# **Areas of Influence Coursework**

The areas of influence and shopping centres in the canton of Vaud, Switzerland

Grade 11, 2007, Mr. F Clarke

**IGCSE Coursework (part 2)** 



**Andrew Pickens** 

### **Table of Contents:**

- 1) Title Page
- 2) Table of Contents
- 3) Introduction
- 4) Location
- 5) Location
- 6) Location
- 7) Aims and Objectives
- 8) Hypothesis
- 9) Method
- 10) Method
- 11) Method
- 12) Method
- 13) Method
- 14) Method
- 15) Exploring the Hypothesises
- 16) Exploring the Hypothesises
- 17) Exploring the Hypothesises
- 18) Exploring the Hypothesises
- 19) Exploring the Hypothesises
- 20) Exploring the Hypothesises
- 21) Exploring the Hypothesises
- **22) Exploring the Hypothesises**
- 23) Exploring the Hypothesises
- 24) Exploring the Hypothesises
- 25) Evaluation
- 26) Bibliography

#### Introduction

The second piece of coursework consists of the evaluation of a shopping mall and the 'Sphere of influence'\* (in two separate shopping centres) in the Vaud area, of Switzerland. We explored shopping centres with middle and lower goods. I assessed, with a fellow student such aspects as the areas of influences. By this we organized a questionnaire in which a set of data could be collected and compared, as to investigate several hypothesise.

To fully complete the assessment we had to gather a set amount of results from each of the shopping centres. By this we designed a set of questions and a questionnaire fill-out form to collect the results. This contributed to the findings of the sphere of influence of both shopping centres.

(\* The Sphere of Influence is the area in which the shopping centre provides its goods. The sphere represents the area in which the people leave either their home or work (or other) to reach the specified shopping centre.)

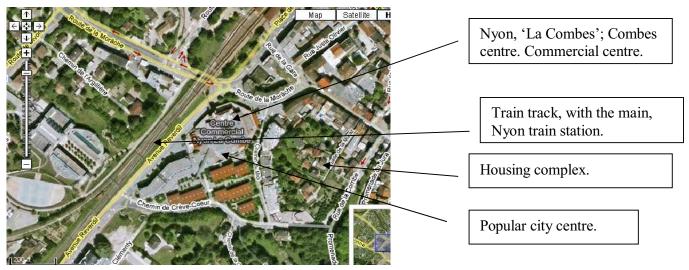
The complete set of data was collected by the following group members: Nitya Duella, Mark Butterly, Lindiwe Lewis and Tanya Heidrich.



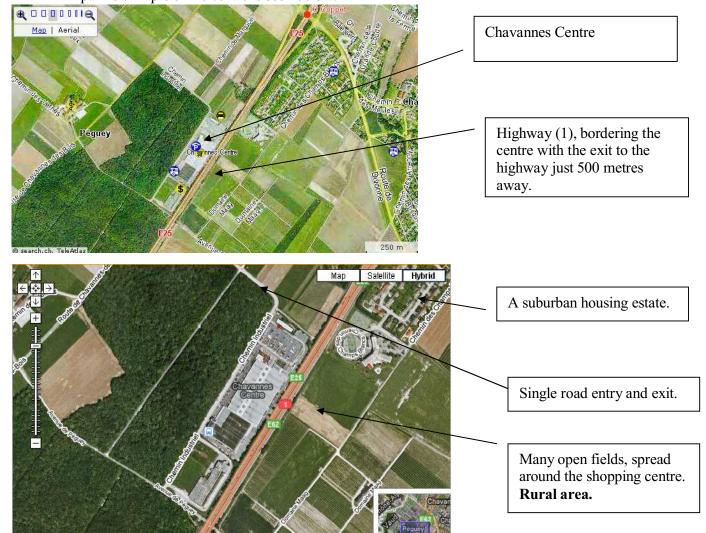


### **Location:**

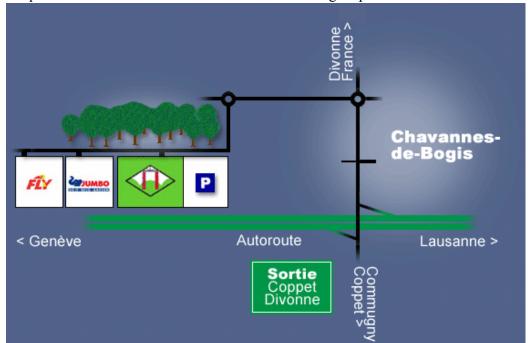
There were two shopping centres in which our group carried out our evaluation. The first location was "La Combs, Nyon Switzerland" as directed below on the map:



