

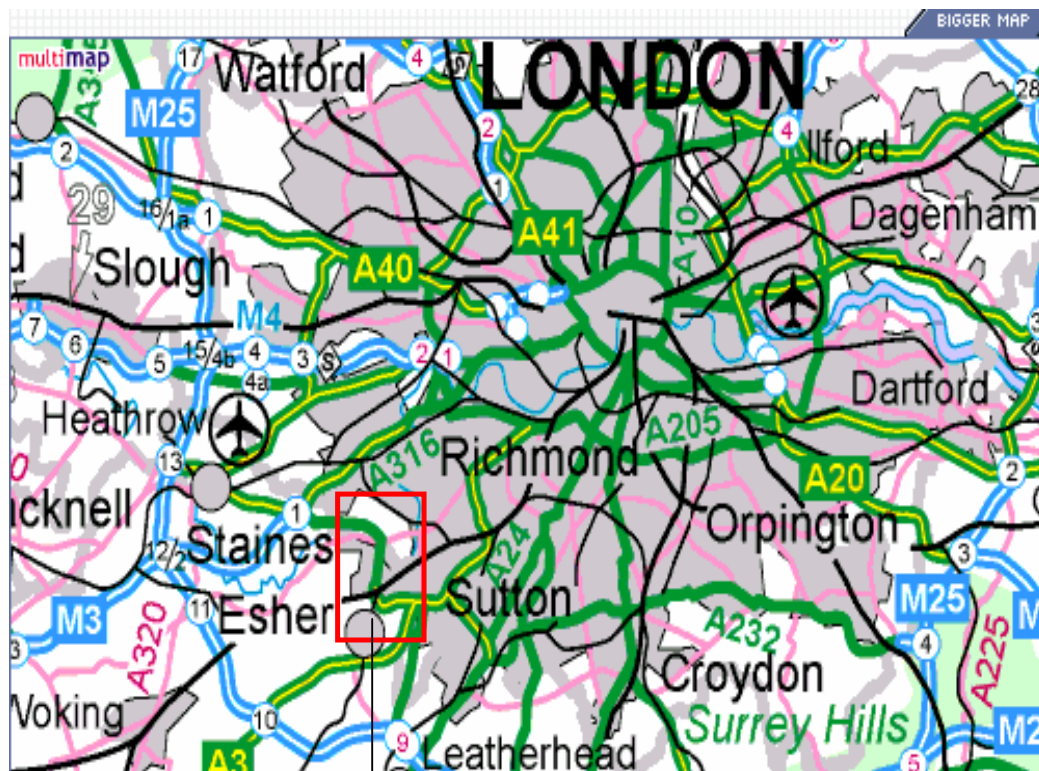
**Aim:**

To investigate the shopping centres of the Kingston Area and their patterns of use.

**Introduction**

Kingston Upon Thames is a large Royal borough situated in the South west of Greater London. There are many shopping centres situated within the borough of Kingston that I will be investigating. Kingston town centre is the main focal point in this area as it is clearly larger than any of the other outlying towns. We will be analysing the patterns of use for each of the various shopping centres and will then draw conclusions. The shopping centres in which we will be investigating are Kingston Town Centre, New Malden High Street, Kingston Road, Richmond Road, Ham, Surbiton, Surbiton Park Parade, Burlington Road, Chiltern Drive, Alexandra Drive and Villiers Avenue.

Here is the Kingston Area in relation to London:



Kingston Area

On the next page is a map of the Area of Kingston our investigation will be taking place in (Fig.1).

**Chosen Hypotheses:**

1)

***The Larger the shopping area:***

- **the larger the sphere of influence**
- **the greater the average travel time**
- **the more services present**

I have chosen this hypotheses because it is obvious that the larger shopping centres will have more shops and services, thus they attract more people, causing the sphere of influence to increase, which in turn causes the average travel time to the shopping centre to increase.

