0	0	0	211	0	0
13:30	196	5	0	0	0	0	0	o	ì	0	202	0	0
14:00	236	11	1	0	0	0	ő	0	ì	0	249	0	0
14:30	268	8	1	0	0	0	0	0	1	0	278	0	1
15:00	223	5	0	0	0	0	0	0	2	0	230		1
15:30	203	7	0	0	0	0	0	0	0	0	210	0	0
16:00	210	9	0	0	0	0	0	0	1	0	220	0	0
16:30	185	8	4	0	0	0	0	0	1	0	198	0	0
17:00	199	5	0	0	0	0	0	1	0	0	205	1	0
17:30	103	6	0	0	0	0	0	0	0	0		1	0
18:00	72	5	0	0	0	0	0	0	0	0	109 77	0	2
18:30	44	2	0	0	0	0	0	0				0	1
19:00	23	0	0	0	1	0	0	0	0	0	46	0	0
19:30	15	2	0	0	0	0	1	0	0	0	24	1	0
20:00	7	0	0	0	0	0	0	0	0	0	18 7	0	0
Total :	3762	155	24						13		20/0		~

COMBINED 2-WAY FLOW

Hour begin	Car	Light Van	Medium Van	2 Axle Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axle Artic.	6 Axle Artic.	Motor cycle	Bus & coach	Total V'eles	Total HGVs	Cycle
07:30	15	3	2	0	0	0	0	0	0	0	20	0	1
08:00	51	12	1	0	0	0	0	0	0	0	64	0	i
08:30	123	14	5	0	0	0	0	1	1	0	144	0	3
09:00	180	9	2	0	0	0	0	0	ì	0	192	0	0
09 30	259	24	3	0	0	0	o	o	0	0	286	0	2
10:00	347	20	1	2	0	0	0	0	6	0	376	1	0
10:30	334	13	1	0	0	0	0	0	0	0	348	0	0
11:00	388	12	5	0	0	0	0	0	1	o	406	0	1
11:30	416	11	4	0	0	0	0	1	2	0	434	1	0
12:00	432	16	5	0	0	0	ø	Ó	2	0	455	0	0
12:30	362	16	2	1	0	0	0	0	0	0	381	1	0
13:00	359	17	5	0	0	0	٥	0	0	0	381	0	0
13:30	387	10	1	0	0	0	0	0	1	0	399	0	0
14:00	446	16	1	0	0	0	0	0	2	1	466	0	1
14:30	561	20	2	0	0	0	0	0	3	0	586	0	1
15:00	511	14	ì	0	0	0	0	0	2	0	528	0	0
15.30	509	13	0	0	0	0	0	0	3	0	525	0	0
16:00	496	13	0	0	0	0	0	0	2	0	511	0	0
16:30	419	16	5	0	0	0	0	0	1	0	441	1	0
17:00	312	13	0	0	0	0	0	2	0	0	327	1	0
17:30	214	16	0	4	0	0	0	l	0	0	235	0	2
18:00	197	11	0	1	0	0	0	0	0	0	209	0	1
18:30	127	5	0	0	0	0	0	0	0	0	132	O	1
19:00	134	6	0	0	1	0	0	0	0	٥	141	1	0
19:30	106	25	0	0	0	0	1	0	0	0	132	1	0
20:00	59	2	0	0	0	0	0	0	I	0	62	0	0
Total :	7744	347	46	8	1	0	1	5	28	1	8181	7	14

Notes :

Please note. Total Vehicles exclude cycles

Count No. :

96052

Location:

Redlands

Date: Sunday 17 March 1996

Weather: dry/bright

10:00 - 19:00 Time:

Nos CARS IN CAR PARK ALL. 500

Results:

