THE STRIP:

Fieldwork Studies of Chemin Chambly

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ABSTRACT

The first chapter provides a general overview of fieldwork and particularly emphasizes urban fieldwork. It examines the changes in the approach towards fieldwork and argues for some awareness of the need for students, particularly those in suburbia, to study and become more knowledgeable about their own environment. The exercises which come later in the monograph can be considered as viable ways of doing this.

In chapter two, the nature and function of commercial strips are identified including the relationship of strips to other commercial forms in the city. Perhaps the chief necessity of this section of the monograph is that it provides the necessary background material needed by teachers planning to use commercial strips as source areas for field study.

The third chapter is an attempt to focus attention on the importance of the automobile in the activities along the commercial ribbon. It is an attempt to zero in on one major control that exists

on these linear streets.

Chapter four consists of five fieldwork exercises. Each exercise is a particular means of testing a formulated hypothesis based on a Commercial Strip. The exercises are uniform in construction and are all based on Chemin Chambly. Each attempts to look at a way in which commercial activities along this particular commercial strip have been oriented towards the automobile.

Chapter five evaluates the exercises prescribed and suggests further developments.

TABLE OF CONTENTS

CHAPTER Page

LIST OF FIGURES

LIST OF MAPS

...From the tight, cosy buildings and the sense of being in a place to walk, the town spills out across the concrete as if it had fallen off a truck. Signs sprout like weeds. A street turns into a strip.

Graham Fraser,

"The car as Architect"
City Magazine No. 5 (Nov. 1976)
pp. 44-51.

PREFACE

During the time that I spent writing this monograph, I have found myself continually wandering in the fields of education theory and geographical theory and that of the practical problems of teaching. These aspects are, of course, related and it is hoped that problems of teaching are enlightened by a body of theory consciously seen as the basis on which solutions to these problems are devised. (Graves) Personally, I have found teachers rightly suspicious, however, of theory which appears to solve no problems or which offers no help in the classroom situation. With this in mind, I have spent little time discussing the place of geography in education and the nature of geography. I am conscious that what I have done is to provide one aspect of "new geography" and illustrate one approach to teaching it. I have, therefore, wherever possible, concentrated on some of the practical problems and have given a number of examples whenever possible. It is also worth bearing in mind that each exercise was given in a particular context and that it is unlikely that they could

be given without modification in another context. Indeed, it is expected that most teachers would need to make at least minor alterations to these exercises dependent on the classes they know.

CHAPTER ONE

FIELDWORK

In Quebec schools it is often the exception rather than the rule to find students involved in fieldwork. This becomes even more evident when one examines the course outlines for geography 412, 512 and 522. Although it is suggested that students examine situations where possible no effort is made in the time-tabling of these courses for field activities nor is any attempt made to examine field research. When fieldwork is carried out it is often based on rural areas since it seems that fieldwork implies getting students out into the "country". More often than not, fieldwork consists of <u>looking</u> rather than <u>doing</u>. This is often brought on by the fact that long distances are involved and there is hardly time for anything other than looking

At this point I think it is worthwhile to spend time in brief review of i) the value of fieldwork, ii) the necessity of urban fieldwork, iii) the changes that have occurred in the approaches to fieldwork, iv) problems that exist, and v) some suggestions in the organization of "field-activities". It is my hope that this review will better prepare teachers for the suggested field exercises which

appear later in the paper.

i) The Value of Fieldwork:

In so far as one is trying in geography to work out generalizations based on observed phenomena, then clearly much which is done in the classroom must of necessity be done at second hand.(Graves, p. 30). From climatic statistics to figures of population or traffic volume, all these represent basic data accumulated by third parties and subsequently processed for consumption in printed form. Clearly, this in itself, represents a case for getting pupils to acquire information at first hand. In so doing they learn how to obtain this information, but they learn some of its limitations. For example, in seeking information about the location of service stations along a commercial ribbon (see exercise 5) students may become aware of the effect of "self-serve" centres on altering the accepted pattern of gas stations being on the side to serve people on their way home rather than on their journey to work. (Klaus, p.16).

Another vital reason for pupils being involved in direct observation is that some of the phenomena with which the geographer is concerned can only be appreciated when the pupil observes them directly. For example, the location and distribution of auto-

oriented businesses along a commercial ribbon such as service centres, drive-in facilities, and quick-lunch facilities. The teacher and his students have seen the landscape with different eyes: it is important that the teacher recognize that his pupils' perception although different, are as valid as his own.(Ward, Fyson p.24).

As a means of acquiring accurate concepts of certain features found along a commercial ribbon little can replace direct experience. How much do students gain from a description of the form and function of a commercial strip such as Chemin Chambly unless they are able to travel the route themselves. A further advantage of fieldwork is that pupils learn to use a map in a realistic situation.

There are many other educational reasons for carrying out fieldwork quite apart from introducing pupils to a technique used in geography. It may be that the teacher acquires a new insight into his/her pupils by meeting them in a slightly less formal situation than the classroom. It is likely that children of average ability have been found to improve in attitude towards geography after having undertaken fieldwork.

ii) <u>The Necessity of Urban Fieldwork</u>:

There has been a decided lack in the amount of urban

fieldwork carried on in our schools. This has likely evolved from the fact that to many students and teachers 'fieldwork' means a journey into the rural area to observe the landscape. There is nothing wrong with rural fieldwork except that many of us live and work in suburbia and we are omitting our own "built" environment for study purposes. There must be an increase in urban fieldwork in our schools in order that the actual environment of the school may be used to the full and be better understood.(Ward, Fyson p.26).

Since there seems to be no argument for experiencing an environment at first hand it would seem obvious that students should become experienced with their own in order that they be better prepared for their future roles as participants and decision-makers in this same environment. As it is of course, the schools' only contribution to the process of public decision-making occurs every few years when the premises are used as polling stations. (Ibid. p.23).

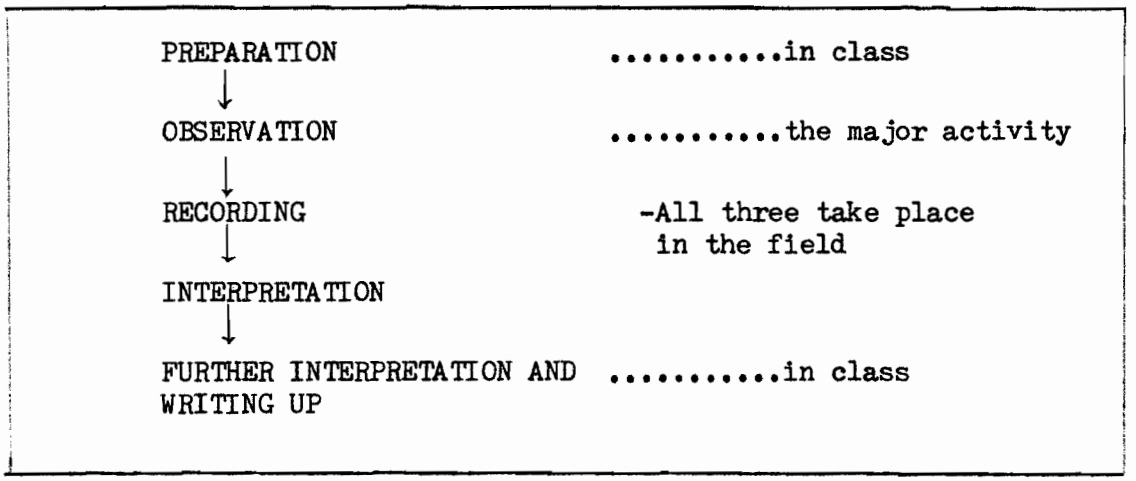
We are aware, for example, that urban geography is concerned with the structure, functions and interrelationships of towns and cities. The structure of a town is its physical form expressed in the types and arrangement of its buildings. In his book Fieldwork in Urban Geography Briggs points out that many

towns have developed from a small nucleus over a long period of time and at present are continuing to expand into the surrounding rural areas. He suggests that students involved in urban field-work have a chance to see the successive stages in this development by examining the nature and form of buildings and street patterns. The major function of towns is to serve as places where people live, but some parts of towns are devoted to manufacturing industries shopping centres, parks and recreation grounds, and other functions. All these different parts of towns are linked together in very complex ways, often by journeys which people make from one part of the town to another, such as journeys from home to work, or from home to the Place Jacques Cartier Shopping Centre on Chemin Chambly. No town exists in isolation. Very complex lines exist between any town and many other towns and cities. Urban field-work allows us to investigate these characteristics and interre-lationships.(Briggs).

iii) Encouraging Changes in the Approaches to Fieldwork:

My intention in this section is simply to point out what I consider to be the major change that has occurred in fieldwork and to show its advantages over its predecessor. Everson (1969) describes the older philosophy regarding fieldwork as being deeply rooted in English geography and sometimes referred to as "field-

teaching". Its underlying thought may be described in a simple flow diagram.



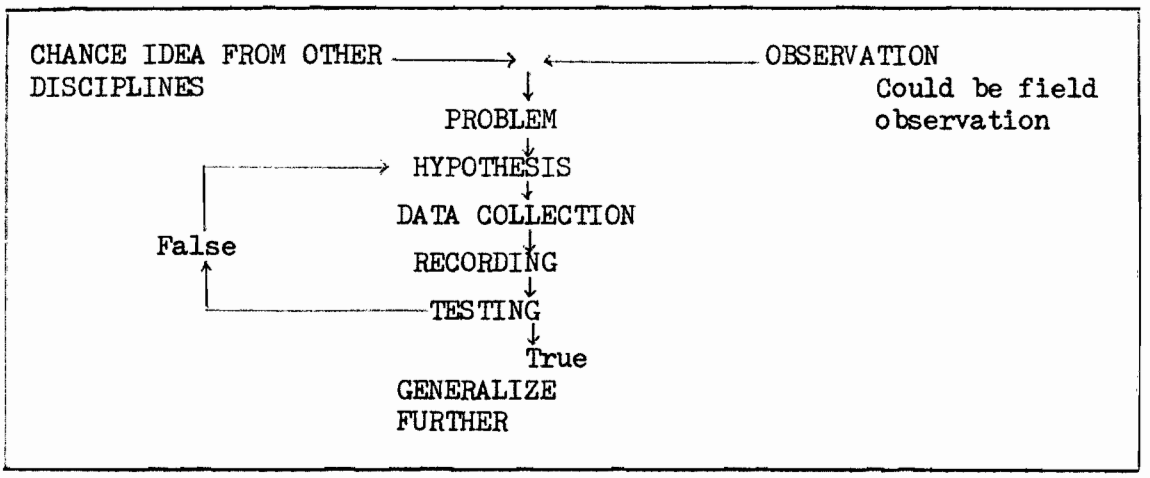
A Traditional Approach to Fieldwork

A piece of work organized in this way can vary from one with slight preparation, that will allow the students some personal discovery, to one so didactic as to make students respond to questions which guide them directly to a view of an area. The teacher may have done all his/her work beforehand in preparing assignments, work sheets, questionnaires etc., so that he/she will take a less dominant role in the day's events, or he may want to teach directly in the field by lecturing or initiating discussion at certain predetermined places.

Perhaps some comment may now be made on the implications of this approach. Basic to it is the idea that somehow the totality of an area can be comprehended. When the complexities of the patterns of the landscape and the very complex underlying causal

factors are considered, it seems a grandiose aim to try to understand the entire landscape presented to the viewer. (Everson p.108). The approach can very easily degenerate into an attempt at a complete regional survey. In many of the studies seen there is a heavy bias towards the physical features that appear to dominate the visible landscape. On the other hand, there is no denying that at the end of such a trip the student may have experienced a thrill or glimpse of something which may lead to increased interest.

The second and more modern philosophy, is sometimes termed "field research" and can be illustrated in the following flow diagram.



