Comparative analysis of a CBD and an out-of-town retail centre

Starting Points

Many urban areas have out-of-town retail centres, and many businesses claim that trade has been affected by these developments. Can you identify and suggest reasons for the differences between the high street and the outlying commercial centre? Has your local retail pattern changed in the same way as others described in textbooks?

It is possible to assess the impact of out-of-town centres by investigating some or all of the hypotheses below. Consider the retailing pattern of a local area and investigate any issues that are particular to your centre.

1. There are differences in the land use pattern between CBD and the outlying retail or commercial centre.
2. The CBD and out-of-town retail centre show distinct differences in type and volume of traffic flow, pedestrian density and shop sizes.
3. Clustering of certain shops occurs in both CBD and outer retail centre.
4. The spheres of influence of CBD and outer retail centre vary significantly.
5. Out-of-town retail centres appear to be taking trade from the traditional high-street shops.

Geographical links to your syllabus

- Concept of bid-rent.
- Town centres are under pressure from competition for space and consequently high land values.
- Nearest neighbour analysis.
- Reilly’s law of retail gravitation.
- Spheres of influence are related to the status of a shopping centre.
- Some higher order shops tend to cluster while others do not.

Primary Data Collection

1. Draw land use maps of both shopping centres. Select 30 shops – a systematic sample will ensure that you cover the whole centre equally. Face shop frontages (to calculate rateable value per metre frontage).
2. Conduct traffic counts (amount and type) and pedestrian flows. Consider and be able to justify the number of counts, the time of day, which day(s) and locations.
3. Select 50 car tax discs in car parks to give an indication of place of origin for sphere of influence. Use random number tables or a systematic sampling method.

4. At the out-of-town centre people don’t walk far from their cars so think about how you can record this. You could record multiple visits where people visit shops near or next to each other, particularly if they are comparison shopping.
5. Conduct a shoppers’ questionnaire (see figure 39, page 54). You must pilot your questionnaire and assess whether or not it will give you the data you need. Beware – you are looking for explanations as well as patterns. This is more than you considered for GCSE.

Secondary Data Collection

1. Collect rateable values from the local council or Inland Revenue to give an indication of land value per metre frontage, for both the out-of-town centre and the town centre.
2. Find out which shops in the town centre have changed since the out-of-town centre was opened. What has replaced each one? How many shops are now vacant? How long have they been thus? Are there figures for before as well as after the new development?
3. Collect details of the delivery areas from shops in both areas.
Ideas for recording and analysing data

1. Draw land use maps of each centre. Annotate to emphasise similarities and differences.
2. Draw a histogram to show shop closures or changes – before and after the out-of-town centre was established.
3. Annotate the map of each centre to show sphere of influence. Add appropriate comment or detail about transport network, main car parking, park-and-ride facilities, which support conclusions about the shape and size of sphere of influence.
4. Use nearest neighbour analysis to identify shop clustering. If you cannot calculate area accurately, find the average distance between nearest neighbours for each category of shop. This can then be used as a comparison between shop types.
5. Chi Squared (see figure 38) can be used to compare differences in types of shops in each centre if you group your data (see figure 40).
6. Draw flow line maps for traffic and pedestrian data. If you undertook a stratified sample of pedestrians, are there differences in shopping habits with age of shopper?
7. Use bar and pie charts to graph questionnaire responses. Make sure your graphs are arranged several on one page so that you can compare the results. Graphs need to be annotated, ie summarise in a label what each one shows, with a note about any unusual data.

Things to look out for

Pedestrian and traffic counts are both very tricky so plan very carefully. Town centres are frequently pedestrianised. Counting pedestrians in a traffic-free zone will be difficult.

It is critical that you consider how to select your respondents for a questionnaire. You will not be selecting randomly, ie using random number tables. More likely you will be making a systematic sample by choosing, for instance, every 10th person. You may decide to identify differences in shopping habits between various age groups so a stratified sample is appropriate. For advice about questionnaires (see figure 1, page 3).

Size of sample is also important – it is unlikely that it will be large enough to be conclusive, but collect at least 50 responses from each centre.

Think about which day. Weekdays and weekends are very different as are bank holidays.

Interpretation and Conclusions

- Summarise the types of shop in each centre.
- Identify any differences in shopping habits, land values and pedestrian flows. Use information from the questionnaire to provide or suggest explanations. Is the age of the shopper significant?
- Do shops in both centres cluster? Why? Is the reasoning the same for both shopping centres?
- Are the spheres of influence different? How? What factors influence the shape of each sphere of influence?
- How and why do traffic flows differ between each centre? Are there differences between weekdays and weekends? Why?
- Bearing in mind your conclusions, can you evaluate the impact of out-of-town retail centres on traditional town centres?
- What further investigations could be undertaken to follow up your enquiry so far?

Figure 39 Potential questions to shoppers

Where do they live?
How did they travel?
How often do they shop here, and what type of goods purchased?
Do they visit other shops at the same time?
Do they visit the other shopping centre in the study, if so how often, what do they buy, and how do they travel?
What other shopping centres do they visit?
Can they comment on attractions of shopping in a particular centre – convenience, transport routes, parking, choice, atmosphere, ease of travel etc.

Figure 40 Table of shopping centre differences

<table>
<thead>
<tr>
<th>TYPE OF SHOP</th>
<th>NUMBER IN TOWN CENTRE</th>
<th>NUMBER IN OUT-OF-TOWN DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department store</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Clothes</td>
<td>41</td>
<td>1</td>
</tr>
<tr>
<td>Electrical</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>DIY</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Specialist comparison goods</td>
<td>56</td>
<td>1</td>
</tr>
<tr>
<td>Leisure / Food</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>1</td>
</tr>
</tbody>
</table>

Resources

Chapter 6 of Human Systems and the Environment by R Prosser, Nelson, 1992
Developers who establish out-of-town retail centres have maps and materials and some have websites.