2)

***People will visit different shopping centres for different goods at different frequencies.***

I have chosen this hypothesis as it is fairly general and it will allow me to generate a decent amount of data to analyse. I feel this hypothesis is true as people will be attracted to different shopping centres. Also the type of goods they are buying will cause them to come to each shopping centre at different frequencies. The method of transport someone has used may help to determine what goods that person will purchase, or the goods that a person intends to purchase may determine which mode of transport they utilize.

**I will also investigate the different goods people buy compared with the mode of transport used.**

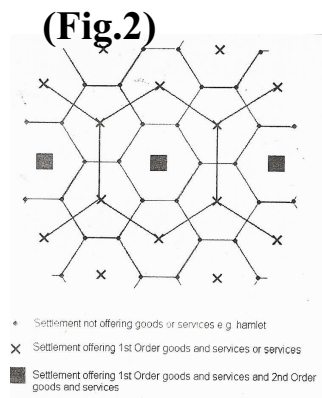
3)

***People will visit different shopping centres using different modes of transports at different frequencies.***

I feel this hypotheses is true as people will be attracted to different shopping centres, but will use different modes of transport to get there. Also the type of goods they are buying will cause them to come to each shopping centre using different modes of transport. **I will hope to find relationships between what was being bought among the shopping centres and with what method people travelled to each shopping centre. The method of transport someone has used may help to determine what goods that person will purchase, or the goods that a person intends to purchase may determine which mode of transport he visits the shopping centre on.**

Each one of my hypotheses is based upon the Central Place theory. The Central Place theory is directly linked to 'Spheres of Influence'. A smaller shopping centre will generally have a lower population and therefore a lower threshold population. The term threshold population is the minimum amount of people needed to ensure that demand is great enough for certain services to be offered. Larger shopping centres will have greater services and threshold populations. If a shopping centre has greater services and more shops offering high order goods, more people will be willing to travel greater distances to visit that centre. The larger a shopping centre is the larger its spheres of influence and the higher its order of goods.

**Fig.2** is a typical image illustrating the Central Place Theory.

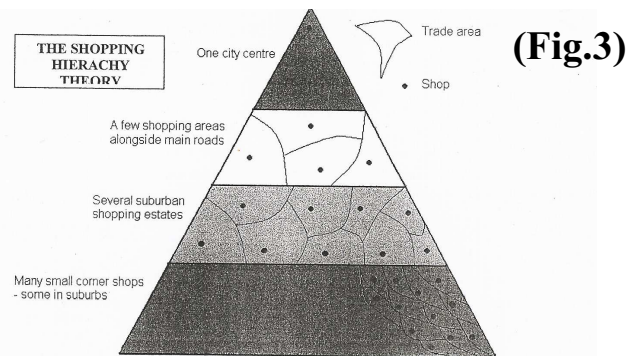


### Urban Shopping Hierarchies

Each one of my hypotheses relates the Urban Shopping Hierarchy theory as well. This theory shows the relationship between different shopping centres and puts them in an order based upon their size and the services they provide. We can see it holds similarities to the Central Place theory. The Urban shopping hierarchy theory on principle states that the greater the size of the centre and the higher the order of its goods the closer it will be to an areas Central Business district (CBD). An example of how this theory works would be to compare a large department store found in a CBD, for example John

Lewis, and a grocery found in a small settlement, for example Berrylands. The department store offers only high order goods that are more expensive and are bought less frequently. Examples of high order goods would be electrical goods, furniture and clothes. The grocery offers only low order goods such as food that are needed regularly thus the goods in the low order shop are bought much more frequently. This theory relates to the central place theory as it shows that low order shops are found closer together which small spheres of influence whereas larger shopping centres have much large spheres of influence thus they are more sparsely spread out.

**Fig. 3** is a typical image illustrating the Urban Shopping Hierarchies.



### Data collection/methods

I chose these hypotheses as a means of investigating the aim of my investigation. I also used my geographical knowledge of the Central place theory and Urban Shopping Hierarchies to base all my hypotheses on. The last two hypotheses however are general tests, where plenty of data can be generated to obtain a series of results that I can analyse and draw conclusions from.

I obtained each of my hypotheses through a series of class discussions with my fellow colleagues.