The second approach may be considered to have the stages shown in the flow diagram. The observational stage could of course be the descriptive approach mentioned earlier. Equally well, the piece of work might be initiated from anywhere or classroom discussion could have unearthed problems which the class might decide

they would like to solve. The problems considered important and relevant will of course, vary with age, background, and geographical experience of the students, as will the hypothesis that they will want to consider as possible answers to the problem. The initial stages of this approach are in the classroom not the field. The data collection is considered in two ways. First in the light of the problem information should be gathered relevant only to this problem and there is no attempt to view the entire area. Secondly, the expertise of the students will more or less dictate the refinement of the data recording methods. (See Appendix for examples).

When the results of any applied tests are know, the students can, if the hypothesis was false, try again or, if it was correct, can test it further and then use his/her work for further generalizations.

I should mention here that some teachers, (potential trippers) might argue that this type of approachtends to develop an eye for a problem rather than the country. In this vein, the study of geography is space and not problems. It can be argued that this approach engages students in the studying, recording, and testing of complex hypothesis which is likely to give them little expertise. Many will be quick to point out that from this

approach students will get less enjoyment and less understanding than from the former approach.

Rather than carry this any further I should simply indicate that I have a strong bias towards the second approach due mainly to the student and possibly the local suburban environment. There should, of course, be no conflict over the two approaches, as they have different objectives. The first approach centres on usually teaching the landscape (Robertson and Long, 1969) while the second is based on the student's understanding of a concept and structure before individual facts are understood.

Teachers planning fieldwork with their students should realize that the use of either approach depends to some extent on the scale of the objective. If one wants a quick overview of a commercial ribbon, then a bus trip or a walk is the answer. If however, a relationship between land values and their location along Chemin Chambly (Exercise #5) then the second approach is the only answer.

iv) <u>The Problems that Exist:</u>

For any teacher who attempts to organize fieldwork the problems they are likely to encounter are many. The organizer has to find time to organize and prepare for the trip; to justify

to himself and, more importantly to others, the loss of actual school teaching time, expecially for classes preparing for high school leaving examinations; to find suitable and willing staff or parents for the work, and to keep costs at a reasonable level. Geography teachers do seem to have determination since the amount of fieldwork attempted each year is increasing.

v) Some Suggestions in the Organization:

Through experience I have found that it is necessary to provide all of the material that a student needs to complete an assignment. There is little or no value from a practical classroom point of view in setting a loosely structured library research assignment.(Molyneux and Jones p. 1). The same applies to fieldwork. Field studies must be carried out with a predetermined geographical problem in mind and must be organized in such a manner that the attempted search for an answer is direct and precise. The intent of the field exercise must always be foremost in the student's mind.

The exercises that I present later in this monograph involve a certain amount of theorizing and all involve the testing of hypothesis. The distinct order of theorizing and observation are indicated by Ambrose (1969), who states that to observe before

theorizing leads not only to inefficient observation but also to certain uncertain conclusions because no specific idea has been identified and tested. To theorize before observing forces the observer to think through the processes that may be at work, focuses the attention on a manageable number of ideas, and limits the observations to selected phenomena only.

Although in this monograph I have suggested a set of specific field exercises, many of which include the testing of hypotheses, teachers should be aware that there is really nothing wrong with students, particularly the young, walking and observing in a loosely directed way. The degree of sophistication possible will vary with the problem tackled and with the students working on it. It is possible that the teacher may wish to use statistical techniques, those suggested or more advanced, to confirm or reject the hypothesis. There is nothing inherently complicated in much of the simple arithmetic involved in computing many statistical measures, It is essential, however, that the user should know what the particular statistical measure is supposed to do. It is quite useless to compute a standard deviation or a chi-square number and yet be unsure as to what these statistical concepts are meant to measure. (Graves, p.32).

There is no doubt in my mind that students derive much

more benefit when planning and carrying out a small piece of field investigation than when the accent is on "lecturing" or "field-teaching". If they are to be introduced to the methods of the geographer, then they must be initiated into them in the same way as students learn of the ways of scientists by attempting to solve problems which have puzzled scientists in the past. (Graves p.35).

Chemin Chambly - A Field Study Area:

In 1665, Fort Chambly was built by Pierre de Sorel and Jacques de Chambly as a reinforcement against the Iroguois who attacked by the Richelieu river. There were no roads as we understand them and the St. Lawrence river supplied an easy means of transport for the soldiers and their equipment. Shortly after the erection of Fort Chambly, the soldiers of the garrison opened a road to Laprairie in front of Ville Marie. This was the first road built in Canada. Later a road was built through the seigneury at Longueuil to join this road to the port at Montreal. Chemin Chambly is now considered as the route from Chambly down through the city of Longueuil to highway #132 which parallels the north shore of the St. Lawrence river at the Montreal harbour. This covers a distance of 20.32 kilometres. Map # 2 shows the portion of Chemin Chambly on which I have based my exercises. It is the area

between Boulevard Des Ormeaux and Rue Leblanc in the city of Longueuil, a distance of 3.04 kilometres. This, in my opinion, is the section of Chemin Chambly which best exemplifies a commercial ribbon. It has very intensive land use, businesses cater to the automobile to a large extent, and it has a diverse mix of retail stores, services, and offices. It also represents a small enough distance which could easily be covered on foot by students and teachers involved in fieldwork.

FIGURE # 1

CHAPTER TWO

THE COMMERCIAL STRIP

Walking or riding along the Longueuil section of Chemin Chambly, one is undoubtedly aware of rather high traffic volume and a tremendous number of different or related businesses. You see motels, apartment buildings, stores, garages, and large shopping centres. On parts of Chemin Chambly the businesses are quite widely spaced and few people are on the sidewalks while other areas have concentrations of businesses and the sidewalks and stores seem to be overflowing. The traffic consists of cars, buses, and commercial vehicles which move at varying rates dependent on the number of traffic lights which is of course very much the result of the degree of business congestion.

This makes Chemin Chambly a commercial strip as this term has been defined by a number of works. For example Ratcliff (1949)suggests that a commercial strip is a linear development located on a major roadway, varying in length from one block to

several miles, and containing a diverse mix of retail stores, services, and offices. The structure and character of each commercial strip is the result of various market factors, such as the relation of the strip to the surrounding area, the type of traffic utilizing the roadway, and the actual location of the strip within the city.

History and Evolutions:

The actual process by which commercial strips are formed has been summarized by Stone (1971). The commercial strip is a direct product of a random route system. Commercial activities have a tendency to build up first around major intersections and then spread along the arteries. As the residential population grows on each side of an artery, and as traffic builds up on it, the commercial activities build up accordingly, serving both the transient and the surrounding residential market.

A close look at strip developments within the suburban residential environment shows that most shopping centres develop at the intersection of two or more strips, and that when shopping centres are established within a mile or so of each other, commer-

cial activities will invariably develop on the main interconnecting roadway.

Linear commercial activity, when on intercity roadways, out in the open countryside, in the form of "gas-food-lodgings", pose few immediate environmental problems. However, when strips develop in the suburban environment, certain sociological relationships develop also. When a suburban area has its commercial activities localized in a shopping centre, it has a focal point for, many of the activities of its residents. The shopping centre, when developed to the extent of not only harbouring shopping activities, but also eating places, movie theatres, and other functions, such as a Post Office, becomes, in fact, a community centre, which gives the surrounding residential area a neighbourhood identity. When, however, centres grow together into strips, something else happens. The strip, instead of focusing a suburban residential area into a neighbourhood, divides it in two, forming a barrier between the halves. True enough, the strip offers the same activity - functions to the area, but it falls short in one important category: it does little toward making neighbourhoods out of otherwise anonymous suburban residential areas because of the traffic density and regularity. The typical suburbanite finds himself somewhere

between commercial strips, only able to identify where he is by the name with which the developer tagged his particular housing tract.

Commercial strips are outstanding socio-economic elements of the suburban environment and are actually a function of the random route system.

Why Businesses Choose Commercial Strip Locations:

Commercial strips are able to satisfy a wide variety of individual business needs. Thus the mix of retail stores is diverse, and the reasons for choosing such a site are equally varied. The locational preferences of businessmen are the result of a conscious and unconscious sifting of many relevant factors, the degree of importance of each varying with each use. The most significant factors influencing businesses to choose commercial strip locations include the following:

A. Visibility and accessibility are most frequently mentioned as reasons for selecting a strip location. Frequently the businessmen note that the strip location is a form of free advertising as was shown in a study in California (Foster & Nelson p. 57).

The study indicates that the advantages of a location on a well-travelled boulevard lie not so much in the advertising

value of such a location, as in the ease with which the particular establishment can be reached. The authors go on to explain that "ease of access is not solely a function of street orientation and width, it is compounded by such things as travelling time, provisions of parking facilities, congestion and personal familiarity with the street in question"(Ibid p. 57).

FIGURE # 2

B. High rents in other locations are frequently mentioned by businessmen as being an important locational factor. Rents are significantly lower on strip locations as compared to the downtown and regional shopping centres, though smaller planned neighbourhood or community shopping centre rents are competitive in some cases.

C. The presence of a cluster of similar uses makes some strip locations appealing for particular businesses. Customers associate a certain area on a strip with a particular type of business because it offers comparison shopping opportunities. This assists a new business in establishing itself (See Ex. # 4).

- FIGURE # 3

D. Equity or reasonableness of rent compared to other locations is an important advantage to some businessmen who own their own store on the strip. There is some indication that the expense and time involved in developing real estate is a factor tending to reduce the number of owner-occupied buildings. Some small businessmen, however, are able to obtain sufficient capital to construct small commercial developments.

E. Freedom to establish ones' own hours, policy, and activities is very important to such operators as personal income tax services, and to many individualists. Examples of this do exist on Chemin Chambly in the form of H. & R. Block income tax consultants, and radio and T.V. repair shops. There is a tendency for these to be more seasonal businesses and because of the cheaper rent on the strip the owners can actually afford not to be open all of the time.

FIGURE # 4

F. For a few, the problem of "No place to go" leaves the strip as the only solution. Businesses such as gas bars, garages, specialty shops, and large shopping centres which depend on the motorized public really have no alternate location if they wish business to remain the same. These businesses are examples of those that need visibility, accessibility, and traffic patterns in order to continue.

The Form of Commercial Strips:

Commercial strips are characterized by their linear form

which evolves as a result of the need for visibility and accessibility to the major arterial (Boal & Johnston). Shopping and other service facilities tend to develop in aggregate linear form for a number of reasons. First, a number of establishments are functionally oriented to provide serves to traffic. The types of functions are drawn to high-volume roads and are likely to occur in a scattered fashion along them except for possible concentrations where other high-volume roads intersect (Boal & Johnston, 1968).

Secondly, a number of functions are drawn onto the ribbon because of its relatively high accessibility to surrounding sections of the urban area. In addition urban zoning policies may not permit commercial development in off-ribbon locations.

The overall linear form is generated by an apparent need to be on the ribbon, by the consequent need to spread out along it, and by the fact that for considerable distances along the ribbon, accessibility is more or less indeterminate.

Another aspect of form is the density of the commercial strip establishments. While businesses on older strips are closely spaced, often forming a continuous frontage, newer ribbons tend to be looser, with large space-consuming stores and auto-oriented uses interspersed with more compact plaza developments and neighbourhood shopping centres. In general, the compactness of new strip development varies with the speed of the traffic along the arterial

route.

The Function of Commercial Strips:

Although geographers have studied commercial strip areas and have developed classification systems, few, perhaps with the exception of Berry's, lead to a better understanding of how commercial strips function within the commercial structure of the city, or the inter-relationships between commercial strip businesses.

Commercial ribbons are multi-functional. This can be observed by examining the types of establishments on any particular ribbon, ranging from (say) motels and gas stations to drug stores and super markets. The ribbons are also multi-functional in that any particular establishment may perform a number of roles. Finally the ribbons are multi-functional in spatial terms in that portions of the ribbon may have concentrations of such functions as motels while other portions may be dominated by food stores, drug stores, and beauty and barber shops (Boal & Johnston, 1968). (See also Exercise 2 Photo # 7).