The second commercial centre was situated in Chavannes-de-Bogis, Vaud Switzerland. This is where I conducted the questionnaire and research with my fellow partner. Map's of the centre is seen below:

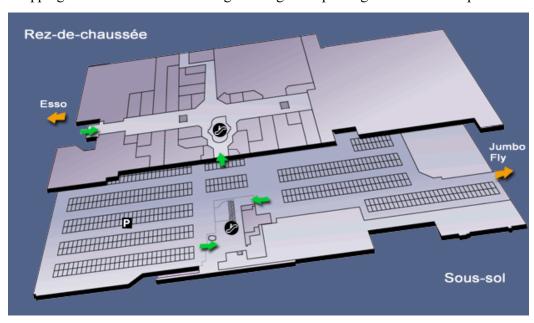


The Chavannes Centre was situated in a very open area, surrounded by crop fields, with only two directed roads for the centres exits and entries. The centre was also bordering the main highway going from Geneva to Lausanne. The exit for this highway was located only about 500 metres from the centre, giving it plenty of access for people coming from Geneva (an extremely dense populated city) or from such cities like Coppet, Commugny, Founex (directly across the highway) or Nyon. Its placement, for a more marketable value is quite sturdy. Since the centre is positioned close to a highway, it becomes more advertised, especially with its large signs. A simpler view of its schematics is seen on the following map:



The Chavannes centre also has a direct road leading to France's border. This is another way of attracting customers from a different location (country), who might prefer this shopping centre to others in their local area.

The Chavannes centre is based on two levels. The ground level consists of the main shopping outlets. Below this is a large underground parking lot with 1'350 spaces.



The Combe centre is situated in the crowded city of Nyon, also known as the central business district. It is positioned close to a train station, offering easy access to the descending passengers of the arriving train. The centre is based in a city surrounded by many large apartment homes, as well as many bars, restaurants and separate shops. A housing complex is also situated in close range of the centre. The centres area of influence consists of a wide ranged sector. The shopping centre has large area, which contributes to its area of influence. Since it's situated in a popular city square centre, the centre receives a larger amount of customers.





La Combes centre, Nyon, Vaud Switzerland

Chavannes Centre.

### **Aims and Objectives**

The principle aim in the coursework is the completion of hypothesises. The exploring of results collected at the centres. Through this I am able to lay out the contrasts and similarities between sets of results. Certain factors are needed to be able to distinguish results, for example the location of the centre and results of the questionnaire, as well as the centres area.

When using the questionnaire; the main objective was to measure the size of the area of influence between the two shopping centres. We also investigated the reasons why people might chose a specific shopping centre over another based on its popularity, and other aspects.

Each hypothesise consists of aims. I expect to find the differences between the two shopping centres as well as the similarities. By this I will conduct a researched analysis containing facts that will lead to the evaluation of certain hypothesises.





### **Hypotheses**

## 1) There will be a larger sphere of influence when there are more shops in one centre than the other.

This hypothesis is saying that the sphere of influence will change due to the amount of shops inside the centre. More people will come from a further distance to arrive at the centre because of its number of shops. With more shops in the centre, people will travel the distance to obtain a wider selection of stores. The customer is then able to complete more chores in one area instead of travelling to several stores to complete all the chores.

### 2) There will be more customers that will frequently come to the Combe centre because it is more accessible.

More customers will go to the Combe centre and they will also frequent the centre more than the customers at the Chanvannes centre. The citizens of Nyon have easier access to the Combe centre because of their placement in the CBD area. Nyon also provides the citizens with public transport, such as buses and trains. Most of the people have a walking distance to the centre, but the Chavannes centre is more remote to the public, and forces most of their customers to drive.

