Data collection

This chapter is about how I collected the data for my surveys, and why I collected it in the methods I used.

The Pedestrian Survey

For this survey, the whole class worked as a group. We started by being given a grided map of Halifax's Central Business District and a small area surrounding it. Our teacher kept a copy of this as the master map. Each square on the map could be identified like the one below. This made identification of points easy.

On this map there were (number) points marked by dots (see above) in the Central Business District and beyond. These were then grouped together into groups of approximately seven. The class was then split into pairs, and each pair was then allocated one of the groups of dots. The reason for working in pairs is so that one person could time and one could count the people passing. It was also for safety reasons.
Before we started the count, we worked out some rules or guidelines for the whole class to follow. These were to

- To count all people that passed, including babies in prams.
- To not count pets/ animals
- To count everyone on ONE side of the road only, except in precinct locations where everyone in the precinct was counted.

A time limit of 5 minutes per point was decided. Each pair then went to their separate points to start counting/ timing. My pair had 6 points to count, so for 3 points person A timed and person B counted, and for the other 3 points, person A counted and B timed.

The timer was started at the same time as the other half of the pair began counting. Every person was recorded as a tally on a table like the one below. Each point was named as the grid reference of the square it was in. After 5 minutes the timer was stopped, and the tally totalled. This was repeated for all 6 points. After they had all been done, we reported back and recorded our results on the master map along with the rest of the groups' results. We were all given a copy of this map so we had records for all the points surveyed.

We used a tally to count al the pedestrians as it is easy to put a dash for every person and the results could be totalled quickly. This was especially useful in busy locations, where large groups of people were passing at once. We set the time limit because then the whole groups' results would be done over that amount of time. The time limit was set as 5 minutes because this would give us a reasonable time to count for, and the results would not be too high or too low.

Problems/ Anomalies

Our particular pair did not encounter many problems, but many of the other groups did. The only problem we had that could have affected the results was that the point nearest the bus station could have been affected by buses coming in and out. At the time we counted there weren't many buses, so the tally could have been higher at a different time of day.

Here is a list of the problems encountered, as well as some other things that could have affected the survey in any way, and how I overcame them.

- The weather, day of the week, date and time were recorded because any of these may have affected the survey. For example, the weather could affect the survey as if it was dry then there would be people outside than if it were raining. The day of the week could affect the survey because there would be a different number of people in town on weekdays than at weekends. The date was important, as there may be more people who would come into town at certain times of the year, for example at Christmas or at holiday seasons. The time of day could affect numbers of people if it was half day for example. Also the closing and opening times of shops must be taken into consideration.
- In Halifax's Central Business District there are changes being made, and new buildings being built which occasionally meant that all pedestrians had to walk on one side of the road. This would have affected the results.
- A very similar problem was that where roads were being resurfaced or dug up, pedestrians also had to walk around these, creating a disruption in pedestrian flow.
- One pair found that they were standing outside the entrance to an office at lunch-time, so large groups of workers created an unusually high pedestrian density. This was because the survey was conducted around lunch- time. If it had been carried out at a different time of day then this would not have been a problem.
- There were often a lot of people on streets that were important routes (to the bus station for example) this could mean that high pedestrian densities were found in areas where the other predictions of Central Business District properties weren't necessarily true. For example there may be poor shopping quality and a high pedestrian count if the road led to the Station. In this aspect the survey is flawed, but not many surveys are perfect. As so many points were done, one or two anomalies shouldn't matter too much.
- The master map that was used to share out the points and on which all our results were recorded hadn't been photocopied very well. This meant that four points were presumed to be marks on the map and weren't given to anyone to survey. These were F5, F7, F8 and F10. No results were got for these points, but a reasonable estimate can be made using the results form previous surveys carried out at similar times on the same day of the week by another class. I also looked at the points in neighbouring grid squares to try and make a reasonable estimate.

When these were compared with the results from the other group, they were found to be very similar.

Anomalies

- At F5, there were 147 pedestrians counted. This is a very high number for an area not really close to the centre of Halifax's Central Business District, or an area without department stores. This could have been because it is near Netto's and a busy newsagents and crossroads.

Other Possible Problems

- Groups of school children or any other unusually large groups of people in quiet areas could be a problem.
- If a pair were counting outside the theatre and a film had just finished or was just starting, then more people would be around and also on the streets leading to it, especially if it was a new or popular film.
- Large sales at big shops (e.g. the 'Next' sale) often draw large crowds, and people will often queue to get in. This would also create pedestrian anomalies.

Was The Survey Successful?

These problems prove that the survey was not flawless but the results I got will give me an idea of pedestrian density in Halifax and where the busiest and most quiet areas are. I have covered everywhere in Halifax, but I don't feel that this would be very reasonable. There are gaps in the survey, but it would take a very long time and a lot of people to do a more accurate survey, and I don't think that the results I have would be further improved to make this worthwhile. I have enough data to be able to display in different ways and investigate further. In the next chapter I will start to evaluate these results and look for patterns and relationships.

How Could the Survey Be Improved?

