

# Northampton coursework – delimiting the central business district

[Business](#)



My study is located in Northampton, it is a large town with total population of 197, 000 (according to the 2001 census), third largest in England at 21st largest settlement in England. It is located in the East midlands region of England, roughly 67 miles North West of London and lies on the river Nene which forms the border between Cambridgeshire and Norfolk and also is the ninth longest river in England and the twelfth longest in the United Kingdom.

Northampton has Junctions 15, 15a and a6 of M1 London to North Yorkshire.

The A45 and A43 which have primary destinations to Coventry, Rugby, Wellingborough, Kettering and Corby. Northampton has railway services to London and Birmingham provided by London Midland and Virgin Trains.

Sywell aerodrome is the nearest airfield which only has a grass runway but for international links, East midlands and Luton airport are quickly accessible via M1/M6 and also by train. Bus services are operated by Stagecoach, First Northampton and MK metro form Greyfriars Bus station in the town.

## History

Northampton is the fastest growing town in England and has applied for city status. Traditionally was a shoe making and leather making town which decreased in 1960 but although some remain. Northampton in the past has been a secondary industry area but now is mainly a tertiary industry containing lots of services such as shopping malls cinemas and restraunts scattered around the town. Northampton has its own university named Northampton University.

The town centre also contains many leisure and entertainment spots such as the Derngate theatre which has a capacity of 1200-1400 people at once. The <https://assignbuster.com/northampton-coursework-delimiting-the-central-business-district/>

Grosvenor centre and peacock place offer a large indoor shopping facilities however the market square offers an exceptional outdoor shopping facility. Local pubs also provide a great night out while on the other hand the sporting clubs offer a great chance to get involved.

## Theory

There are two types of land use models, Hoyt model and the Burgess model.

The Central Business District of a town or a city is usually located in the centre of the city or town. The CBD can be divided into two distinct concentric areas called the core and the Frame. The frame of the CBD has land uses such as office areas, some derelict land, limited light manufacturing, small shop/low grade, specialist services e. g. medical, etc. The core of the CBD is different to the frame because it contains low residential population, some vertical zoning with use of first/second floor, high density of pedestrians, concentration of banks/ business, etc. The PLVI is in the centre of the CBD and means Peak Land Value Intersection, meaning the place with the highest land value. In this investigation we are aiming to delimit the Central Business District of Northampton.

## Hypotheses

1. Over 70%of land use in the Grosvenor centre will be for high order comparison goods.
2. The highest pedestrian flows will be recorded on Abington Street.

3. The lowest Environmental quality scores will be recorded in the Greyfriars Area.
4. Environmental Quality will be highest in the Grosvenor centre.
5. The age of the buildings will decrease as you travel further from the CBD.
6. Highest traffic will be in the frame as there are car parks and major ring roads in the frame.

#### Methodology (Data Collection techniques)

We will collect data in Northampton on Friday the June 19, 2009. We will leave Weavers school at 9 am sharp and return back to school at 3 pm approximately. We will spend roughly 45 minutes in each of our study areas. We have split the centre of Northampton into 6 study areas and they are Greyfriars, Upper Abingdon Street, St Giles Street, Market Square, The Grosvenor Centre and Gold Street/Bridge Street. In each area we will organise ourselves into of 3-5 people so that we can collect data on land use, height of the buildings which will help us delimit the CBD of Northampton. These types of data are primary data but we may also look for sources of secondary data such as leaflets and maps.

#### The selection of Northampton as our study area

We chose Northampton as our study area for a number of reasons such as;

- \* Northampton is convenient as it is only 8 miles from Wellingborough.

- \* Northampton is familiar to us and we can revisit it if necessary to collect further information.
- \* We believe Northampton is a typical of a large English town.
- \* Northampton town is a manageable size to survey in a school day.
- \* We have a particular interest in Northampton as it is our county town.
- \* Northampton would be an easy place to study as we have all been there before a number of times.

#### Hypotheses explained

1. Over 70% of the land use in the Grosvenor centre will be for high order comparison as only companies with high profits can afford the high land costs.
2. The highest pedestrian flows will be recorded on Abingdon Street as there are more services and shops for people to shop.
3. The lowest environmental quality scores will be recorded in the Greyfriars area as there is a bus station which pollutes it with air pollution.
4. Environmental Quality will be highest in the Grosvenor centre as it the major shopping area in Northampton.
5. The age of the buildings will decrease as you travel further from the CBD because it costs too much to rebuild as the land prices are high and so are the health and safety risks.

6. Highest traffic will be in the frame as there are car parks and major ring roads in the frame.

#### Conducting a Land Use survey

The purpose of conducting a land use survey is to discover the pattern of land use in the study area and attempt to map the edge of the frame and core of the CBD as this is the aim of the whole project. The procedure to conduct a land use is as follows: during the 45mins which are allowed in each of the 6 areas we code each building according to its land use with letters. The land use code varies e. g. PB for public buildings, LO for low order shops, etc. The type of data collected is qualitative as it describes type of use of each building. The advantage of this sort of data is that actually describes the type of building and is quick and easy however it doesn't tell an exact number of buildings in each category. The sampling technique is systematic as this ensures that the whole area is covered without gaps.