### 3) The younger public will mainly shop in the afternoon and the older shoppers will buy their goods in the morning.

School and studies occupy the younger citizens time during the morning and early afternoon, whilst the older, retired people of the Vaud area will arrive in the morning to complete their shopping. This is said because since the younger aged people will be held up with school during the hours of roughly seven am to four pm. The people aged from 60 and up will mainly be present in the centres at early hours of the day, or lunch hours.

#### Method

To collect the correct data needed as to complete the set hypothesises, we created a sheet of questions. We asked passers-by the questions and collected the results in a table. Before asking the questionnaire we translated each question from English to French, because of Vaud's French speaking population. When selecting the people for our questionnaire, we had to keep in mind that it was to be random.

The questions designed for the questionnaire were derived from a group discussion and decision. The first four questions on the questionnaire were obligatory, assigned to the group by Mr. F Clarke. The questions; X, Y and Z were as well assigned by our teacher. Below is a copy of the questionnaire used:

- 1. From where did you start your journey today to visit this shopping centre?
- a. Home b. Work c. Other
- 2. (i) if work what is the street name, town/commune of your place of work?
- (ii) If home or other can you give me a street, town/commune near where you Started your journey (but not you address)?
- 3. What are the purpose/purposes of your visit to this shopping centre today?
- a. Food/groceries b. Catering/café etc c. Electrical goods
- d. Shoes/clothes e. Sporting or leisure items f. Gifts
- g. Books/magazines h. Pharmaceuticals i. Jewellery
- j. Meeting other people/leisure k. Others

*If others please specify:* 

- 4. Which of the above would you say is the main purpose of this visit?
- 5. Approximately how long did it take you to get here?

a.10-20 min b.20-30 min c.30-45 d.45 +

- 6. What transport did you use to get here today?
- a. Car b. Bus c. Bike
- d. Scooter e. Foot f. Other if other please specify:

7	7. How many times do you come to this shopping centre?			
a. week		2-3	times	a
d	d. 4-5 times a week e. More			
8	8. If you had the choice which stores would like to see in this shop	ping c	entre?	
9	9. At what time of day do you usually come to this shopping centre	e?		
а	a. Morning b. Early afternoon c. Late afternoon			
Ċ	d. Evening			
1	10. If given the chance what changes would you make to this shop (e.g. Parking spaces more or less)	ping c	entre?	
	11. On a scale of 1 (poor) to 5 (excellent) how would you rate:			
	•			
d	d. Clothing and shoe store(s)			
Y: Windica Z: W	Are the access signs for the parking next to the shopping centre vis Whilst you're circulating in the parking are the signs inside the particulations of circulations and markings on the ground) sufficient? Would you come more often to the shopping centre if the parking we thour?	king (1		<b>:</b>
F	For the group:			
N	Male/ female			
S	Student/younger working/older working/retirement			
(9	(Question Z was not used in the Chavannes centre because the par	king w	as free.,	)
a. d X: Ar Y: W indic. Z: W first l	a. Food store(s) b. Electronic availability c. Parking d. Clothing and shoe store(s)  Are the access signs for the parking next to the shopping centre vis Whilst you're circulating in the parking are the signs inside the partications of circulations and markings on the ground) sufficient? Would you come more often to the shopping centre if the parking we thour?  For the group:  Male/ female  Student/younger working/older working/retirement	king (1	e for the	

The following results table was the one used to collect the data at both centres, and the set of results were collected at the Chavannes centre:

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2	road																			
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3	а		1			1	1	1			1				1	1	1		1	1
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	Types of shops:	Books	Fnac	None	None	Fnac	sepnora	Snoes	None	INone	Starbucks	INone	Game	INone	Zara	None	Library	INone	INone	None
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	c	3	5	4	5	5				4				5	5	5	3	4	5	
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Z	Y=1 N=0																			

These results were the deciding factor over the hypothesises, yet other aspect also contributed to the several hypothesises.

### 1) There will be a larger sphere of influence when there are more shops in one centre than the other.

To complete this hypothesis we need to calculate the amount of shops in each shopping centre and compare it to the sphere of influence for each centre.