The survey could have been improved by any of the following methods-

- Counting at more points to get a more accurate result.
- Repeating the survey at different times on different days, or at the same time on the same day a week later and comparing the results. If this was done, a more accurate picture could be seen, and anomalies more easily spotted.

Land Use Survey

To carry out this survey, I got a map of Halifax that was on a large enough scale to have every building in it's Central Business District on it. I then thought of all the possible land uses of the buildings in the Central Business District and put them into groups of similar uses e.g. chain stores/ department stores. I then assigned a letter and colour to each of these groups. I gave each group a letter because this could be written onto the map when I was in Halifax and was easier than taking a lot of coloured pencils. I gave each a colour so that I could colour each shop when I got home to make the results clearer.
I then went into Halifax to carry out the survey. To carry out this survey I took the map of Halifax 's Central Business District, the key and a pencil to mark the letter on each building. I started in one corner of Halifax and walked along every street, marking the buildings as I went. To do the whole of Halifax would have been unreasonable, so I decided to mark groups of similar buildings, even if there may have been the odd one which wasn't in that category. I also went into the Tourist Information to find some more maps and information on Halifax. These helped me fill in any buildings that I had missed.

Problems
Here is a list of some of the problems that I encountered whilst carrying out the survey.

- Some buildings had more than one use on different floors. In this case I recorded the most important use. In cases such as the Piece Hall, they were both classed as one type of shop, because most of the shops there are selling craft item or food.
- The main problem I had was that Halifax is undergoing a lot of changes at the moment and a new set of shops was under construction in Woolshops. As the changes are very recent, none of the maps that I have show the new shops, and I had to either draw them in or colour the area as 'under- construction'. By the time I have finished this project, the shops are likely to be finished, so it is possible that I can update the results then.
- Some of the shops were so small that I couldn't fit a letter on them. To overcome this problem, I grouped shops of similar types.

Possible Problems

- If the town had been any bigger, then survey would have been much more difficult to do, as it would take hours to do every single shop.

Was the Survey Successful?
I think that the methods I used worked well and using a map and finishing the survey at home saved time. As the point of the survey is to get a general pattern of where the different types of land use that occur in Halifax's Central Business District, I don't think that colouring every single building would have been necessary. Colouring in blocks of similar shops saved time, and though some areas may not have been strictly accurate, the general pattern will not be affected.
The survey will help show patterns and groups of similar shops as well as where the main shopping areas are, and where the main business areas are. It should also be related to the Peak Land Value Intersection, but I will investigate this in the next chapter.

How Could the Survey Be Improved?

The survey could have been improved by any of the following measures-

- I could have looked at every single shop- this would have been possible if lots of people did the survey together and put their results together.
- A newer map would have created a more up-to-date result.
- An even bigger scale map would let me write the names of the shops on, but this isn't really necessary.

Model Central Business District

To start this survey, I firstly formulated some question to compare Halifax to a model Central Business District. I then got a map of Halifax and worked out where its centre was (See finding the centre of Halifax's Central Business District) and then used a compass to draw concentric circles moving outwards from the centre of Halifax. I drew 6 circles at equal intervals to represent the zones of Halifax's Central Business District and took this map into Halifax.
Once in Halifax, I walked through each of the zones and answered the questions while I was there. I also used a map if I was unsure of any of the answers and this helped me when I was back at home. Every question was either a yes or no answer, so most of the time this wasn't a problem. I started in the innermost zone and answered all the questions while I was there, before moving outwards and answering all the questions for the next zone and so on until I had covered most of the areas on my map.

Problems

There were some problems that I encountered whilst doing this survey. These were-

- It was often quite difficult to tell exactly where the zones started and finished, and some zones included a lot of road and some didn't contain any.
- Some questions, like the one about building height, are affected by the fact that Halifax's Central Business District buildings are protected. This is because they are of historical value and may mean that they aren't very tall. This would not normally be the case in a Central Business District.
- Parking is actually allowed in Halifax's Central Business District but a lot of it is voucher parking.
- Some questions were hard to answer; like 'Wide range of shops?' and 'high pedestrian counts?' because it was hard to tell where to put the boundaries between high and low pedestrian counts or high and low range of shops.
- There are new shops being built at the moment, and it is likely that these will have a high shopping quality, but I can't be sure unless I see them.
- It was hard to define the centre of Halifax in the first place, so if it were moved, I would possibly get very different results.
- The zones were hard to define in the first place- I was unsure whether to have them as circles, or try to define them by looking at the properties of the different areas and drawing on zones to suit them.

Was the Survey Successful?

I think that the survey was successful and that using a questionnaire was a good idea. It gave me enough information to be able to make a reasonable comparison in the next chapter. The zones are very hard to define, but I chose to put them at regular intervals, leading out from the centre of the Central Business District. The survey will also help me find patterns, like the land- use survey, and give me a good all round view of the properties of Halifax's Central Business District. In the next chapter I will compare them to the properties of a model Central Business District and see how they relate to each other.

How Could the Survey be Improved?

The survey could possibly be improved by carrying out a more in-depth study of the position of the centre of the Central Business District. This would ensure that I got the positioning exactly right and zoning correct. This is the only way that I can think of to improve the survey.