Classified vehicle link flows in half hours

PM: 15

SUNDAY OUT TOWARDS ROUNDABOUT

Hour begin	Car	Light Van	Medium Van	2 Axle Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axle Artic.	6 Axle Artic.	Motor cycle	Bus &	Total V'cles	Total HGVs	Cycle
09:30	129	8	0	0	0	0	0	0	0	0	137	0	0
10:00	267	17	1	0	0	0	0	0	I	1	287		0
10:30	287	7	3	0	0	0	0	0	5	0	302	0	0
11:00	337	13	0	0	0	0	0	0	I	0	351	0	1
11:30	283	16	0	0	0	0	0	0	4	0	303	0	2
12:00	257	21	0	0	0	0	0	0	0	0	278	0	0
12:30	213	5	0	0	o	0	0	0	1	0		0	0
13:00	185	4	0	0	0	0	0	0	0	0	219 189	0	0
13:30	148	6	0	0	0	0	0	0	1			0	1
14:00	193	1	0	0	0	0	0	0	0	0	155	0	0
14:30	185	6	1	0	0	0	0	0		0	194	0	0
15:00	223	7	0	0	0	0	0	0	1	0	193	0	1
15:30	221	3	0	0	0	0	0		0	0	230	0	2
16:00	244	5	1	0	0	0	0	0	2	0	226	0	0
16:30	284	7	1	0	0	0	0		1	0	251	0	0
17:00	261	12	1	0	0	0		0	0	0	292	0	1
17:30	237	4	0	0	0		0	0	0	0	274	0	1
18:00	100	3	0	0	0	0	0	0	1	0	242	0	1
18:30	51	2	0	0		0	0	0	1	0	104	0	0
		4	V	V	0	0	0	0	1	0	54	0	0
Total :	4105	147	8	0	0	0	0	0	20	1	4281	0	10

SUNDAY IN AWAY FROM ROUNDABOUT

Hour begin	Car	Light Van	Medium Van	2 Axle Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axle Artic,	6 Axle Artic.	Motor cycle	Bus & coach	Total V'cles	Total HGVs	Cycle
09:30	448	4	0	0	0	0	0	0	2	0	454	0	0
10:00	305	10	1	0	0	0	0	0	5	0	321	0	3
10:30	274	11	0	0	0	0	0	0	5	0	290	0	3
11:00	236	11	0	0	0	0	0	0	2	0	249	0	2
11:30	197	5	0	0	0	0	0	0	1	0	203	0	0
12:00	169	7	0	0	0	0	0	0	1	0	177	0	,
12:30	150	5	0	0	0	0	0	0	1	0	156	0	١ ^
13:00	148	3	0	0	0	0	0	0	1	0	152		0
13:30	167	7	0	0	0	0	Ö	0	0	0	174	0	1
14:00	203	4	1	0	0	0	0	0	0	0		0	0
14:30	202	4	0	0	0	0	0	0	0		208	0	1
15:00	198	4	0	0	0	0	0	0	2	0	206	0	0
15:30	145	2	2	0	0	0	0	0		0	204	0	l .
16:00	199	4	0	0	0	0	0	0	0	0	149	0	0
16:30	190	12	1	ō	0	0	0	0	1	0	204	0	0
17:00	147	5	0	0	0	0	0		0	0	203	0	0
17:30	80	1	0	0	0	0		0	0	0	152	0	1
18:00	48	1	0	0	0	0	0	0	1	0	82	0	0
18:30	16	3	0	0			0	0	0	0	49	0	0
_		,	Ü	V	0	0	0	0	2	0	21	0	0
Total :	3522	103	5	0	0	0	0	0	24	0	3654	0	14

COMBINED 2-WAY FLOW

Hour begin	Car	Light Van	Medium Van	2 Axle Rigid	3/4 Axle Rigid	3/4 Axle Artic.	5 Axle Artic.	6 Axle Artic.	Motor eyele	Bus & coach	Total V'cles	Total HGVs	Cycle
09:30	577	12	0	0	0	0	0	0	2	0	591	0	0
10:00	572	27	2	0	0	0	0	0	6	1	608	0	3
10:30	561	18	3	0	0	0	0	0	10	0	592	0	4
11:00	573	24	0	0	0	0	0	0	3	0	600	0	5
11:30	480	21	0	0	0	0	0	0	5	0	506	0	0
12:00	426	28	0	0	0	0	0	0	1	0	455	0	1
12:30	363	10	0	0	0	0	0	0	2	0	375	0	0
13:00	333	7	0	0	0	0	0	0	1	0	341	0	2
13:30	315	13	0	0	0	0	0	0	1	0	329	0	0
14:00	396	5	1	0	0	0	0	0	0	0	402	0	1
14:30	387	10	1	0	0	0	0	0	1	0	399	0	1
15:00	421	11	0	0	0	0	0	0	2	0	434	0	3
15:30	366	5	2	0	0	0	0	0	2	0	375	0	0
16:00	443	9	1	0	0	0	0	0	2	0	455	0	0
16:30	474	19	2	0	0	0	0	0	0	0	495	0	1
17:00	408	17	1	0	0	0	0	0	0	0	426	0	2
17:30	317	5	0	0	0	0	0	0	2	0	324	0	1
18:00	148	4	0	0	0	0	0	0	1	0	153	0	0
18:30	67	5	0	0	0	0	0	0	3	0	75	0	0
Total :	7627	250	13	0	0	0	0	0	44	1	7935	0	24