Due to the diversity of commercial strip uses, classification systems tend to oversimplify highly complex business patterns. Nevertheless, there are certain types of commercial businesses that tend to recur on strip areas. The following list is representative of these businesses:

1. Convenience stores (food, drugs, banking services).
2. Restaurants.
3. Auto-serving uses (gas station, car wash, auto banks).
4. Large space users (furniture stores, trailer sales, car dealers, warehouses).
5. Businesses requiring low overhead, especially marginal businesses (pawn shops, antiques, second hand book stores).
6. Offices (professional, contractive, financial, real estate).
7. Recreational equipment sales and services (marine equipment, cycle shops, ski-doo sales).
8. Appliance repair shops (vacuum cleaner, T.V., and radio).
9. Specialty shops (hobby, ski, saddlery, music shops).
10. Recreational uses (theatres, bowling alleys, pool halls).
11. Obsolete uses left over from former times (general-purpose clothing, household goods, and jewellry).
12. Other (florist, hardware).

Convenience stores, restaurants, auto serving uses, large space users, and offices are found consistently along Chemin Chambly.

Geographers Boal & Johnston, Howard & Nelson, have noted various clustering tendencies on commercial strips. The most visible clustering occurs among similar types of businesses that locate near each other to provide the customer with comparison shopping for a particular specialty good (see Map #5 Appendix). Convenience uses such as banks, drug stores, bakeries, and small grocery stores also tend to cluster together and form "convenience nodes".

Clustering does not always involve adjacent sites since the "best" location on a commercial strip for a particular business may not be available. However, businesses are usually able to find suitable locations as long as there is a reasonable supply of land available on the strip (Edmonton Report, 1973).

> "Regional shopping centres and to a growing extent, smaller centres as well, "plan" the type of stores and the location of the stores in the shopping centre in advance, in order to optimize the business opportunities of each. "Pre-planning" of commercial strips, however, would contradict the basic function of a strip as a place where businesses can choose the best available location to meet their business needs. In addition, sufficient information is not available from which clustering patterns that naturally occur on commercial strips can be analyzed. The clusters found on strips are varied, in part because of different locational needs and preferences of individual businesses. This is not to say that there is not a need for "specialized" shopping centres for certain types of goods, such as automotive and home improvement centres. These specialized centres, however, are very different from commmercial strips." (Edmonton Report)

Less obvious clustering occurs among the businesses that serve each other, such as the auto parts store near the gas stations, the finance companies near the furniture and appliance stores, and the restaurants that cater to local customers and employees. In short, the business and customer relationships on commercial strips are diversified and vary according to alternate location, type of traffic, and other factors.

Businesses located on commercial strips have a wide range of trade areas. Some stores market their goods primarily to local residents, while other stores cater to customers throughout the city. The market area for commercial strips is much wider than is commonly assumed. Even the convenience stores which serve predominantly local markets, benefit from city-wide customers who are attracted to the strip from some other purpose or who are just driving by.

Usually, shopping trips on commercial strips are of short duration, although considerable lengths of time may be spent shopping for a major item such as an automobile or furniture, where different stores along the strip offering the same item may be visited.

Relation of Commercial Strips to Other Commercial Development:

Commercial uses take a variety of forms in the land use of the city. Commercial strips are one form of development; other forms include planned shopping centres, the downtown business district, and isolated commercial nodes. Although each commercial form accommodates commercial uses, the types of businesses and the types of customer trips vary for each form. Trips to commercial strips are often trips for a single item, rather than shopping trips for a variety of goods. In addition, some business on commercial strips is generated by passing traffic, although the importance

of this factor varies with each business. Regional shopping centres and the downtown, on the other hand, provide opportunities for multi-purpose shopping trips. Often one or two large department stores attract customers; these customers in turn shop at smaller stores in the centre. The amenities offered by these large nodal commercial developments encourage extended shopping trips. Isolated nodes often consist of a single grocery store, or a small convenience shopping centre. These small commercial nodes, like commercial strips, are oriented to special-purpose trips and to business from passing traffic. The market area served by these commercial nodes varies the location in the city and character of passing traffic. In fact, neighbourhood shopping centres and small convenience nodes often form part of a commercial strip.

It is difficult to generalize about the competitive character of each of these commercial forms with the others. Individual businesses may compete with other businesses of the same type, regardless of their location in a particular commercial development. However, each type of commercial form has developed in response to a market demand for goods and services and offers different opportunities to the consumer and the businessman.

For the consumer, different types of commercial

centre. However, businesses in planned centres must follow policies set by the management, and meet selection criteria. A variety of factors make regional shopping centres and commercial strips more or less attractive to individual businesses.

In conclusion, commercial strips must be considered as integral parts of the city's commercial structure. Then form and function in general terms is distinct from other types of commercial development. Although the location of commercial strips in the city and the types of businesses on the strips may change over time, it is unlikely that the need for a flexible commercial form like commercial strips will disappear. Strip development pressures will continue to occur in response to demands of businesses to be visible and accessible and the demands of consumers for a variety of goods and services.

Alternative Locations for Commercial Strip Uses:

Only a small number of businesses that choose commercial strip locations have alternative locations open to them. These primarily include contractors, mail-order firms, and offices, as well as some specialty businesses. Uses such as convenience and dry goods businesses may appear to have alternative locations but

in fact do not if they wish to retain their trade area and basic function. Each of these categories is briefly discussed below.

Some offices, contractors, and mail-order businesses may find alternative locations in neighbourhood shopping centres or areas near downtown. There are primarily the uses that have located on the strip because the strip was the only available space. Regional shopping centres are also possible alternative locations, expecially centres that have developed special office buildings as part of the centre. Rents in regional shopping centres tend to be higher than on commercial strips, however, and it is expected that these office areas will compete more directly with the downtown tenants.

Certain specialty businesses located on commercial strips may find specialized shopping centres attractive. (Hairdressers, bookstores, record shops, specialized clothing stores.)

Most convenience businesses, such as grocery stores, banks, drug stores, and dry cleaning depots are found in neighbourhood and regional shopping centres as well as on commercial strips. As a result, it is a common assumption that these types of uses have alternative locations. Because the potential customers in

these different types of locations vary, it is not accurate to say that alternatives are available. If a commercial strip convenience use relocates to a regional shopping centre, for example, the owner must re-orient his business to a different clientele. Not all stores would be able to adjust to such a change.

Other uses commonly found on strips that appear to have alternative locations are general-purpose dry goods stores, such as jewellry, clothing, and shoe stores. For a variety of reasons these stores do not have alternative locations. Some are a product of the early part of the century when commercial strips served as comparison shopping areas. They often have operated at the same site for many years and depend upon customers who know where they are located. If this type of store were to relocate to a regional shopping centre, the old established clientele might be lost.

Other dry goods stores found on commercial strips offer specialized goods and services, catering to a specific clientele. While they may appear to be similar to shops located in regional shopping centres, they are very different in function. They rely on special-purpose customer trips, rather than upon the traffic generated by large department stores nearby, as is often the case in a regional shopping centre.

In brief, only a few of the businesses presently located on commercial strips have alternative locations. The majority of commercial strip businesses are on the strip because it is the best business location for them; they usually do not have alternative types of locations if they wish their business to remain the same. It is necessary to look beyond the actual type of business to such things as customer shopping patterns and trade areas to understand the character of strips.

Because few strip uses have alternative locations, it is expected that a demand for space on commercial strips will continue. The linear form of the strip, resulting from the needs of businesses for visibility and accessibility, as well as from the traffic patterns will continue in the future. Strips in the future will be composed of neighbourhood shopping centres, plaza developments, and specialized centres mixed with large space users and individual buildings. As is true today, the character of each strip will vary according to the type and volume of traffic on the major roadway, as well as the type of land uses surrounding the strip.

The specific locations and lengths of commercial strips should be planned in advance of demand, taking into account a

variety of factors. Special considerations include existing city plans and programs, land use inter-relationships, citizen views, and of course, the economic feasibility of the area for commercial uses. A variety of strip commercial locations should be available, in order to meet the varying locational needs of businesses.

CHAPTER THREE

THE AUTOMOBILE AND THE COMMERCIAL STRIP

The automobile is an integral part in both the form and the function of the Commercial Strip. One should realize that the present day commercial ribbon is very much the result of automobile-oriented activities and if the ribbon is to continue as a viable part of commercial retailing it must continue to encourage such activitiesto locate on the "strip". This chapter is an attempt to focus attention on the importance of the automobile in terms of; a) Urban Evolution, b)determining land values, c) roadside Advertising and Identification, d) Automobile-oriented Retailing, and e) Auto-oriented retailing on Retail Strips.

The Impact of the Car on Urban Evolution:

All over the world - from London to Los Angeles and from Cape Town to Copenhagen - the car has become the number one problem confronting urban and metropolitan authorities. Wherever access is possible the car has intruded, and wherever people have congregated the number of cars has continued to increase,(S.S.Morris).

developments offer different ranges of goods and services, different locations, and different amenities. If a person needs to have an appliance repaired, or if he is purchasing an automobile, he is likely to go to a commercial strip. If a housewife wishes to spend the afternoon shopping for a new dress, she will likely go downtown, or to a regional shopping centre, where she can have lunch and perhaps shop for other goods as well. The office worker coming home may pick up a loaf of bread at the corner grocery, rather than going to other grocery store locations. A variety of factors distinguish each type of commercial form from the other - no single variable is sufficient to "define" these areas.

Different commercial forms offer different opportunities for businesses, as well as consumers. Important variables include rent, amenities, location, exposure to passing traffic, potential customer markets, and degree of control. Planned regional shopping centres reduce problems of customer parking and site maintenance, if the business is willing to pay the rent. In addition, the centre helps small businesses attract customers, by optimizing the location of individual types of shops in the centre in advance, and by planning for large department stores that attract customers to the

The car has created a new way of city life. The old compact, tightly grouped, intimate town and city have become a symbol of a part era; they have been replaced by the teeming metropolis covering hundreds of square miles. Within the context of the vast concentrations of people and economic power that characterize the modern city, the car is no longer a luxury. It hasbecome an essential adjunct to modern living. Urban sprawl and suburban spread are manifestations of modern socity, and traffic congestion and its attendant problems, symptoms of the progress syndrone.

The task of urban planners, therefore, with reference to the car, is, and will continue to be, constantly to guide and encourage development along those paths considered most likely to provide the optimum physical, cultural, and spiritual environment for all people.

The Automobile and Changing Land Values:

The value of land under retail stores as well as in other types of land uses has been determined largely by the medium of transportation (Homer Hoyt). Land values for retail stores are highest where the greatest number of shoppers are brought to a market and where merchants can make the highest volume of sales

per square foot of store area.

Prior to the automobile revolution and before 1929, retail sales and land values rose to Mount Everest levels at the converging points of street cars and elevated lines, or at the meeting points of subway and railroad terminals (Homer Hoyt). In these 100% districts nearly all the great department stores were located and they were flanked by the array of women's and men's specialty clothing stores, shoe stores, variety stores, and other small specialty shops. From all points of the metropolitan area families came to this central point to shop for fashion goods, which were chiefly articles of apparel.

The automobile revolution did not register its full effect until after World War II, when as a result of almost universal car ownership and the movement to the suburbs, the new type of shopping centre arose, which provided free automobile parking in front of or around the stores. From 1946-1968 it was estimated that 10,000 of this new type of shopping centre had been constructed. They consisted of great regional shopping centres, neighborhood convenience centres, and community centres. In addi-tionto these three types, a new kind has arisen, the large discount

store, like K-MART, WOOLCO - which, with its own supermarket, or affiliated supermarket, is a complete shopping centre in itself.

FIGURE # 5

What has been the effect of these changes on land values in central retail districts and in the new shopping centres?

