

Evaluation

In general, the investigation has been a success. The most of the data collected agrees with the hypotheses and the CBD has been delimited without great difficulty. The occasionally anomalies were easy to recognize and most could be explained. However, as with any projects, there are limitations which prevented the results from being perfect. There are four main factors which restricted the degree of accuracy of my project:

1. Limitation of time and resources
2. Pilot Errors
3. Survey Error
4. Temporal factors

Limitation of time and resources

This is perhaps the most fundamental problem faced with all projects. The amount of time and resources often prevents accuracy improvements upon the results. In this particular project, this has become even more significant as a proper investigation on Stamford's CBD would require a lot more resources and time. Firstly, the data collection is done by a class of around 20 students over one morning. Although Stamford is a relatively small settlement, the data collected by such a small group of people over a short period of time is barely representative enough in delimiting the CBD of the whole of Stamford, despite the use of secondary data. The street furniture collection could not be completed in time for the transects, nor could parking restrictions. Also, due to the people and time available, only 4 hypotheses could be investigated into within the given time. More hypotheses would significantly strengthen the accuracy of the delimitation of the CBD. For example, we could investigate into building heights and show that buildings near the centre of CBD tend to be taller than those outside the CBD. Secondly, the accuracy could be greatly improved if the data collection could be repeated over a couple of days. However, travelling to Stamford every morning to repeat the data collection would be inefficient in both time and cost, and therefore this could not be done. Thirdly, the data collection was done at a different time for different points, due to the number of students available. This is especially significant for pedestrian count, as the number of people vary significantly during the different times of the day. This error is diminished by speeding up the data collection and shortening the time difference between the data collection at various points.

Pilot Errors

The students were split into different groups for the data collection. For a group of students this size, there would undoubtedly be some mistakes among certain groups, such as miscounting the number pedestrians, or missing out CCTV camera because it was hard to spot. However, these individual mistakes are unlikely to be significant, as

this project is more concerned with the general picture. The major source of pilot errors came from the scoring of shopping quality and street appearance. The scoring system is highly subjective and the scoring guidelines were not specific enough. For example, descriptions were only given to the top and bottom score from 1-6. This may result in a high percentage error, as some students might consider a place to be 3, while others might consider it to be 4. This is a significant 33% error. This error could be slightly reduced by using better guidelines with clear descriptions for each score, although subjective data collections such as the scores for street appearance and shopping quality would still have a greater error than non-subjective data such as pedestrian counts. Therefore, the best way is to avoid subjective data collection whenever possible.

Survey Errors

The points of data collection were carefully chosen by the teachers in a stratified manner with a roughly equal spacing, as explained in the methodology. This is a good way to show a general trend of the data collected over the whole of Stamford. However, with the given time and resources, the points of data collection could be significantly improved. With more time and resources, more data points could be added randomly over Stamford. This would increase the accuracy of the data significantly. For example, for the pedestrian count, point 2 on transect 5 has a very high count for its distance away from the centre of Stamford. Although there is a school nearby, it is difficult to be absolutely sure that the increase in pedestrian count was due to the school. If more random points around the school were made to be data collection points, then we could be more certain whether or not that the increase in pedestrians was due to the school.

Temporal factors

The temporal factors made the least contribution to the error in this project. The weather was fine on the day of data collection, thus preventing any anomalies as a result of bad weather conditions. The day chosen, 15th September, was a normal weekday without any significant special events, which again increases the accuracy of the data collection. However, it does cause a small error for street appearance due to the first days the streets were cleaned. Streets which had just been cleaned on 14th September would appear to be better in Street appearance than streets which had not been cleaned recently, although it does not necessarily mean that they are normally cleaner.

Summary

A rough estimation of the CBD of Stamford has been delimited rather successfully using limited amount of data. Although there is a lot of room for improvement, most requires extra time, effort and resources which are not necessarily needed for a project at GCSE

level. It is not a very accurate estimation and is definitely not commercially viable, however, it does give a general idea of the CBD of Stamford.