#### Conducting a Traffic survey

The Purpose of conducting of a traffic survey is to discover where the highest traffic counts are as theory suggests that they will be in the frame as there are lots of parking spaces. The procedure is as follows: Stand at a safe place by the side of the road and record the number of vehicles of different categories that pass you in each five minute period. The type of data is quantitative. The advantage of this sort of data is that it gives an exact number however it doesn't tell what type of vehicle it is, this would matter as if it is a local bus or a lorry are for business purposes while a car is for

personal purposes. The sampling technique is systematic point sampling as we don't miss as vehicles which pass us.

### Conducting a Pedestrian count

The purpose of conducting a pedestrian count is to discover where the highest pedestrian counts are as theory suggests they will be in the core of the CBD as there are lots of shops and services. The procedure is as follows: stand in a place where you can clearly see in both directions on the street and count the number of people that pass you in a five minute period using a tally chart. The type of data is collected is quantitative. The advantage of this sort of data is that it tells the exact number of people walking by however it doesn't tell what purpose are the people coming in the town for as this would show what is the use made by people of a particular area. The sampling technique is systematic point sampling so we don't miss any people which pass us.

### Conducting an Environmental quality survey

The purpose of conducting an environmental quality survey is to assess the quality of the environment as in the theory the scores should be higher towards the centre of the CBD as there normally are regular cleaning schedules. The procedure is as follows: give each particular criteria a point on a 5 point rating scale which extends from +2 to -2, the criteria varies from visual impression to pollution etc. The type of data collected is quantitative. The advantage of this sort of data is that it tells exactly how polluted the area is however it doesn't tell what part of the CBD is polluted

the most as there are no words and this matters because there is no point getting numbers but don't know where they come from.

### Data analysis and interpretation

#### Land use- Area 1

The largest category of land use in area 1 is derelict with 21% of the total. This may be because of the current recession which affects the company's profits, closing them down. Other types of land use that are well represented include public buildings. This may be because there is good transport near it, the Greyfriars bus station in the area so the public can access the buildings. Therefore it is likely to be in the frame as it has good transport services.

#### Land use- Area 2

The largest category of land use in area 2 is other services with 20% of the total. This may be because it has high pedestrian count, so more people can access it. Other types of land use that are well represented in area 2 include public buildings, offices and food shops. This may be because it has high pedestrian count, as it has lots of varieties of shops and services. Therefore it could be in the core as there are lots of services.

#### Land use- Area 3

The largest category of land use in area 3 is offices with 15% of the total. This may be because it is a easily accessible area so people working in the office can access it. Other types of land use that are well represented in area



3 include financial services. This may be the fact it is mainly offices. Therefore it could be in the core as it has lots of financial services.

#### Land use- Area 4

The largest category of the land use in the area 4 is public buildings. This may be because it has lots of roads and a market square that people access normally, so a good place of public buildings that can be accessed by the local public. Other types of land use that are well represented in the area 4 include other services and high order comparison. This may be because, as it is next to the Grosvenor centre which has very high pedestrian counts, it is a location. Therefore this could be in the core as there are lots of services in the area.

#### Land use- Area 5

The largest category of the land use in the area 5 is High Order shops with 40% of the total. This may be because as this area has high pedestrian flow so more people are likely to enter the shop and buy goods. Other types of land use that are well represented in area 5 include Low order shops. This may be because as there is high pedestrian flow. Therefore this could be the PLVI as it is a prime shopping area with the most high order comparison shops.

#### Land use- Area 6

The largest category of land use in area 1 is Other Services with 27% of the total. This may be because it is in a high pedestrian area and near major

roads. Other types of land use that are well represented in area 6 include low order. This may be because this area is near Market square and Grosvenor centre. Therefore this could be in the core as it has quite a few services.

#### Comparing Traffic flow in different areas

The average value of number of vehicles that pass a fixed point in a minute is 41. The range of data was 92. The highest value recorded was 118 vehicles per 2 minutes at the top of Abington Street (area 2) near the A5123, this is 92 more than the lowest value and 77 more than the average. The lowest value was 26 at Drapery (area 4), this is 1 higher than bridge street (area 6) and 16 less than sheep street (area 1). As Grosvenor centre is a shopping centre, traffic flow is not applicable and the average and range were calculated excluding Grosvenor centre. Generally, as the distance from the Grosvenor centre increases so does the traffic flow. We expected to find the highest traffic flow in area 1 as there is a major bus station Greyfriars but instead we found that area 2 has the highest traffic flow.

#### Comparing the Environmental quality of different areas

The average environmental quality score was -2 while the range was 25. The highest score was 11 for the Grosvenor centre (area 5), which is 25 points higher than the lowest -14 at bridge street (area 6) and 13 higher than the average. Drapery (area 4) had a score of zero. Castilian Street (area 3) was the second lowest with -9, this 11 less than Abington Street and 7 more than Sheep Street (area 1). Generally, the further away from the Grosvenor centre lower the scores are. Grosvenor also had the best building condition and

appearance but no plants or trees, while Bridge Street had the lowest building condition and appearance score also very polluted. We were expecting to find the Grosvenor centre the cleanest as it is the centre of the town and indeed we found Grosvenor centre to be the cleanest.