The final, justified land value in any shopping centre depends on the terms of the major leases, the cost of construction of the centre, the operating expenses, including real estate taxes, the interest and amortization rates, and the price paid for the land (Homer Hoyt).

The value of land in a shopping centre depends in the last analysis upon whether the stores attract a sufficient number of customers and realize the valume of sales which enables them to do a profitable business.

Roadside Advertising and Identification

Roadside advertising and identification present an extremely difficult and complex problem in the relationship between traffic and land use (Ronald Meadows). At one extreme there is the laissez-faire attitude toward these related roadside elements, which finally leads to self-defeating conflict and confusion, while at the other extreme their total prohibition tends to create visual austerity in certain areas. Furthermore, as all methods of advertising form an essential part of commercial enterprise, the total elimination of one important aspect, namely, roadside advertising, would be generally unacceptable. There is also a real need for the roadside identification of both products and services by traffic. It appears desirable that ways and means be

found to accommodate both roadside advertising and identification to ensure that the total road system is preserved for public benefit.

The service station, as a retail function of a moving public, namely, traffic, demonstrates the growing importance as well as the increasing difficulty in achieving identification of products and services by means of a symbolic image (Ronald Meadows).

At first cars were expensive, handmade novelties and consequently very few in number. The proud owner usually maintained and lubricated his own vehicle. Gasoline was sold both from and in containers, usually at the general store.

With the development and improvement in road systems and the introduction of pumps which could deliver gasoline in measured quantities from underground storage tanks, the curbside pumps became the first objects with which to identify various brands of the content. As these pumps were of a more or less standard design, it became essential that each corporation identify its own product by means of a distinctive standardized colour arrangement, shape, and brand name on the appropriate pumps.

With the increased use of the automobile, the curbside pump became inadequate and the now characteristic features of

service station pump islands with a forecourt area developed. As the market was still basically a captive one, positive identification of products and services was rarely considered in the initial planning and design of the station but was left to the supplying companies who advertised extensively over the area.

The most significant changes in overall design and identification of the service station occurred during the change from the system of multi-brand to one-brand marketing. The corporation, as opposed to the individual owner, was intent on identifying its own products. Personal exuberance and the current local architectual fashion became subordinate to the corporate image.

As the service station must be directly related to traffic for its viability, easy recognition and identification of the brand of products and services is imperative. With the increase in speed and complexity of traffic, this is becoming more difficult. Although great refinement and simplification are being displayed in the design of the symbolic image in order to gain speedy identification, its effectiveness can be nullified by the close juxtaposition of similar devices on adjacent lots and/or by being submerged by other advertising and merchandising displays within

and surrounding its own area.

One of the most satisfactory methods at present appears to be the transfer of distinctive colour patterns, brand names, and sign-writing to the building façade.

Automobile-Oriented Retailing:

The automobile began to have a major impact on retail form during the 1940's. Automobile-oriented retailing is of two basic types: uses which serve the automobile directly such as car dealerships, gas stations, and auto repair outlets; and stores which were built to be accessible to the automobile such as drive-in restaurants and the newer supermarkets. These uses are frequently interjected into the traditional retail strip, particularly in the stretches where development is less intensive(City of Toronto Planning Dept. 1972).

In the suburban areas where a large amount of development has occurred since the 1940's, automobile-oriented retailing frequently lines the street to form a new type of commercial strip. The degree of interdependence between stores is less than on the traditional strip, since the car gives the consumer greater mobility, and makes physical proximity less important to him when he makes his shopping choices. The concentration of stores on

these strips is caused by their mutual need for access to the traffic artery. Development is less intensive than on the traditional strip. Facilities tend to be surrounded by parking lots, and are set back from the road and sidewalk.

FIGURE #6

FIGURE #7

Auto-Oriented Retailing on Retail Strips:

Despite the widespread use of the automobile as a means of personal transportation, the actual activity of shopping remains primarily pedestrian - oriented. Shopping centres are adapted to this fact, and protect the shopper from the danger and nuisance of cars once he has left the parking lot. However, when auto-oriented retail outlets locate on traditional retail strips, they tend to detract from pedestrian shopping activity.

Since they are generally surrounded by parking lots and set back from the street and sidewalk, they break up the strip's physical continuity and intensity of land use. Since they require that cars cross the sidewalk in order to reach them, they increase the dislocative effects and danger to passing pedestrians.

FIGURE # 8

FIGURE #9

If very many such activities locate on a retail strip, the degree of disruption may be sufficient to dissuade pedestrian shoppers from going there, detracting from the viability of the entire retail district (Ibid p.7).

CHAPTER FOUR

Fieldwork Exercises

EXERCISE #1:

Points - Lines - Areas - A Basic Mapping Activity

"If it cannot be mapped it is not Geography."

Very often geography courses are begun by having students do map work. Mapping is not only a valuable skill but it also serves as a good way of putting the class in perspective. It provides a semblance of organization in the class and also provides an opportunity for questions and discussion. What better way to introduce students to urban field work than to have them do a simple mapping exercise.

This exercise is designed to have students represent things on a map by using points, lines, and areas.

Preparation (in class):

A. Students are informed that many things can be represented on a map by using points, lines, or areas.

e.g. i) A point is a small object represented on a map by a dot. It is used to represent a location without dimension. An example

would be a mailbox.

ii) An area is a space with a marked boundary. It must be large enough on the map so that its boundaries can be seen. An example is a parking lot.

iii) A line is used when the objects being mapped are arranged in a continuous line. An example would be a street or highway.

B. Students are then asked to provide examples of objects that can be mapped by using points, lines, and areas. Some examples that might be given are:

Points	Lines	Areas
Mailboxes	Bus routes	Parking lots
Taxi Stands (signs)	Streets	Commercial areas
Fire hydrants	Hydro lines	Retail areas
City garbage containers	Telephone lines	Vacant lots
Bus stop signs	Sidewalks	Industrial areas
Hydro poles		
Telephone poles		
Advertisements		

Fieldwork - The collection of data:

A fieldwork exercise can then evolve where students are given a study area (i.e. Boulevard DesOrmeaux to Rue Leblanc) and told to map all objects that can be represented by points, lines, and areas. Students would be grouped and assigned points, lines, or areas and it would be decided what they would map.

Each student would be provided with two outline maps of the study area and would be responsible for mapping two similar representations - two points, two lines, or two areas. (Do only one per student if time is a problem).

Presentation and Analysis of Data:

The class can now prepare generalized maps on which they show all the objects in the study area that can be represented by points, lines, or areas.

A discussion and examination of the maps should indicate that there is a particular arrangement to all these mapped objects. They have a distinct linear form. This enables students to see the particular arrangement that exists on a commercial strip. Now that they are aware of this the next point of discussion is - "With such a particular linear arrangement who uses the strip?" (Exercise #2)

FIELD STUDY AREA

MAP # 1

MAIL COLLECTION &

STORAGE BOXES

EXERCISE #2:

"Who Uses the Commercial Strip"

There seems to be much confusion as to what are the true functions of a commercial strip. The great variety of functions on commercial ribbons and the considerable differences in functional balance between one such street and another can be attributed to the fact that they present desirable locations to a wide range of establishments.

Since the ambiguity over the functional makeup of a commercial ribbon is increased by the existence of a variety of definitions used to delimit such streets perhaps it is advisable to adopt the idea of Ratcliff who says that the nature of the uses comprising these commercial ribbons depends upon the extent to which the street is a main automobile artery and the degree to which it is the core of a residential area.

The intent of this fieldwork exercise is to provide a suitable and practical means of testing the function and character of a commercial ribbon. The following sample, although based on a previously mentioned portion of Chemin Chambly, should be useful in examining the functional makeup of any commercial ribbon. The exercise provides a workable hypothesis, a method of testing the hypothesis,

ideas for data collection, description and analysis of the data, and some follow-up suggestions.

Preparation (In Class):

Use this exercise after the mapping exercise (#1) and it logically follows that "Who Uses the Strip" be the next topic of discussion. As preparation for discussion and a fieldwork exercise students could be given the following sheet to fill out:

"Shopping Areas Available"

A. The local Neighbourhood Shopping Area: This type of shopping facility exists in most communities and can range from a corner store to a fair size shopping centre. It serves the immediate needs of the local residents and it is unlikely to draw customers from any other area.

i) Name some local stores in your community.

ii) What do they sell?

iii) Why and when are you or your parents most likely to use them? Explain.

iv) How far do you have to travel to get to the local shopping area? (Blocks)

v) How do you travel? (Explain...i.e. does your mode of travel depend on what you are shopping for?)

B. The Downtown Shopping Area: This is the downtown area of any city and is the main shopping area (St. Catherine Street). This area contains the major stores and often top quality goods, It often requires travelling a distance and involves a day-long shopping trip.

i)Name some stores in the Montreal downtown area.

ii) What do they sell or specialize in?

iii) How often do you use these stores?

iv) Why would you use these rather than the other two?

v) Do you go by car, bus, or metro?

C. The Commercial Strip Shopping Area: This is a linear arrangement of stores and businesses along a major roadway. It can vary in length from one block to several miles. There are retail stores, services and offices. (Example- Tashereau Blvd. in Greenfield Park.)

i)Name some stores found along this strip.

ii) What do they sell?

iii) Why does this type of area attract customers?

iv) Can you name any other commercial strip?

D. Comparison of Shopping Areas:

i)Which shopping area draws from the smallest "customer shed"? (Why?)

ii) Which shopping area draws from the largest "customer shed"? (Why?)

iii) Which one are you likely to walk to?

iv) Which one are you likely to take public transport to? (Why?)

v) Which one are you likely to take a car to? (Why?)

vi) If you needed to get something done to your car, which one might be the best choice?

vii)What are main advantages and attractions of commercial strip shopping areas?

viii) Is the commercial strip shopping area more dependent on auto-oriented customers than the other two?

Preparation (In Class) cont'd:

Discuss the specific differences that the commercial strip has and based on answers to questions and class discussion formulate a hypothesis.

Hypothesis:

Chemin Chambly functions as a main automobile artery rather than the core of a residential area.

An in-class discussion would decide on what would be considered directly related to the car and what would likely be to serve the residents who live in the immediate area. Some possible answers from pupils might be:

Chemin Chambly - A traffic Artery	Chemin Chambly - Residential Core
Service Stations	Drug stores
Accessory Shops	Grocery stores
Auto dealer	Dry Cleaners
Quick Lunches	Hardware stores
Fruit Stands	Pool Halls
Drive-in Banks	Taxi Stands

Fieldwork - The Collection of Data:

Students should be bussed to the site, Chemin Chambly and boulevard Desormeaux and two groups of two students should be dropped off at determined locations so that each group can cover its allotted

sector. (Two groups of two students at each location allows both sides of Chemin Chambly to be covered at once.) Each pair of students must identify the businesses in their designated area which relate directly to the automobile or the residential area. Each pair of students might be equipped with a simple tabulation sheet such as the following:


PERKINS

DATA COLLECTION SHEET

Businesses Relating directly to the Automobile

AREA COVERED	SERVICE STATIONS	ACCESSORY SHOPS	CAR DEALERS	QUICK LUNCHES	FRUIT STANDS	DRIVE-IN BANKS	TOTAL

Businesses Relating directly to Nearby Residents

DRUG STORES	GROCERY STORES	DRY CLEANERS	HARDWARE	POOL HALLS	TAXI-STANDS

INSTRUCTIONS: When you are in the field collecting the data, remember that all you need put on your data collection sheet is a tick (✓) mark every time you see a service station, a drug store, a hardware store etc. All you are doing is a count.