#### 2) There will be more customers that will frequently come to the Combe centre because it is more accessible.

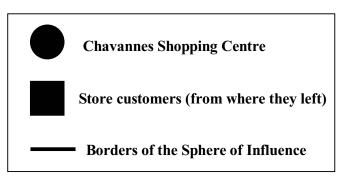
To analyse this hypothesis I need to look at the results collected in the table from the questions we asked. I also have to look at the area in which the each centre is set. I will compare the result of how frequently a customer comes to the centre with the locations whereabouts.

## 3) The younger public will mainly shop in the afternoon and the older shoppers will buy their goods in the morning.

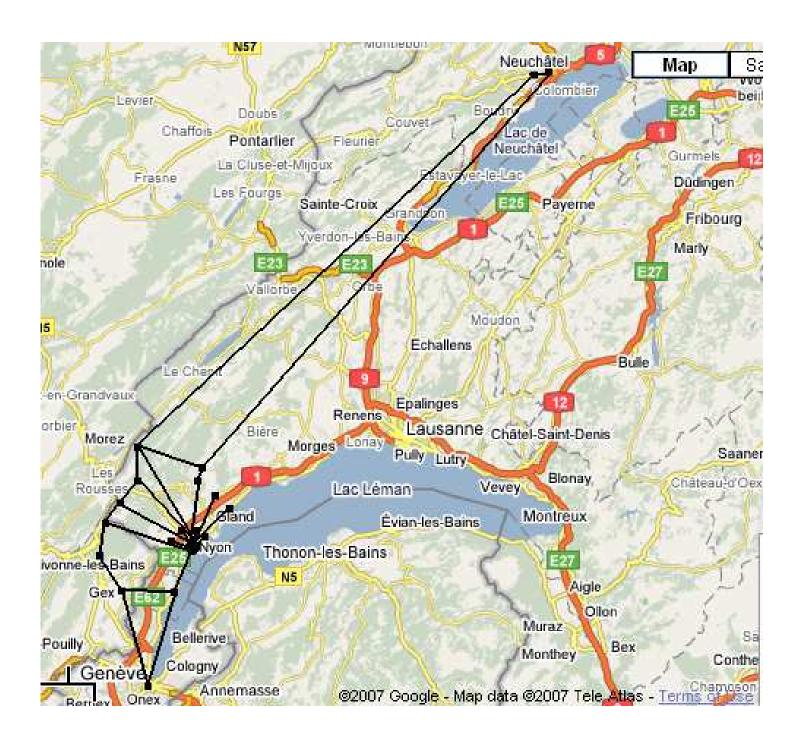
For the evaluation of this hypothesis I need to compare the set of data; differently aged public with when certain shoppers tend to buy their goods at the centre. We divided people into age groups, as to not ask them their age, so the ages are not exact. We decided on four age groups: Student, young worker, older working, and retirement. This is question 13 on the 'question sheet.' That set of results would then be compared to the set of results collected for question nine.

## Map showing the 'Sphere of Influence' of the Chavannes Centre:





### Map showing the 'Sphere of Influence' of the Combe Centre:



## There will be a larger sphere of influence when there are more shops in one centre than the other.

(Hypothesis 1)

(The sphere of influence maps can be seen on the two pages before this one.)

Throughout the Chavannes centre there are approximately 30 shops, and in the Combe Centre there are 33. To fully define the hypothesis we need to look at the sphere of influence of each centre (seen on the last two pages). The Chavannes centre has roughly a similar pattern to the Combe one. Both receive customers from Geneva and of its local area, yet Chavannes seems to receive customers that are stationed further away from the centre. The Combe centre has mainly customers from close neighbouring towns, and many from the city in which the centre is placed. Both centres also have two or three customers who have arrived from a much longer distance.