#### Comparing the Age of buildings of different areas

Most buildings were Post War (1946-1969). There were also a few Victorian (1830-1900) and Pre Victorian buildings (before 1830) dotted round the town. There were also some Pre World War 2 (1901-1945). However, the Grosvenor centre, the Multi-story car park, Job centre and few others are modern buildings (1970 -2009). As, so far the Grosvenor centre has been suggested by our data that it is the PLVI, normally the centre of the CBD is quite old and as you go further away the building age decreases. This is an anomaly that we have discovered because the centre of the CBD has the youngest buildings. We were expecting to find the PLVI/Core to be the oldest.

#### Comparing the Pedestrian count of different areas

The highest recorded count was 209 on Abington street (area 2) while the lowest on Hazelwood road (area 3) at just 3. Generally Area 2 has the highest count and so does the Grosvenor centre. We expected to find the highest count on Abington Street and indeed we did find that. The range of the data was 206 this suggests that the counts vary a lot from place to place.

#### Looking back at our hypothesis

Our first hypothesis was that " Over 70% of the land use in the Grosvenor centre will be for high order shops". However, only 39% of the shops were high order which doesn't support the hypothesis but as Grosvenor has the highest percentage of high order comparison shops, it is the Peak Land Value Intersection at the centre of the central business district.

Our second hypothesis was that " The highest pedestrian flows will be recorded on Abington Street". Our data supports the hypothesis as the highest, 209 people, were recorded. This suggests that Abington Street is in the core of the CBD, also as it is a pedestrianised street it should definitely be in core.

Our third hypothesis was that " The lowest environmental quality scores will be recorded in the Greyfriars area". Our data challenges the hypothesis as the lowest score was recorded on Bridge Street. This suggests that Bridge Street is not in the core as it is not clean, generally the core of the CBD normally clean.

Our fourth hypothesis was that " Environmental Quality will be highest in the Grosvenor centre". Our data supports the hypothesis as Grosvenor centre scored 11 points, 25 more than the lowest. This suggests that Grosvenor centre is in the Core as it is the cleanest.

Our fifth hypothesis was that " The age of the buildings will decrease as you travel further from the CBD". Our data challenges this hypothesis, as the apparent PLVI is the Grosvenor centre, Grosvenor centre is a modern

building (1970- 2009) while the building around it are mainly Post war (1946-1969). This suggests that Grosvenor centre is in the not in the CBD.

Our sixth hypothesis was that " Highest traffic will be in the frame". Our data shows that A5123 near Abington street has the highest traffic flow. This suggests that A5123 is in the frame as it has high traffic flow because frame has major ring roads and transport services.

Reaching conclusions about the location of the core and the frame of the CBD

Abington Street is definitely in the core because it has the highest pedestrian count also there are lots of high order shops. Grosvenor centre is also definitely in the core, in fact it is the Peak Land Value Intersection because it has the highest percentage of high order shops, and also it is the cleanest of all. A5123 road is definitely in the frame because it has the highest traffic flow. While, Greyfriars is also in the frame because it a major bus station, frame normally has lots transport services. Bridge street is also in the frame because has the poorest environmental quality. The boundary between the core and the frame is between Market Square and the Grosvenor centre, because market square is low order while Grosvenor centre is high order.

The other boundary appears to be where Fish street meets St Giles street because there are much lower pedestrian counts and number of high order shops on St Giles street than on Fish street and Abington Street.

Furthermore, The Junction near Abington street, A5123 is another boundary between the core and the frame because A5123 has the highest traffic flow

while Abington street pedestrianised. There also another boundary, which is between the multistory car park (behind Grosvenor center) and the Grosvenor centre, as frame usually contains car parks while the Grosvenor is high order so it must be in the core.

#### Evaluation of the investigation

The investigation has been a success as we have rightfully discovered the extent of the core and the frame in the CBD also boundaries of the core and the frame. The collection of all the data and reaching the conclusion worked well as a part of the investigation because useful and understandable conclusions were reached also the data was effectively collected. The time period was quite short but long enough to get basic data, however for more accurate and precise data more places within the town should have been surveyed and for that longer time period would be needed.

So at least 2 day trip should be organised the next time. Also we found the CBD being an anomaly as the youngest buildings were in the core, to improve this an another study place should be selected such as Milton Keynes. The results could also be compared with a similar case study in an LEDC as this would provide a greater comparison.

The data might not be reliable as this data was collected during one of the worst recessions, this increases the number of derelict buildings and the total number of shops, offices, etc in the area. For example, a particular area in Northampton before the recession area could be full of high order shops but now because of recession it may be all derelict, so this affects the

reliability. This is supported as we did find derelict shops even in the Grosvenor centre. The validity is also affected, the data is still valid because there wasn't an areas that was fully or mostly derelict, the impact of the recession was spread out not targeted in a particular area. We can trust our findings as these are all factual figures collected by ourselves.