There is a varied array of data and information that is needed to complete this investigation. Below is a list of types of information that are needed together with an explanation of why each is needed:

### **Types of Shops in each shopping centre**

I need to find out how many different types of shops there are in each shopping centre so I can contrast the different attractions of each centre and see which one offers the most high order shopping and provides the most services. This data is linked to *all my hypotheses*.

### **Type of Goods Purchased**

I need to find out what people mostly shop for in each of the shopping centres to give me an idea of what people use each centre for in terms of high and low order goods together with services. This is linked to *my second hypotheses*.

### **Method of transport used**

This will give me a clear indication on how each person travels to their decided shopping centre. Also, the method of transport they use will limit them to the goods they can purchase. For example, someone who is travelling by foot is not likely to purchase a 3-piece suite, as this will be impossible to carry. However, it is indeed true that they might still be able to order goods for later delivery of home delivery. But, people who travel on foot will be more tempted to buy such items as clothes, shoes and food as it is easier for them to carry, and will allow them to continue shopping in ease. This is linked to *my third hypotheses*.

### **Frequency of visit to shopping centre**

This will show me clearly, how many times each person visits each shopping centre to give me an idea on how popular each centre is. I will also be able to contrast my results from this information with the previous information from the Methods of transport and type of goods purchased to allow me to produce analysis to see if there are any patterns of relationships evident between the 3 sets of data. This can be related to all my hypotheses but especially *the second and third hypotheses*.

### **Where do you come from?**

We put where they lived as the last question because if we put a more intimate question at the beginning then they might have been put off for asking the other questions. This question needs to be asked so a desire line map of each of the surveyed shoppers locations could be created. This desire line map will be used mostly for Hypotheses 1 but analysis can be drawn for hypotheses 2 and 3.

### **CLASSIFICATION OF SHOPS AND SERVICES**

It was also necessary to obtain the number of different classifications of shops and services present in the specific shopping centre. We needed this so a list of different shops present in each of the shopping centres could be created to help us on investigating patterns of use in each shopping centre.

The method that we used to collect the data was simple. Several teams of geographers were sent out to different shopping centres at the same time of day. This was necessary in order to make the results fair. Each team was given a specific location in each shopping centre to obtain data and information regarding to the two means of data collection:

1) A Shopping survey Questionnaire:

This was is compilation of all the questions that were needed for data collection.

2) A classification list of shops and services.

