URBAN STUDY - LOUTH

A LEVEL GEOGRAPHY FIELDWORK

CENTRAL BUSINESS DISTRICT

Most towns and cities have a 'retail core' or Central Business District (C.B.D.). Retail and other 'central' uses can be used to delineate the extent of the CBD, to map its land use and to look for patterns within it. Mapping the land use may show up the transitional zone which is said the surround the CBD. This TRANSITIONAL ZONE is seen as an area of MIXED COMMERCIAL and non commercial land use. Common to this zone are:- off street car parks, warehousing, light manufacturing, some professional services, and multi-family residences. It is a zone of great and often rapid change.

FIELDWORK

① LAND USE ON THE GROUND FLOOR. Use the tables which classify buildings by use and a map of the central area of Louth.

② UPPER FLOOR LAND USE. Use a separate map.

③ BUILDING HEIGHT. Indicate the number of storeys. For a small town such as Louth there are usually few differences

NOTE: A full study of a CBD would obviously include a look at the rateable value of the properties in the centre.

FOLLOW-UP WORK

a. Produce a land use map of (i) ground floor use
(ii) upper floor use
(iii) building height (if applicable.

b) Produce separate maps of specific functions eg Solicitors, shoe shops: see the list below?
What factors might affect the location of specific land uses.

c) Cluster Analysis: Do like land users locate together? Are some land users more closely spaced than others? Which land users would benefit from being near to like land users.

Procedure for Cluster Analysis:-

(i) Establish X and Y axes (edge of map?)
(ii) Measure the distance of each lot of a specific land use to the X and Y axis.
(iii) Calculate a mean value for X and for Y to give a centre of gravity for that particular land use.
(iv) Measure the distance of each lot of that particular land use from the centre of gravity and calculate a mean distance to the centre of gravity.
(v) Draw a circle with a radius equal to the mean distance to the Centre of gravity around the centre of gravity of that land use to show the Cluster boundary.

The use of Cluster Analysis.

i) Which land users have the smallest mean distance to the Centre of gravity and therefore exhibit greater clustering?
(ii) Calculate the standard deviation of the mean distances.
(iii) Draw a dispersion diagram of the mean distances to show the median, upper quartile, lower quartile and inter quartile range.
(ii) and (iii) show how widely spaced the land use is.

Suggested land uses.

Jewellery
Solicitors
estate agents
building societies
banks
Insurance offices
Clothes shops
Shoe shops
Food shops
Cafes.

FIELDWORK

① PEDESTRIAN COUNT

At selected sites conduct a 10 minute count.

② TRAFFIC COUNT

At the same selected sites conduct a 10 minute count of traffic.

FOLLOW-UP WORK

a) On a map of the streets of the C.B.D. use statistical mapping techniques to show the densities of pedestrians

b) Produce similar maps of traffic in the C.B.D.

Suggested techniques:- Flow line maps.
Proportional circles/semi circles at the sites
Isoline maps.

FIELDWORK.

① Conduct the questionnaire. Interview 30 people selected at Random

This sample asks questions about how the C.B.D is used, but also begins to investigate the question of the size of the sphere of influence of Louth. How far away from Louth does its influence extend. From what sort of distances do people travel into Louth to use its services?

SPHERE OF INFLUENCE

The size of the sphere of influence of a town such as Louth will differ with the critera being used to delimit it. The Questionnaire will determine the size of the sphere of influence of the town as a shopping centre and market town.

FIELDWORK

① Use your initiative to discover the size of the sphere of influence of Louth. Think about the area served by estate agents, bus services, diliveries by shops etc.

FOLLOW-UP WORK.

a). Desire line maps can be drawn on a map of Louth and the surrounding area to illustrate the sphere of influence, using the data from the questionnaire.

b). Calculate the average distance travelled and draw a circle to show the urban field.

c) Is there any relationship between the distance travelled and the frequency of visits to Louth.

d) Does the use of shops and services illustrate any kind of hierarchy?