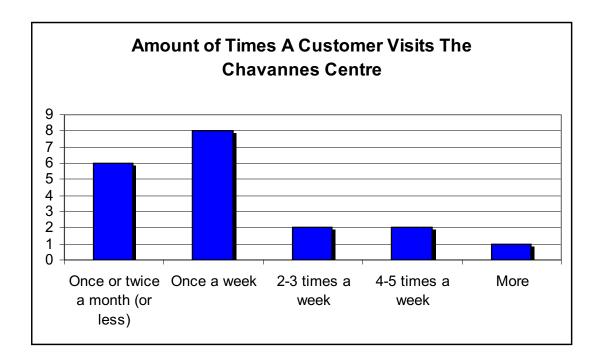
Since the two centres have such similar spheres of influence, I believe that more shops in one centre than another will not change the sphere of influence, based on the set results.

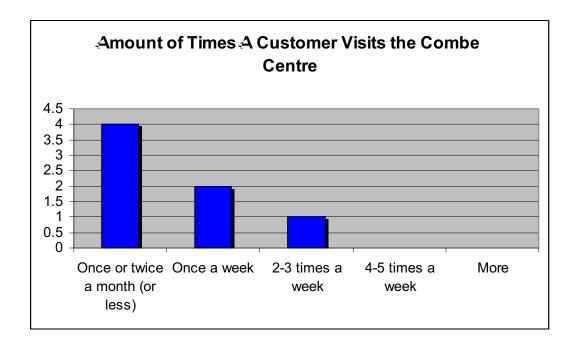
# There will be more customers that will frequently come to the Combe centre because it is more accessible.

(Hypothesis 2)

The sum of the people recorded for each centre is as follow: In Chavannes we counted 19 people and in Combe 7. The lack of people counted in the Combe centre is because we were missing several people. One of our members contributed to another group as they had to leave, and another group member was not present.

The results show that Chavannes had more customers present that day. This is mainly because the results were challenged and also we did not collect as much data as we needed to fully complete this hypothesis. With more results, and for different days, the hypothesis could be proven to a more precise calculation. The sets of results are seen to challenge the original hypothesis, by disagreeing with it.



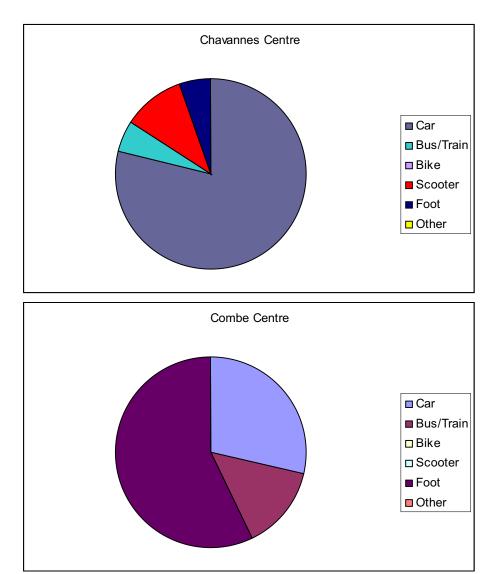


Once or twice a month (or less)	4
Once a week	2
2-3 times a week	1
4-5 times a week	0
More	0

Based on the two bar charts which show how many times a customer comes to each centre, the Chavannes centre has more people coming once a week regularly than the Combe centre which has mainly people who come once or twice a month. These results seem to be pending on the Chavannes centre that evidently had more collected results than the Combe centre.

The accessibility is important to market both shopping centres. The following data represents the transport used as to reach each shopping centre.

	Chavannes Centre		Combe Centre	
Car		15		2
Bus/Train		1		1
Bike		0		0
Scooter		2		0
Foot		1		4
Other		0		0



The first pie chart shows that most access to the Chavannes centre is reached by car with several customers coming by scooter. In the Combe centre most people reach the shopping centre by foot, with several people coming by car and bus/train. The Combe centre is in middle of Nyon where the main source of transport for the citizens is walking. This is

seen on the pie chart. As expected walking has the highest percentage of people yet surprisingly there is a large percent of people who drive to the centre. This might have been different if more results had been collected. Since Nyon is a crowded town bike's and scooter's are somewhat seen throughout but are not used mainly to go the Combe centre, probably because people like to purchase a larger quantity of goods, and It is harder to transport them with a scooter or bike.