Notes: Picase note. Total Vehicles exclude cycles

Comment: Due to excessive traffic volumes, caused by the car boot sale, counting the vehicles in the car park at the start of the survey was difficult.

Site Reference: 00-01-K-01 Survey Date: 17/10/96 Day Of Week: Thurs

Survey Type: Manual Count

Car Park Occupancy - Initial: 17 Final: 20

Data Proportions - (Total = 0):

Motor Cars: 0 Motor Cycles: 0 Public Service: 0 Light Goods: 0 Heavy Goods(1): 0 Heavy Goods(2): 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	- 1	-1	-1	- 1
01:00 to 02:00	-1	-1	- 1	- 1
02:00 to 03:00	-1	-1	-1	-1
03:00 to 04:00	- 1.	-1	-1	-1
04:00 to 05:00	-1	- <u>1</u>	-1	- 1
05:00 to 06:00	- 1	-1	- 1	-1
06:00 to 07:00	-1	-1	- 1	-1
07:00 to 08:00	-1	-1	-1	- 1
08:00 to 09:00	72	23	95	66
09:00 to 10:00	159	86	245	139
10:00 to 11:00	195	162	357	172
11:00 to 12:00	201	203	404	170
12:00 to 13:00	201	190	391	181
13:00 to 14:00	184	206	390	159
14:00 to 15:00	192	215	407	136
15:00 to 16:00	187	223	410	100
16:00 to 17:00	163	207	370	56
17:00 to 18:00	149	89	238	116
18:00 to 19:00	133	159	292	90
19:00 to 20:00	62	94	156	58
20:00 to 21:00	16	64	80	10
21:00 to 22:00	-1	<u>-1</u>	-1	- 1
22:00 to 23:00	- 1	-1	-1	-1
23:00 to 24:00	-1	-1	-1	-1

Site Reference: 00-01-K-01 Survey Date: 20/10/96 Day Of Week: Sunda

Survey Type: Manual Count

Car Park Occupancy - Initial: 20 Final: 13

Data Proportions - (Total = 0):

Motor Cars: 0 Motor Cycles: 0 Public Service: 0

Light Goods: 0 Heavy Goods(1): 0 Heavy Goods(2): 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	-1	-1	-1	-1
01:00 to 02:00	-1	-1	-1	-1
02:00 to 03:00	-1	- 1	-1	- 1
03:00 to 04:00	-1	-1	- 1	-1
04:00 to 05:00	-1	-1	- 1	-1
05:00 to 06:00	-1	-1	-1	- 1
06:00 to 07:00	- 1	- 1	-1	-1
07:00 to 08:00	-1	- 1	-1	- 1
08:00 to 09:00	-1	-1	-1	-1
09:00 to 10:00	74	30	104	64
10:00 to 11:00	427	212	639	279
11:00 to 12:00	654	531	1185	402
12:00 to 13:00	567	587	1154	382
13:00 to 14:00	563	625	1188	320
14:00 to 15:00	610	577	1187	353
15:00 to 16:00	553	649	1202	257
16:00 to 17:00	143	428	571	-28
17:00 to 18:00	63	99	162	-64
18:00 to 19:00	-1	-1	- 1	1
19:00 to 20:00	-1	-1	- 1	- 1
20:00 to 21:00	-1	- 1	- 1	-1
21:00 to 22:00	- 1	-1	-1	-1
22:00 to 23:00	-1	-1	-1	-1
23:00 to 24:00	-1	-1	- 1	-1

TO .