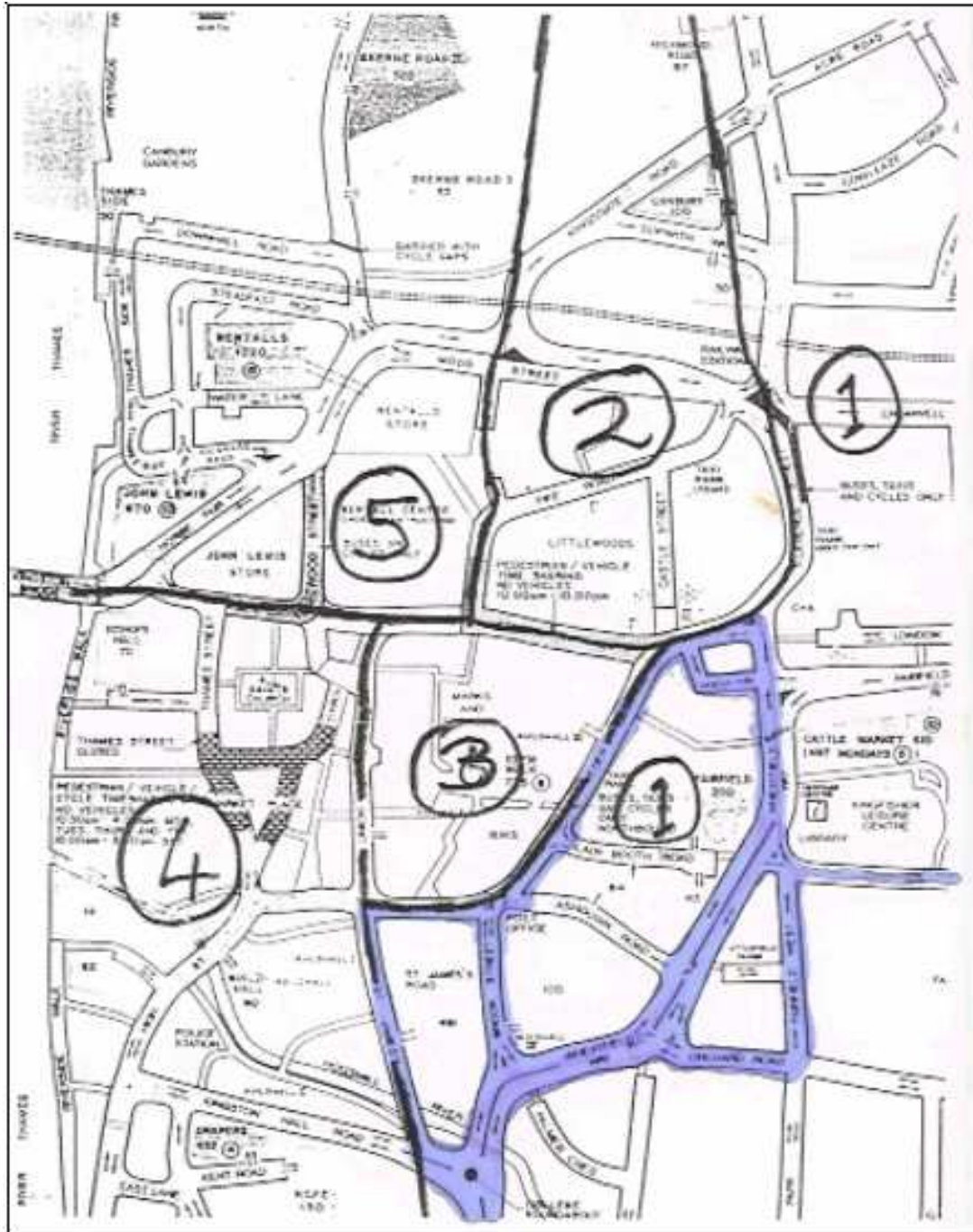
This is a list of shops and services in different categories. The categories are:

- Convenience
- Shopper's goods shops
- Specialist
- Department and Variety
- Services
- Car sales and services

Each group comprising of 2 or 3 persons was given a questionnaire and a list of shops and services classification. First of all the shops and services in the designated data collection area had to be classified, and then when every shop had been classified, the team were able to survey shoppers on the street using the Questionnaire.

Below is an approximated map of the Kingston Shopping Area (**Fig.4**). The roads highlighted in blue were the areas that my group surveyed.

**(Fig.4).**



Below is a copy of my groups shopping survey questionnaire (Fig. 5) and shops and services classification list (Fig. 6). Each group were issued both of these sheets for data collection:

**(Fig.5). The Shopping Survey Questionnaire**



Also when completing the shops classifying survey certain shops may be hard to categorize and may fit into more than one group.

All these questions that we have asked are general closed-answer questions with a limited number of responses that we generated through class discussion as a means to base our Questionnaire on. We chose to include fixed response questions on the clear majority apart from the question entitled *where do you come from?*

Below are our results obtained from our Data collection. **Fig.7** is completely raw data and is taken from all the data collection questionnaires.

**(Fig. 7)**

SHOPPING CENTRE	Type of shop							Total No.	Type of Goods Purchased				
	1	2	3	4	5	6	Empty		Foods	CLOTHES/ SHOES	ELECTRICAL/ FURNITURE	Services	Other
Alexandra Drive	4	0	4	0	8	1	1	18	13	0	0	7	4-Bks, WCake, China
Burlington Road, NM	8	2	4	2	13	2	4	35	9	0	6	2	11
Chiltern Drive, Berrylands	1	1	6	0	9	0	6	23	2	0	0	0	1-Low Order Toy
Ham	4	2	6	0	5	14	0	31	5	0	2	8	5
Kingston Rd	6	0	5	0	6	2	0	19	16	0	0	4	0
KingstonTown Centre	17	141	157	15	180	4	25	539	74	78	34	34	74