Presentation and Analysis of Data:

When the students have returned to class one of the first tasks is for each pair to enter their counts on an enlarged data collection sheet. (Such a sheet might simply be drawn on the blackboard.) Each pair of students is then responsible for arriving at a total for each business and recording the total on a fresh copy of the Data Sheet. (See example)

DATA COLLECTION SHEET

Businesses relating directly to the automobile

AREA COVERED	SERVICE STATIONS	ACCESSORY SHOPS	CAR DEALERS	QUICK LUNCHES	FRUIT STANDS	DRIVE-IN BANKS	TOTAL
Total: Boul Des Ormeaux to rue Leblanc	19	8	5	17	2	1	52

Businesses Relating directly to Nearby Residents

AREA COVERED	DRUG STORES	GROCERY STORES	CLEANERS	HARDWARE	POOL HALLS	TAXI STANDS	TOTAL
Total	4	4	3	1	1	4	17

Since Chemin Chambly is relatively straight from Boulevard Des Ormeaux to la rue Leblanc students can also prepare linear maps of their own area. (This might be done during the fieldwork.) On these maps they record the number of occurrences for each type of

business. This data should then be transferred to a Master map.

NOTE: Make sure that a set of symbols has been agreed upon.

Students should be asked to total the number of businesses recorded and to calculate the percentage that are directly auto-related and the percentage that are resident-related. The results can be graphically shown with a Circle Graph. The data that has been collected can also be shown on a Bar Graph in order to give another visual impression of the number of occurrences.

Time should now be devoted to "data contemplation". (Crawford p. 10). Students have now tested their hypothesis and perhpas discussion could now evolve around "Why" the auto-related businesses outnumber the resident-related ones.

Students may consider whether they had the best possible classification of businesses and they might explore the idea of the validity of their hypothesis had they simply recorded all the businesses that are along the study area.

Their maps and visual impression of the field study area might lead to discussion of the location of certain types of businesses - reference their concentrations and the particular side of Chemin Chambly where the businesses are found.

EXERCISE #3

"What kinds of stores or retail outlets are likely to be found on the Commercial Strip?"

Travelling on foot, by car, or by bus along a commercial ribbon one sees examples of almost every type of retail establishment. You are likely to see large shopping centres, car lots, fruit stands, medical buildings, tool rentals, furniture stores, dry cleaners, snack bars, funeral parlors, brasseries, and on and on. This exercise is an attempt to have students realize the kinds of stores that one finds on a commercial strip and how to deal with large numbers of stores.

Briefing (In Class):

Show the students the accompanying set of eight (8) slides and on the sheet "Likely Locations for Stores", have them name and indicate the location of the store in each slide. On completion of this short exercise a discussion should take place as to their particular choice of store location. (Sheet to follow)

"LIKELY LOCATIONS FOR STORES"

PHOTO	DOWNTOWN	NEIGHBOURHOOD	COMMERCIAL STRIP
1			
2			
3			
4			
5			
6			
7			
8			

Fieldwork:

Chemin Chambly, from Boulevard Des Ormeaux to Leblanc, is identified as the study area and students are given linear maps of the same. They are instructed to walk the length of the study area and to record all of the businesses, stores, and land uses that they see. They should do both sides of the street. (If it is difficult to record on the maps while in the field, simply have the students list the businesses, land uses, and stores on sheets of foolscap indicating their location by simply putting in streets when the sheet is full and beginning another.)
NOTE: See Appendix for total listing of all businesses in field study area.

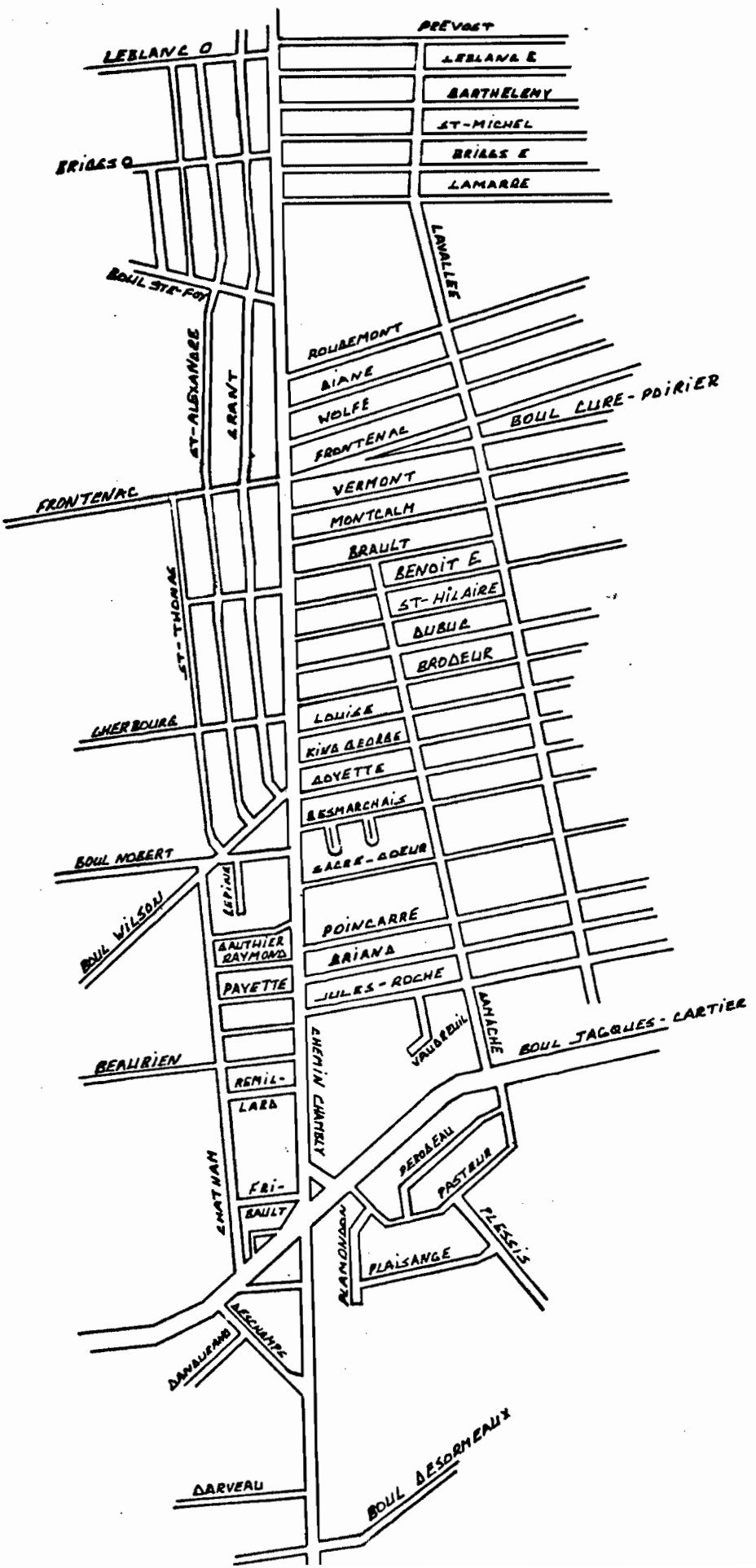
Analysis and Presentation:

An attempt to present this seemingly endless line of businesses might suggest that there is a need for classification.

Present the students with two systems of classification; 1) the system used by Brian Berry in 1963, and 2) the city of Toronto Planning Board System used in 1976.

FIELD STUDY AREA

MAP # 2



TORONTO PLANNING BOARD SYSTEM - (USED IN 1976).

RETAIL TRADE CLASSIFICATION

I FOOD GROUP

1. Bakery products stores
2. Candy, nut stores
3. Confectionery stores
4. Dairy products stores
5. Egg and poultry stores
6. Fruit and vegetable stores
7. Grocery stores, without fresh meat
8. Combination stores (grocery stores, with fresh meat)
9. Meat markets
10. Fish markets
11. Food stores, with other merchandise
12. Other food stores
13. Delicatessen stores

II GENERAL MERCHANDISE GROUP

1. Department stores
2. Mail order offices or houses of department stores
3. Non-department stores
4. General merchandise stores
5. General stores (more than one-third foods)
6. Variety stores

III AUTOMOTIVE GROUP

1. Automobile dealers
2. Automobile dealers, with wholesale car departments
3. Automobile dealers, with farm implements
4. Used car dealers
5. Accessories, tire and battery shops
6. Second-hand parts and accessory shops
7. Service stations
8. Garages
9. Paint and body shops
10. Other specialty repair shops
11. Car wash
12. Automotive business not elsewhere classified

IV APPAREL AND ACCESSORIES GROUP

1. Men's and boys' clothing and clothing and furnishings stores
2. Men's and boys' furnishings stores
3. Men's and boys' hat stores
4. Women's ready-to-wear stores
5. Lingerie and hosiery stores
6. Milinery stores
7. Furriers and fur stores
8. Accessories and other apparel stores
9. Children's and infants' wear stores
10. Family clothing and furnishings stores
11. Men's shoe stores
12. Women's shoe stores
13. Children's and infants' shoe stores
14. Family shoe stores
15. Custom tailors
16. Made-to-measure clothing
17. Second-hand clothing
18. Piece goods stores
19. Miscellaneous apparel and accessories stores

V HARDWARE AND HOME FURNISHINGS GROUP

1. Hardware stores
2. Hardware and farm implement stores
3. Paint, glass and wallpaper stores
4. Furniture and undertaker stores
5. Furniture stores
6. Household appliance stores
7. Television sales and service shops
8. Furniture, television, radio and appliance stores
9. Television, radio, piano and music stores
10. TV and radio repair shops
11. Household appliance repair shops
12. Electrical supply stores
13. China, glassware and kitchenware stores
14. Floor coverings, curtains, upholstery and interior decoration stores
15. Linen stores
16. Antique shops
17. Second-hand furniture shops
18. Miscellaneous home furnishings stores

VI OTHER RETAIL STORES GROUP

1. Drug stores, without restaurant
2. Drug stores, with restaurant
3. Patent medicine and perfume stores and proprietary stores
4. Fuel dealers (other than oil)
5. Fuel oil dealers
6. Ice dealers
7. Florists
8. Luggage and leather goods stores
9. Tobacco stores and stands
10. Newdealers
11. Book and stationery stores
12. Artists' supply stores
13. Camera and photographic supply stores
14. Music stores
15. Gift, novelty and souvenir shops
16. Jewellery stores
17. Jewellery repair shops
18. Sporting goods stores
19. Bicycle shops
20. Boats, outboard motors, boating accessories
21. Motorcycle dealers
22. Pet shops
23. Monument and tombstone dealers
24. Religious goods dealers
25. Opticians
26. Health appliance stores
27. Government liquor stores
28. Brewers' retail stores
29. Wine stores
30. Hobby shops
31. Toy shops
32. Record bars
33. Bicycle repair shops
34. Wool shops
35. Miscellaneous stores

Brian Berry Classification (1963):

The System of Classification is as follows:

1. Large Shopping Centres:

Each business in this group is located centrally with respect to the maximum number of customers it can serve. Functions such as grocery stores, barber shops, variety and clothing stores, and department stores locate in these centres. These particular functions cluster because customers tend to shop from store to store during a given shopping trip.

2. Businesses that serve Highway Demands:

This group consists of service stations, restaurants, and motels and they serve demands originating on the highways. These businesses are seldom related one to the other because most trips to them are single-purpose trips.

3. Businesses that serve Home Demands:

These establishments are usually associated with special single-purpose trips with little customer come-and-go between them. Examples are furniture and appliance stores, automobile repair shops, radio-T.V. sales and service establishments, and plumbing shops.

4. Businesses that are directly related to each other:

These are businesses that tend to locate very near each other because usually the activity of one is closely related to that of the other. Some examples are dealerships in new and used cars, doctors and pharmacies, dentists and X-ray technicians, banks and finance companies.

Students should now be given outline maps of the study area and they should record all the businesses, stores, and land uses.

They should then apply each system of classification to the study area.