The Chavannes centre has a large percentage of people who arrive by car, compared to the Combe centre. Since the Chavannes centre is very remote, and isn't very near any small roads connecting to towns or villages, most people have to access it by car. The centre doesn't provide any public transport as well. There are no buses or trains that reach the centre. The people who do take the bus have to eventually walk from the bus stop which isn't very near the centre. There were only several people in the Chavannes centre who reached the shopping mall by either foot or scooter.

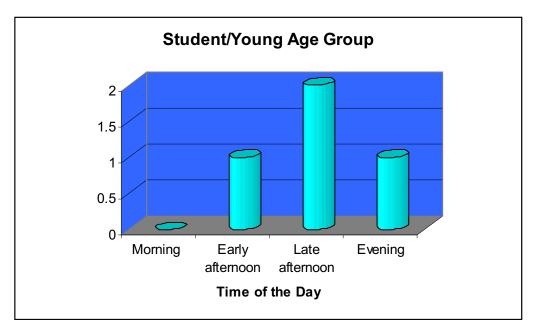
We concluded that the Chavannes centre has more customers on a frequent basis mainly because of the lack of results. The Combe has an easier and more accessible location, providing their customers with a varied set of transport, and an easy foot passage for Nyon's citizens. Since the Chavannes centre has more goods, the customers are willing to go the distance to have access to all their necessary good in one location, but the Combe centre provides easier access for the people in a more urban location.

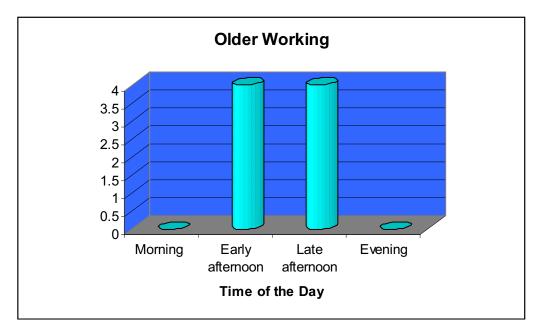
# The younger public will mainly shop in the afternoon and the older shoppers will buy their goods in the morning.

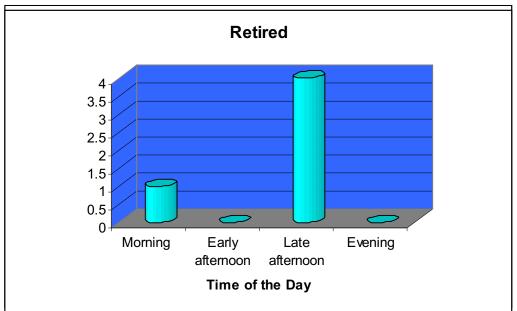
(Hypothesis 3)

The following graphs show the different age groups shopping in different times of the day between the Chavannes centre and the Combe centre.