In order to analyse this data we have collected thoroughly it is necessary that we convert all our data into percentages. This will help create graphs for certain conclusion to be drawn from and will allow us to use the Spearman Rank Correlation coefficient. If the data is kept raw relationships and patterns may be harder to find. Shown below, Fig. 8 shows our results from the Data collection converted into percentages:

(Fig. 8)

SHOPPING CENTRE	Type of shop							Total No. of Shops	Type of Goods Purchased				
	1	2	3	4	5	6	Empty		Foods	CLOTHES/ SHOES	ELECTRICAL/ FURNITURE	Services	Other
Alexandra Drive	22.22	0	22.22	0	44.44	5.56	5.56	100	54.17	0	0	29.17	16.67
Burlington Road, NM	22.86	5.71	11.43	5.71	37.14	5.71	11.5	100.1	32.14	0	21.43	7.14	39.29
Chiltern Drive, Berrylands	4.35	4.35	26.09	0	39.13	0	26.1	100.02	66.67	0	0	0	33.33
Ham	12.9	6.45	19.36	0	16.1	45.16	0	99.97	25	0	10	40	25
Kingston Rd	31.57	0	26.32	0	31.6	10.52	0	100.01	80	0	0	20	0
KingstonTown Centre	3.15	26.16	29.13	2.78	33.4	0.74	4.64	100	25.17	26.53	11.56	11.56	25.17
New Malden High St	6.61	9.09	15.7	4.13	59.5	0.83	4.13	99.99	51.52	9.09	2.65	20.45	16.29
Richmond Road	40.74	11.11	18.52	0	25.93	3.7	0	100	42.86	14.29	7.14	35.71	0
Surbiton	5.31	7.73	14	2.9	55.55	5.8	8.7	99.99	53.95	11.84	1.31	21.05	11.84
Surbiton Park Parade	12.82	7.69	23.08	0	41.03	10.27	5.13	100.02	32	8	28	28	4
Villiers Avenue	18.75	0	12.5	0	12.5	0	56.3	100	65.38	0	26.92	7.69	0

Frequency of visit				
Day/Date/Time Visited	LESS THAN ONCE A WEEK	ONCE A WEEK	MORE THAN ONCE A WEEK	Total Interviewed
Wed 3/7 pm	25	12.5	62.5	21
Mon 1/7 am	48.39	25.8	25.8	31
Wed 3/7 pm	0	33.33	66.67	55
Wed 3/7 pm	41.18	11.76	47.06	17
Mon 1/7 am	30	5	65	20
Wed 3/7 pm	33.78	4.44	61.78	225
Mon 1/7 am	19.9	16.74	63.35	221
Wed 3/7 pm	21.43	28.57	50	14
Wed 3/7 pm	30	46.67	23.33	60
Wed 3/7 pm	64	28	8	25
Wed 3/7 pm	43.48	56.52	0	23

Method Of Transport							
SHOPPING CENTRE	WALK	CAR	BUS	RAIL	CYCLE	OTHER	Average Travel Time
Alexandra Drive	37.5	58.3	0	0	0	4.17	6m 20sec
Burlington Road, NM	19.4	67.7	6.45	0	3.23	3.23	13m 50 secs
Chiltern Drive, Berrylands	50	25	25	0	0	0	4min
Ham	35.3	29.4	17.7	5.88	5.88	5.88	21 mins
Kingston Rd	65	30	0	0	5	0	5m 15 secs
KingstonTown Centre	18.7	33.3	35.2	9.89	2.56	0.37	19m . 1 secs
New Malden High St	43.5	27	22.6	3.48	3.48	0	13m 35 secs
Richmond Road	50	42.9	0	0	7.14	0	15 mins
Surbiton	26.9	41.8	20.9	8.96	1.49	0	13m 45secs
Surbiton Park Parade	64	28	8	0	0	0	13m 45 secs
Villiers Avenue	40	52	0	0	4	4	12m 15secs