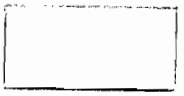
Encourage discussion about the following points:

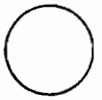
i) Which appears to be the best system?

ii) Which gives the truest picture of the selected study area?

iii) Is classification a viable way of examining what kind of stores are found on the commercial strip?

Students should then be encouraged to develop a system of classifying their collected data. Suggest that they devise a system using Venn diagrams.

Example:  - the universal set of all stores or businesses on the commercial strip.

 - represent particular groupings of stores - use letters A - food, ...

- do this type of classification for all of the collected data.

On completion of their own classification they should be asked to discuss such things as

i) Are there any intersecting sets?

ii) If so, what stores are in these sets?

iii) What do the intersecting sets identify about these stores?

EXERCISE # 4

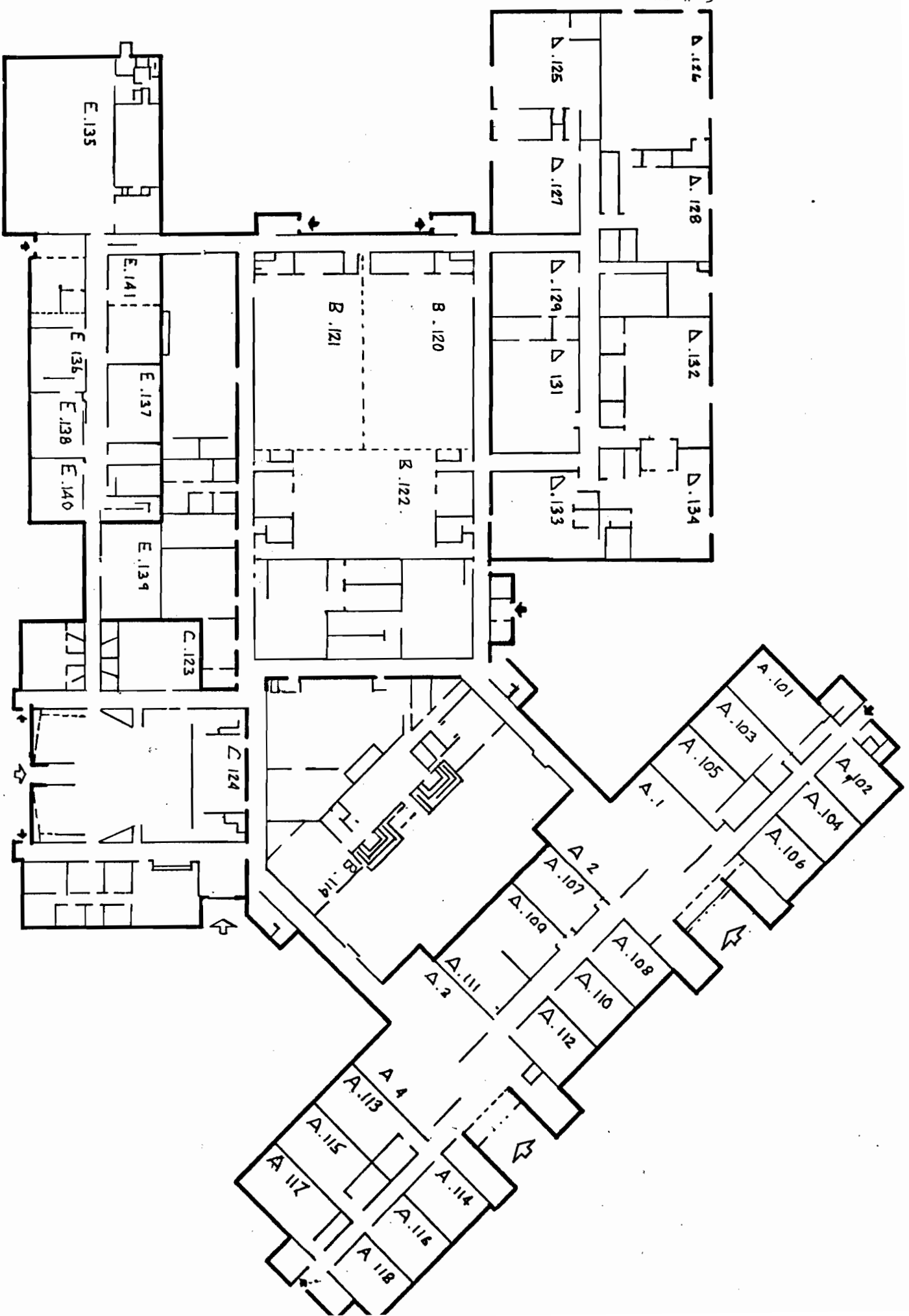
"Business Clusters"

The shopping centre is a place where many people spend a great deal of time. For some it serves as a place to buy food and clothing. For the young it often serves as a socializing place, while for others it is an area where they are content to brouse. Certainly if there is such a centre near the homes of your students you can be sure that much of their spare time is spent there.

I suspect that the amount of time spent in the shopping centre does not necessarily indicate an increase in awareness of the particular arrangement of the stores. Many people are only able to name a few of the stores in the centre - those that they make particular use of. In many instances there is probably hardly more than a vague awareness of the shops on either side ofthe ones they commonly use. It is certain that little or no thought has been given for the particular location of stores and shops. This is itself provides sufficient reason for an exercise to investigate the arrangement of stores in a shopping centre.

Briefing (In Class):

Give each student a copy of a room-usage map for their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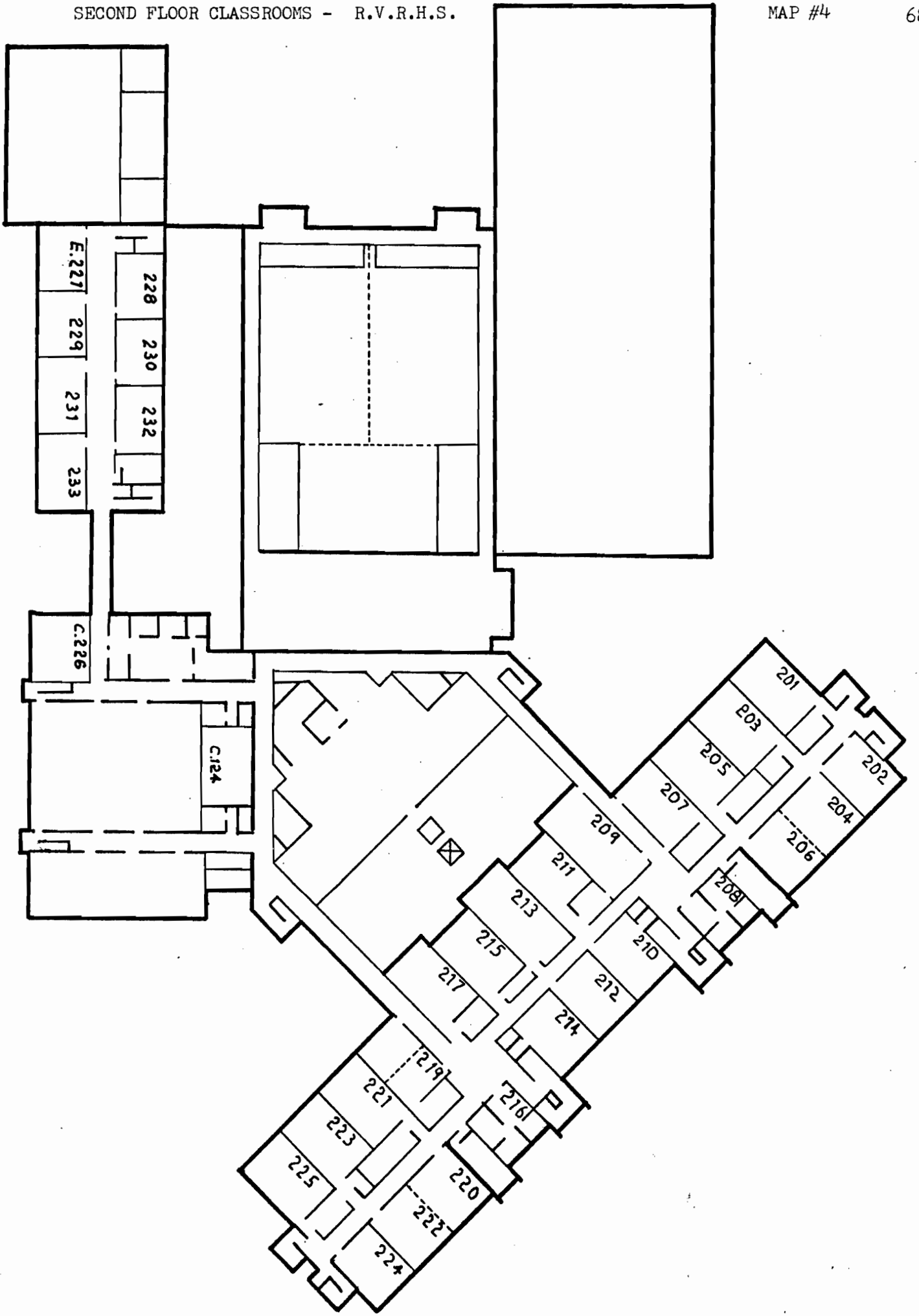
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Subject	Room
Science	221
Humanities	110
History	112
Art	129
Auto	126
French	115
Mathematics	102
English	224
English	231
Humanities	138
French	211
French	223
Mathematics	103
Commercial	215
Humanities	137
History	207
French	232
History	206
Art	131
Commercial	229
English	220
Home Economics	107

Subject	Room
French	202
Commercial	213
Mathematics	104
Mathematics	106
Humanities	108
Home Economics	111
Science	203
French	225
French Immersion	228
Mathematics	105
English	222
Mathematics	210
English	230
Mathematics	101
Geography	209
Biology	201
English	116
Science	217
English	233
French	117
English	212
English	118

Subject	Room
English	114
French Immersion	227
Science	204

school and have them fill in the room occupance by subject or department. If a room has more than one subject use the subject that dominates. (A simple way, if possible in your school, is to indicate room usage by homeroom.) To get a good visual impression use different colours to indicate either subjects or subjects taught by departments.

When the map is completed have the students examine the room allocation by subject or department.

The arrangement is likely to be that subjects or departments have rooms in clusters. There will of course be exceptions. Discuss the reasons and advantages of classroom clustering.

Encourage students to provide other examples of clustering. Some possible answers that might be given are:

i) House styles in suburban developments,
ii) Students waiting for buses in parking lot,
iii) Department stores in a downtown area,
iv) People on a beach,
v) Stores in a shopping centre.