#### **Chavannes Centre**

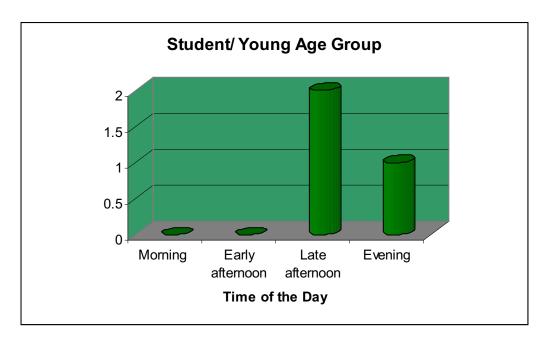


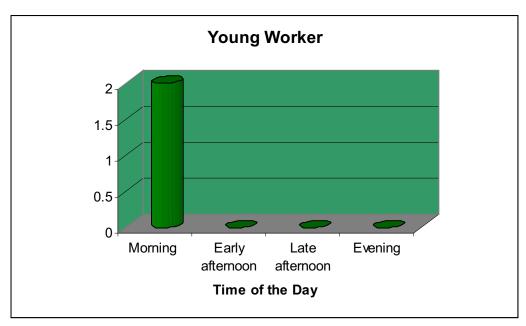


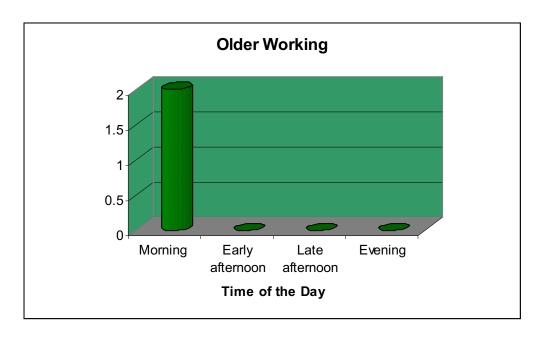


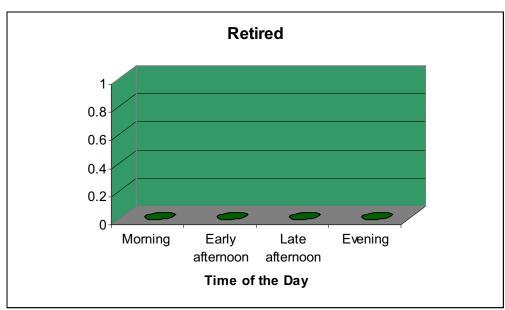
The following cylindrical bar chart shows the Combe centre:

### **Combe Centre**









The Chavannes centre shows that most of the young visitors come to the centre in the late afternoon, probably due to their studies. Young workers shop in the evening probably after returning from work. And surprisingly the elder population visit the centre in the late afternoon, as I have predicted that they would usually come in the morning. This differs greatly from the Combe results in which older workers come to the centre in the morning. The results are constant when comparing the young

students in the Combe centre and the Chavannes centre. But the young workers arrive early in the morning in the Combe centre while in the Chavannes centre they arrive in the afternoon.

The lack of results in the Combe centre has released a lack of comparison. There were no retired citizens questioned in the Combe centre.

To conclude; the young workers and elderly workers seem to shop mainly anytime of the day, whilst the younger students shop in the late afternoon when they get out of school. The retired citizens shop in varied time, either in the morning or (more likely) in the late afternoon, in the Chavannes centre. The Combe centre was unable to collect any results from retired citizens; (maybe because they did not shop at that time, when we collected our results.)

### **Evaluation**

An important issue that could have been improved is the hypothesises. We could have organised our self as to write up the hypothesises we were planning to do, so then we could narrow our questionnaire to a shorter and more valid set of collected results.

A more precise analyses of the hypothesises could have been done if we had visited more shopping centres and collected many more results. Different shopping centres in different areas like rural or urban would have contributed to a more varied set of results and different sphere's of influence.

### **Bibliography:**

### Maps:

1) Google Earth - maps.google.com 2) Map Search.Ch - www.map.search.ch

http://map.search.ch/chmap.jpg?layer=bg,fg,copy&zd=2&x=-50480&y=17844&poi=verkehr,anzeigen&w=560&h=420

http://maps.google.com/maps?hl=en&ie=UTF8&ll=46.600393,6.69342&spn=0.862404,1.867676&z=9&om=1

http://maps.google.com/maps?hl=en&ie=UTF8&ll=46.334484,6.158867 &spn=0.013541,0.029182&t=h&z=15&om=1

### Centre's Logos:

#### **Chavannes**

- 1) http://www.les-centres.ch/plan/plan chav.asp?c=1&sm=3
- 2) http://www.les-centres.ch/centre\_chavannes/index.php?c=1&sm=1

#### **Combe**

1) http://www.lacombe.ch/

### **Andrew Pckens**

### **Optional:**

### 4) People will travel further to the Chavannes centre than to the Combe centre, giving Chavannes a larger Sphere of Influence.

Chavannes centre is situated in a very rural area, secluded from any major CBD areas or towns, unlike the Combe centre. There is only one major highway which borders the centre and several long distant roads leading to it. The Combe centre is situated in the middle of a CBD area, in Nyon's centre. People will mainly travel the distance to purchase a larger variety of goods. Chavannes also has two separate stores to its side, in the same area; Fly and Jumbo. This means that the secluded area provides large, medium and small goods to the citizens who travel the distance.