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Site Reference: 00-01-K-02 Survey Date: 17/05/96 Day Of Week: Frida

Survey Type: Manual Count

Car Park Occupancy - Initial: 10 Final: -1
Data Proportions - (Total = 0):
Motor Cars: 97 Motor Cycles: (

Motor Cycles: Public Service: 0 Light Goods: 2 Heavy Goods(1): 1 Heavy Goods(2); 0

Time Rar	nge	Arrivals	Departures	Totals	Park.Acc.
	01:00	-1	-1	-1	l
	00:50	-1	-1	-1	-1
	00:80	-1	~1	-1	-1
03:00 to (04:00	-1	-1	-1	<u>1</u>
04:00 to (05:00	-1	-1	-1	-1
05:00 to 0	06:00	-1	-1	-1	- <u>î</u>
06:00 to (7:00	-1	- 1	· -1	Ī
07:00 to 0	00:80	-1	-1	-1	-1
	19:00	-1	<u>-1</u>	-1	-1
09:00 to 1	10:00	66	38	104	38
10:00 to 1	1:00	104	91	195	51
11:00 to 1	2:00	120	116	236	55
12:00 to 1	13:00	96	101	197	50
13:00 to 1	4:00	100	96	196	54
	5:00	109	100	209	63
15:00 to 1	6:00	118	99	217	82
16:00 to 1	7:00	101	105	206	78
17:00 to 1	8:00	77	94	171	61
18:00 to 1	9:00	44	62	106	43
19:00 to 2	20:00	40	48	88	35
20:00 to 2	21:00	-1	-1	-1	-1
21:00 to 2	22:00	-1	- 1	-Î	-1
	23:00	-1	-1	-1	-1
23:00 to 2	4:00	-1	-1	-1	-1

Comment:

THERE IS A TESCO/M&S NEARBY WITH CONNECTING FOOTPATH TO THIS SITE THESE ARE THE PEDESTRIAN MOVEMENTS BETWEEN THE TWO

RETAIL PARK	IN		OUT	
	ADS	CH	ADS	CH
0900-1000	15	1	7	2
1000-1100	16	8	10	4
1100-1200	22	9	17	9
1200-1300	19	6	29	б
1300-1400	29	1	18	1
1400-1500	26	6	17	5
1500-1600	12	9	18	8
1600-1700	16	4	8	7
1700-1800	3	4	7	3
1800-1900	3	1	3	1
1900-2000	4	0	6	0
TOTALS	165	49	140	46

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Friday 09/01/9 · · · · Pagenn

Site Reference: 00-01-K-02 Survey Date: 18/05/96 Day Of Week: Satu

Survey Type: Manual Count

Car Park Occupancy - Initial: 14 Final: 19
Data Proportions - (Total = 0):

Motor Cars: 98 Motor Cycles: 0
Light Goods: 2 Heavy Goods(1): 0 Public Service: 0 Heavy Goods(2): 0

_		• •		GOOGB(Z):
Time Range	Arrivals	Departures	70 - 4 - 7	,
00:00 to 01:00	-1		Totals	Park.Acc.
01:00 to 02:00	-1	- <u>1</u>	-1	-1
02:00 to 03:00	-1	$-\frac{1}{2}$	-1	-1
03:00 to 04:00	-1 -1	-1	-1	-1
04:00 to 05:00	- 1	-1	-1	-1
05:00 to 06:00	-1 -1	~1	-1	-1
06:00 to 07:00		- I	-1	-1
07:00 to 08:00	-1 -1	I	-1	-1
08:00 to 09:00		-1	-1	-1
09:00 to 10:00	-1 90	<u>-1</u>	-1	-1
10:00 to 11:00	88 174	61	149	41
11:00 to 12:00		151	325	64
12:00 to 13:00	222	211	433	75
13:00 to 14:00	188	210	398	53
14:00 to 15:00	175 314	163	338	65
15:00 to 16:00	236	284	598	95
16:00 to 17:00		254	490	77
17:00 to 18:00	192	199	391	70
18:00 to 19:00	103	154	257	19
19:00 to 20:00	-1	-1	-1	-1
20:00 to 21:00	-1	-1	-1	-1
21:00 to 22:00	$-\frac{1}{1}$	-1	-1	-1
22:00 to 23:00	-1	-1	-1	-1
23:00 to 24:00	-1	<u> </u>	- 1	-1
	-1	~1	-1	$-\tilde{1}$

Comment:

THERE IS A TESCO/M&S NEARBY WITH CONNECTING FOOTPATH TO THIS SITE THESE ARE THE PEDESTRIAN MOVEMENTS BETWEEN THE TWO

ከከጠከተል 🐃 🗕 🗕			WATER IN	
RETAIL PARI	K 1	N	OU	T
0000 1000	ADS	CH	ADS	CH
0900-1000	7	0	8	1
1000-1100	15	5	7	ō
1100~1200	17	15	20	$1\overline{3}$
1200-1300	29	12	22	17
1300-1400	19	5	26	4
1400-1500	26	7	36	6
1500-1600	34	23	34	19
1600-1700	42	12	49	16
1700~1800	7	5	4	1
TOTALS	196	84	206	77

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Site Reference: 00-01-K-02 Survey Date: 19/05/96 Day Of Week: Sunda

TO

Survey Type: Manual Count

Car Park Occupancy - Initial: 8 Final: -1

Data Proportions - (Total = 0):

Motor Cars: 98 Motor Cycles: 0 Public Service: 0
Light Goods: 2 Heavy Goods(1): 0 Heavy Goods(2): 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	-1	-1	-1.	-
01:00 to 02:00	-1	-1	-1. -1	<u>1</u>
02:00 to 03:00	-1	-1	-1 -1]
03:00 to 04:0 0	$-\hat{1}$	-1 1		-1
04:00 to 05:00	-1	<u> </u>	-1	-1
05:00 to 06:00	-î	 1	-1	-1
06:00 to 07:00	-1 -1	<u>l</u>	-1	-1
07:00 to 08:00	1 1	 1	-1	-1
08:00 to 09:00	-1	-1	-1	-1
09:00 to 10:00		- 1	1	-1
10:00 to 11:00	-l	-1	-1	-1
11:00 to 12:00	138	85	223	61
12:00 to 13:00	196	173	369	84
	196	212	408	68
	134	145	279	57
	1,84	146	330	95
	161	211	372	45
	19	59	78	5
17:00 to 18:00	-1	-1	-1	-1
18:00 to 19:00	-1	-1	-1	-Î
19:00 to 20:00	~1	-1	<u>-1</u>	-1
20:00 to 21:00	-1	· -1	- î	I
21:00 to 22:00	-1	~Î		-1
22:00 to 23:00	-1	_î	i	-1
23:00 to 24:00	<u>~</u> 1	- 1	- <u>1</u>	-1
			1	••• 1

Comment:

THE LAST COUNT PERIOD WAS 1600-1630 I.E. HALF AN HOUR ONLY THERE IS A TESCO/MES NEARBY WITH CONNECTING FOOTPATH TO THIS SITE THESE ARE THE PEDESTRIAN MOVEMENTS BETWEEN THE TWO

RETAIL PARK	IN		OUT	
• · · · · · ·	ADS	CH	ADS	CH
1000-1100	31	7	13	4
1100-1200	32	9	43	13
1200-1300	31	6	32	7
1300-1400	23	2	17	5
1400-1500	47	18	31	10
1500-1600	21	15	36	21
1600-1630	5	2	8	2
TOTALS	190	59	180	62

TRICS v3.8 Copyright(C) 1993-1997, JMP Consultants Ltd Wednesday 12/11/9 Survey Day Details for LC-01-K-03 / 01 Page :

Site Reference: LC-01-K-03 Survey Date: 11/10/96 Day Of Week: Frid:

Survey Type: Manual Count

Car Park Occupancy - Initial: 0 Final: 0
Data Proportions - (Total = 0):

Motor Cars: 84 Motor Cycles: 1 Public Service:
Light Goods: 11 Heavy Goods(1): 3 Heavy Goods(2): 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	-1	- 1	- 1	-1
01:00 to 02:00	-1	-1	-1	-1
02:00 to 03:00	-1	-1	-1	- 1
03:00 to 04:00	- 1	-1	-1	-1
04:00 to 05:00	- 1	-1	- 1	- 1
05:00 to 06:00	- 1	-1	-1	- 1
06:00 to 07:00	-1	- 1	-1	- 1
07:00 to 08:00	14	6	20	8
08:00 to 09:00	43	23	66	28
09:00 to 10:00	61	46	107	43
10:00 to 11:00	116	102	218	57
11:00 to 12:00	95	98	193	54
12:00 to 13:00	108	107	215	55
13:00 to 14:00	141	123	264	73
14:00 to 15:00	134	143	277	64
15:00 to 16:00	127	117	244	74
16:00 to 17:00	114	125	239	63
17:00 to 18:00	87	92	179	58
18:00 to 19:00	54	72	126	40
19:00 to 20:00	49	72	121	17
20:00 to 21:00	0	17	17	0
21:00 to 22:00	-1	-1	- 1.	-1
22:00 to 23:00	-1	-1	- 1	- 1
23:00 to 24:00	-1	- 1	-1	-1

⁵ pedestrians and 2 pedal cycles were also counted. This count includes the staff/goods entrance.