Hypothesis:

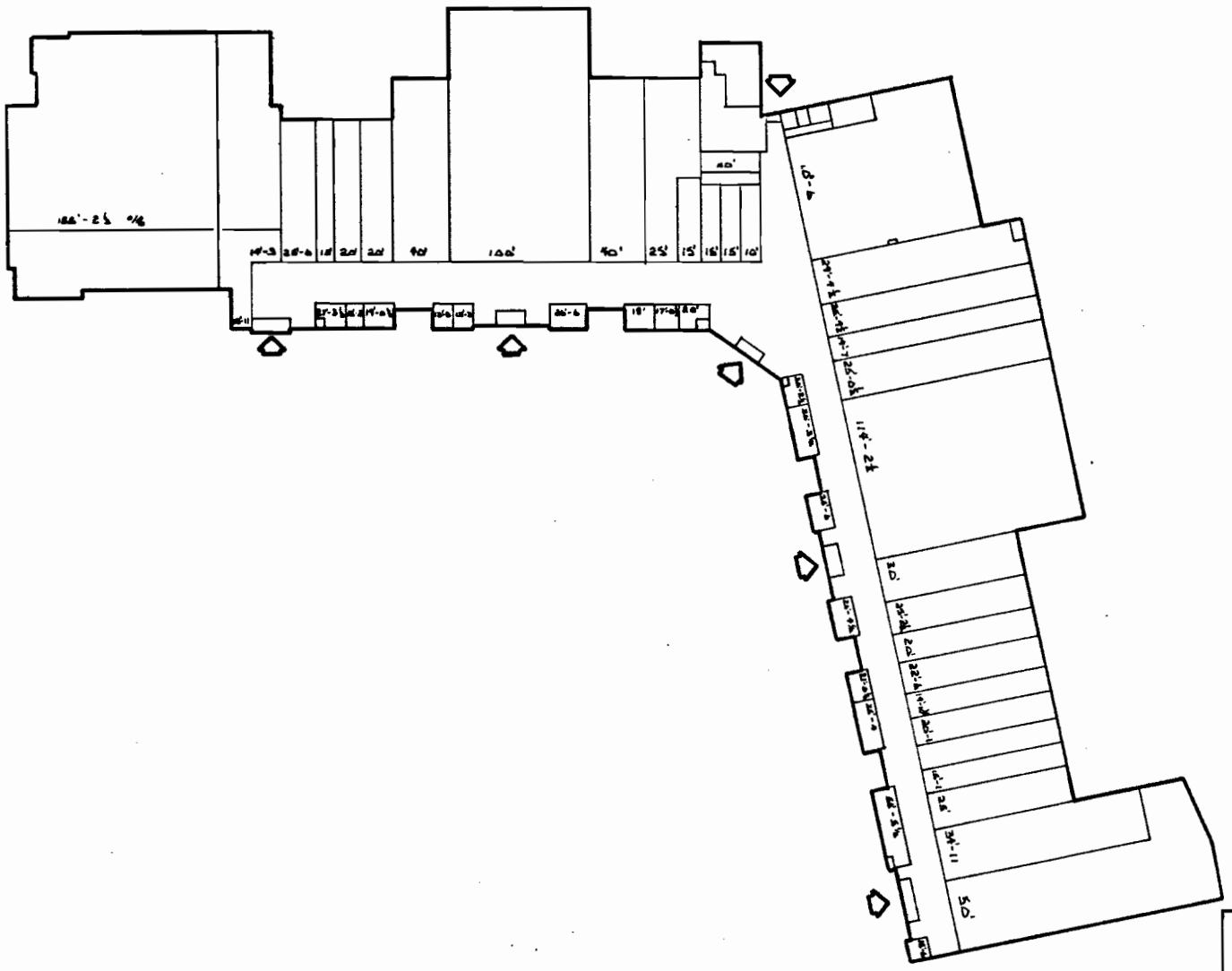
Stores which sell related goods or provide related services are clustered in a shopping centre.

Data Collection - Fieldwork:

i) Each student is provided with an outline copy of the floor area of the shopping centre. (See sample for Place Jacques Cartier.)

MAP #5

73

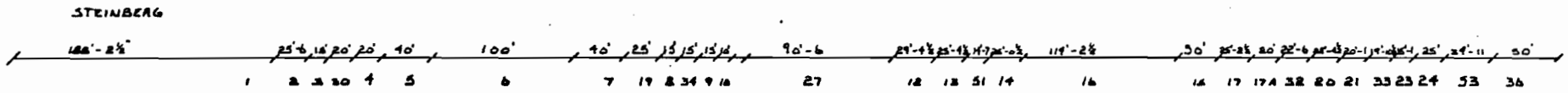


JACQUES CARTIER SHOPPING CENTRE

BRUNING 40-21

74

MAP # 6



LINEAR MAP. PLACE JACQUES CARTIER

BRUNING 40-21

ii) Using four colours, their maps are to be completed similar to those displayed in the Mall area of the shopping centre.

iii) With each store or business they are to note the chief service provided. (i.e. Steinbergs - food store, Harts - clothing.)

Data Presentation and Analysis:

i) Use a large copy of the Shopping Centre Map and construct a master copy of floor usage in the shopping centre. Indicate on the map the main function of each store or shop.

ii) Examine the distribution of stores in the shopping centre.

iii) Provide students with a linear map of the shopping centre.

iv) Have them mark the distance from the centre of each shop to the nearest similar one. (Store frontage measurements are provided on the map.)

v) The Nearest Neighbour Analysis test can be used to see whether the stores are clustered, random, or equally distributed.

$$R_n = 2\bar{d}\sqrt{\frac{n}{a}}$$

$\bar{d}$ = mean distance between points
n = number of points
a = area of floor (See map in folder)

Values of R_n range from:

0 if the points are clustered

1 if the points are random

2.15 if the points are maximum spaced

Although the Master Copy that the students complete will give a visual impression of clustering, the nearest neighbour test gives a true indication of the pattern of store distribution in the shopping centre.

Debriefing (Topics to be discussed.):

i) What stores do arrange in clusters?

ii) Is this arrangement necessary?

iii) Is this arrangement likely to have any effect on the rental value of the store?

iv) Does this arrangement provide an advantage for the customer or the store or both?

v) Is this arrangement likely to have any effect on the architectural design of shopping centres?

EXERCISE #5

"The Gas Station Image"

As suburban dwellers we sometimes fail to realize the importance of the automobile. We accept it as a daily necessity in our lives and overlook its affects around us. On a day to day basis we see highways, parking lots, garages, service stations, and car dealers and we hopefully pass the later by, with a sigh of relief.

In the past twenty-five years, the automobile has greatly increased individual mobility and has become a very pervasive force in changing our cities. Yet analysis of land uses within cities rarely discuss automobiles, and zoning by-laws and other control mechanisms at the municipal level have not yet become specifically cognizant of the needs of the automobile-oriented public.

As public use of the automobile increases, the range of facilities that are oriented toward this private means of transportation increases. In fact, it has been estimated that over 3/4 of all retailing in many cities involves the direct use of the auto.

A commercial ribbon provides an ideal location to examine how business has not only become auto-oriented but also located to

take advantage of the mobile consumer.

This exercise is simply designed to have students note the exact location of service stations and to rate the locations in terms of their value to people who travel daily to and from work by car.

A Classification of Service Stations:

For the purpose of rating the service stations the following locations should be examined (Claus & Hardwick).

NOTE: Only after doing perception exercise, should they be examined.

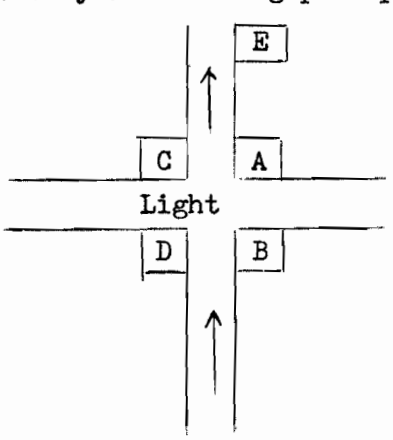


Figure # 1

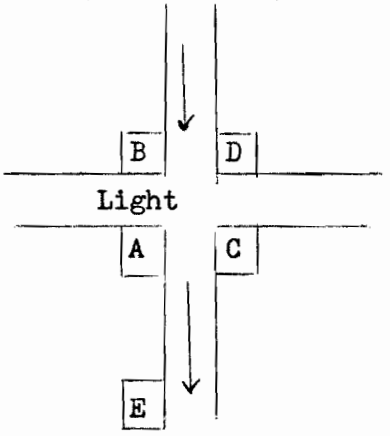


Figure # 2

Figure #1 illustrates four (4) possible locations for gas stations at a main intersection and a fifth (E) at the end of a tributary street running into the main route. If the direction of the

traffic is reversed the locations appear as shown in figure #2. If the traffic is two way, as it is on Chemin Chambly, then figure #2 can be superimposed on figure #1.

Research (Claus, Hardwick) has shown that values can be assigned these five locations in terms of traffic direction and customer preference.

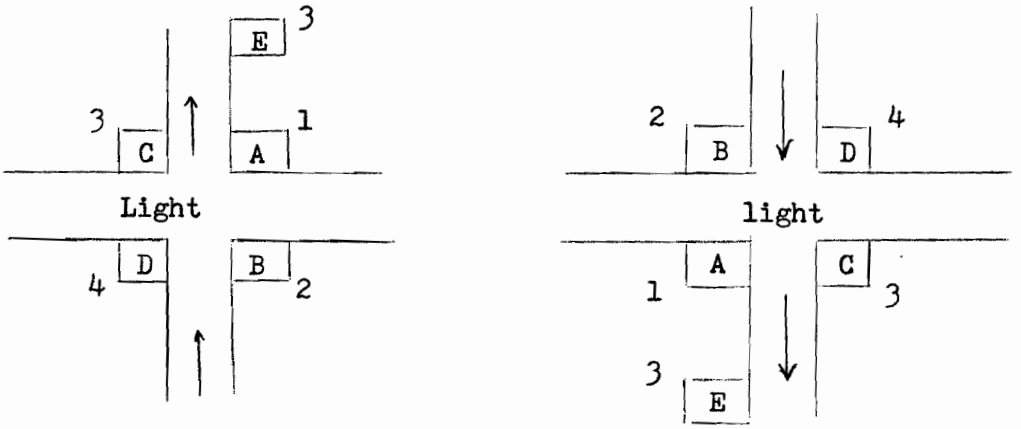


Figure #3

Site "A" gets the top value (1) because it is in the preferable location for customers stopping for gas. This is a "far-corner" location which can only be reached by crossing the main intersection. The highest rating is given because of high visibility due to street width and because ingress and egress are easy due to the break in traffic. The chief disadvantage comes from low volume sales if the "near-corner" site has heavy "turn-around" traffic.

Site "B" gets value (2). This is a "near corner" location which can be reached before crossing the intersection. If a large portion of the traffic turns right at the intersection the location is referred to as a "turn-around" corner. The advantages of this location are that it is the first station at the corner and if a right hand turn is allowed, then it draws from two corners. The location has disadvantages in visibility, ingress is hindered by traffic signals and egreee becomes difficult during heavy traffic.

Site "C" is assigned value (3). This is "near-corner diagonal" site. It can only be reached by crossing through the traffic and the intersection. The disadvantage is apparent and any advantages that exist would not be in terms of location but rather in that of low priced gas etc.

Site "D" is assigned value (4). This is a "far-corner diagonal" site and can be reached by crossing the traffic before the intersection. It does not seem to have any advantages for traffic going in this direction and the disadvantages are many.

Site "E" is assigned value (3) because it has approximately the same values and disadvantages as Site "C". This is a "tributary street corner" location. The chief disadvantage here is that the

station is not at an intersection and so to gain entrance the regular traffic flow must be broken.

Pre-fieldwork Activity:

Gas stations, like other businesses, are located to attract customers. Customers, on the other hand, are attracted because they are loyal to a particular brand, their gas tank is empty, they are in need of fuel and a car wash, or because a particular station catches their fancy. The driver often unconsciously rates a station by a first glance and this may determine whether he will buy gas there or not. When locating stations, the gas companies are well aware that the customers perception of the station will play a substantial part in sales and so they attempt to make stations aesthetically pleasing.

Give each student a "rating" sheet and ask them to rate the 12 photos of service stations on a 1 to 5 basis. They should be encouraged to comment on their ratings.












PERCEPTION OF GAS STATIONS

PHOTO	RATINGS 1	2	3	4	5		COMMENT
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Hypothesis:

A greater number of gas stations along Chemin Chambly are located to take advantage of the "going-home" traffic.