TRICS v3.8 Copyright(C) 1993-1997, JMP Consultants Ltd Wednesday 12/11/9 Survey Day Details for LC-01-K-03 / 02 Page :

Site Reference: LC-01-K-03 Survey Date: 12/10/96 Day Of Week: Satu

Survey Type: Manual Count

Car Park Occupancy - Initial: 0 Final: 0
Data Proportions - (Total = 0):

Motor Cars: 91 Motor Cycles: 1 Public Service: 0
Light Goods: 7 Heavy Goods(1): 1 Heavy Goods(2): 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	-1	-1	-1	-1
01:00 to 02:00	-1	-1	-1	- 1
02:00 to 03:00	- 1	-1	-1	- 1
03:00 to 04:00	-1	-1	-1	-1
04:00 to 05:00	-1	- <u>1</u>	-1	-1
05:00 to 06:00	- 1	-1	-1	-1
06:00 to 07:00	-1	- 1	-1	- 1
07:00 to 08:00	7	3	10	4
08:00 to 09:00	46	24	70	26
09:00 to 10:00	87	52	139	61
10:00 to 11:00	161	130	291	92
11:00 to 12:00	210	202	412	100
12:00 to 13:00	194	183	377	111
13:00 to 14:00	227	192	419	146
14:00 to 15:00	255	251	506	150
15:00 to 16:00	226	275	501	101
16:00 to 17:00	140	157	297	84
17:00 to 18:00	88	149	237	23
18:00 to 19:00	33	47	80	9
19:00 to 20:00	22	25	47	6
20:00 to 21:00	0	6	6	0
21:00 to 22:00	-1	- 1	-1	- 1
22:00 to 23:00	-1	-1	- 1	-1
23:00 to 24:00	-1	-1	- 1	-1

⁵ pedal cycles were also counted.

This count includes the staff/goods entrance.

TRICS v3. \$9 Copyright(C) 1993-1997, JMP Consultants Ltd Survey Day Details for LC-01-K-03 / 03

Survey Date: 13/10/96 Day Of Week: Sunda Site Reference: LC-01-K-03

Survey Type: Manual Count

Car Park Occupancy - Initial: 2 Final: 3
Data Proportions - (Total = 0):

Motor Cars: 92 Motor Cycles: 0 Public Service: Light Goods: 7 Heavy Goods(1): 1 Heavy Goods(2): 0 0

Time Range	Arrivals	Departures	Totals	Park.Acc.
00:00 to 01:00	-1	-1	-1	-1
01:00 to 02:00	_ 1	-1	-1	- 1
02:00 to 03:00	-1	-1	- 1	- 1
03:00 to 04:00	-1	-1	-1	-1
04:00 to 05:00	-1	-1	-1	-1
05:00 to 06:00	- 1	- 1	-1	-1
06:00 to 07:00	- 1	-1	- 1	- 1
07:00 to 08:00	-1	-1	-1	-1
08:00 to 09:00	-1	- 1.	-1	-1
09:00 to 10:00	14	7	21	9
10:00 to 11:00	163	98	261	74
11:00 to 12:00	233	197	430	110
12:00 to 13:00	211	198	409	123
13:00 to 14:00	230	223	453	130
14:00 to 15:00	274	287	561	117
15:00 to 16:00	224	240	464	101
16:00 to 17:00	54	127	181	28
17:00 to 18:00	3	28	31	3
18:00 to 19:00	-1	-1	- 1	- 1
19:00 to 20:00	-1	-1	-1	- 1
20:00 to 21:00	- 1	-1	-1	-1
21:00 to 22:00	-1	-1	-1	- 1
22:00 to 23:00	-1	-1	- 1	-1
23:00 to 24:00	-1	- 1	- 1	-1

⁹ pedestrians and 10 pedal cycles were also counted. This count includes the staff/goods entrance.