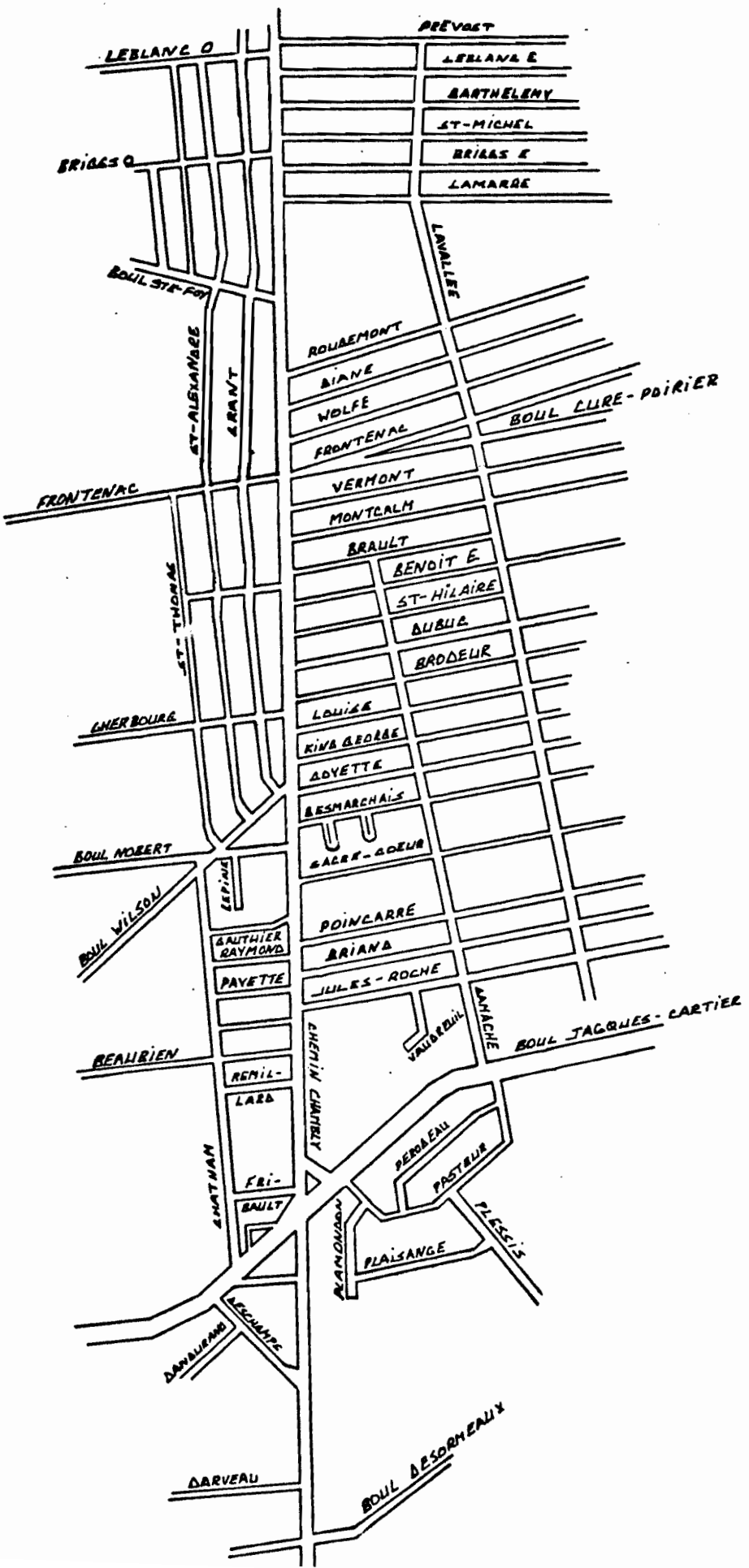
Data Collection (Class Preparation):

The field study area is defined as the segment of Chemin Chambly from Boulevard Des Ormeaux to Rue Leblanc. Students must become familiar with the above methods of classification and traffic direction should be clarified. Traffic moving from Boulevard Des Ormeaux to Leblanc is likely heading towards the Longueuil Metro or one of the bridges to Montreal. Traffic moving the other way is considered as "home-going" . Students need to be equipped with paper and a clip board for sketching locations.

Data Collection - Fieldwork:

When the students are taken to the field area half should be dropped off at each end where they can move from individually or in small groups by time intervals. This allows them to map the gas station locations in both directions. They should map the locations of all gas stations on both sides of Chemin Chambly. They should note any special gimmicks such as cheaper gas, gifts, or car washes for those stations located in "E" positions. Be sure to have students

FIELD STUDY AREA



indicate traffic lights at intersections where they exist. All of this data can be recorded on sketch maps. Students should remain at each station for a few minutes and on their sketch maps they should record the number of people that have stopped for gas.

Data Presentation and Analysis:

In class the students are now faced with the task of presenting and analysing their data. I would suggest that a master map be prepared to show the location of all gas stations. Have the master map reduced to stencil size and each student should receive three copies. On one copy he/she recopies the data from the master map, on the second copy he/she assigns the values for gas station location for traffic going to work and on the third, the values for "home-going" traffic. Each student should count the number of occurrences and record them in tabular form. (See sample.)

VALUES	1	2	3	4
# occurrences "to work"	3	1	8	2
# occurrences "going home"	2	8	1	3

*Figures (# of occurrences) were taken from count made on field trip. See Appendix for data.

An examination of the compiled data does verify the hypothesis. In analysing the data students should be encouraged to give reasons for:

i) why there are such a number of value (2) locations for "going-home" traffic;

ii) why the stations values need not necessarily arrange themselves in reverse just because the direction of the traffic has changed, (Prizes, cheap gas, dry goods, car wash...);

iii) the effect that "self-serve" stations has had on the whole idea of locating gas stations.

CHAPTER FIVE

SUMMARY

My chief intent in writing this monograph was to present material that is readily usable in the classroom and material that was easily adaptable. There is little doubt of the need for urban fieldwork exercises as the focus of attention is concurrently shifting from rural to essentially urban problems (Chisholm, p. 182). The need is also there for students to become more aware of their own environment.

The material that was presented in the exercises was toward the lower cognitive level because in my opinion the organization of field activities and carrying them out is sufficiently difficult (Everson). Potential users are less likely to become turned-off if they see a simple practical exercise which they can carry out. Our educational system has geography as an optional subject therefore in many cases the ability level of our students is such that very complicated, difficult fieldwork would not serve the purpose. I feel that the use and the effectiveness of these exercises will come from the fact that they are simple in what

they are attempting to show. The student should be able to see a result in a relatively short period of time.

If students are encouraged to participate in one, two, or all of these exercises they cannot help but become more aware of the effect that the automobile has had. They will become aware of higher level concepts such as location, spatial distribution, areal association, and spatial interaction. They cannot help but be more aware of the arrangement of their own natural environment. Concepts can be taught if suitable techniques are developed.

I am fully aware that these exercises in particular, or urban fieldwork in general are not guaranteed to make converts out of students but it will at least make them more aware of what they see everyday. They may not agree that the "far-cornered" location is the best for a gas station but at least they are now aware that such a preference does exist. They are not likely to change their opinion of the function of a clothing store but the particular location of the store in terms of which it is situated in the immediate area may be noted. They may now see another advantage to shopping centres being located back from the street and having large parking lots. It is possible that the car park has a place for their car, provides space for the customers of the shopping centre, and also indirectly has an effect on the land

value across the street.

Any reference that I have made in the first chapter of the monograph to rural fieldwork and the approaches often associated with it should have been taken seriously by the reader. For the faithful practionner of this method I certainly do not expect to be the one responsible for their conversion both to urban fieldwork and to the field research method. I would hope that the method suggested in this monograph be tried and then evaluated.

There are two "material" chapters in this paper, one on the commercial strip and the other on the effect of the automobile. These were meant primarily as background material for the teacher and certainly not as sources for factual material to be given in "old" geography classes. The material used in these chapters may provide source material, may generate ideas, and may hopefully give the teacher sufficient thoughts on which to generate an awareness of a commercial strip. The chapter dealing with urban fieldwork is hardly more than a precis of what has all been said before while the chapters dealing with the commercial strip and the effects of the automobile contain previously researched academic material.

In final summary I wish to stress that my major concern throughout this monograph has been the five fieldwork exercises that I have presented. This has resulted from my experience as a practicing geography teacher and my knowledge that teachers do not want to be told what they should do, they need to be shown how it could be done. They will be interested in the theoretical aspects only if they can see practical examples of its application which they themselves can use. With this in mind the exercises in this monograph can be used almost exactly as they were written for the suggested field area or with a few changes they can be altered to fit a somewhat similar environment.

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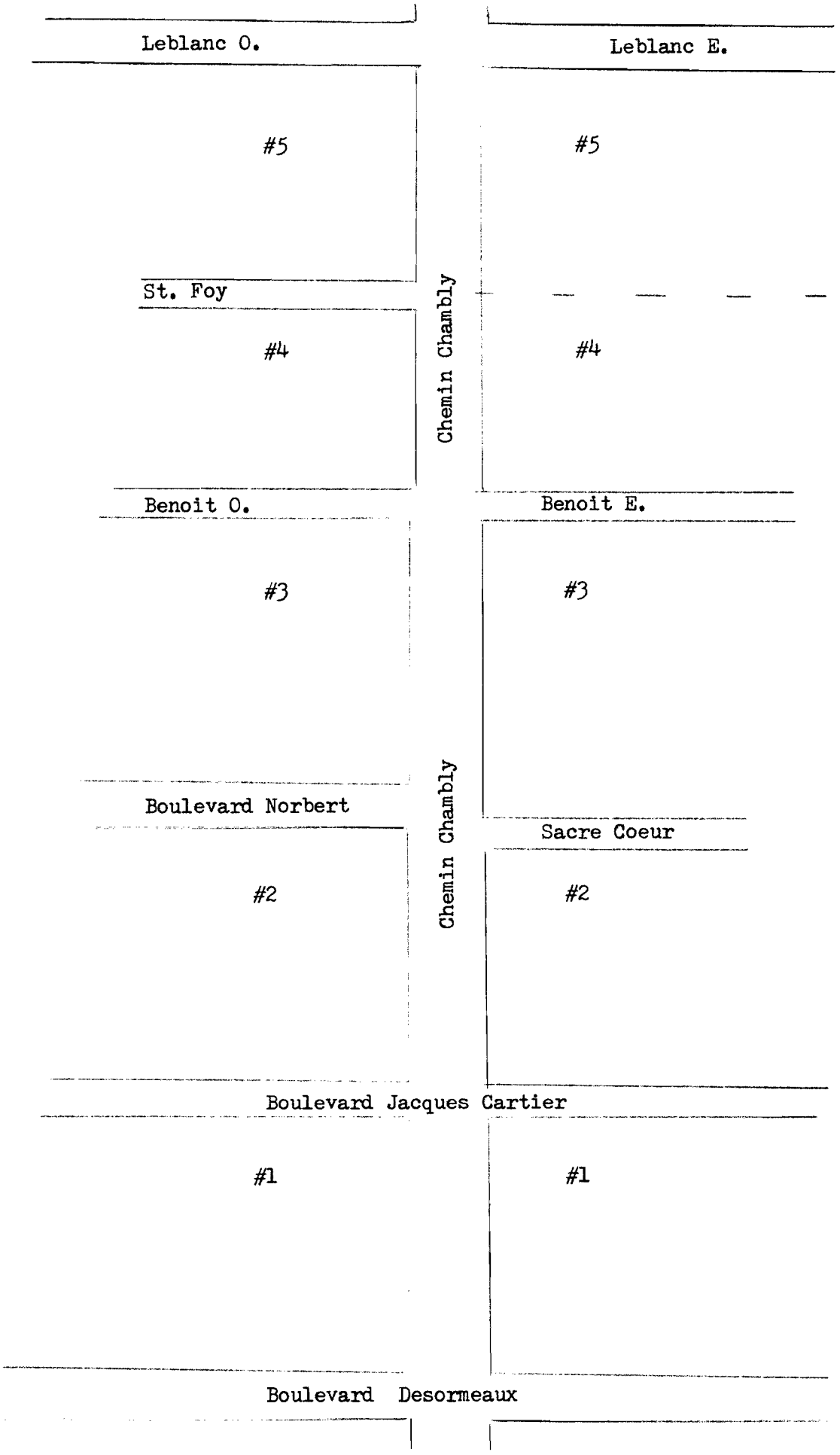
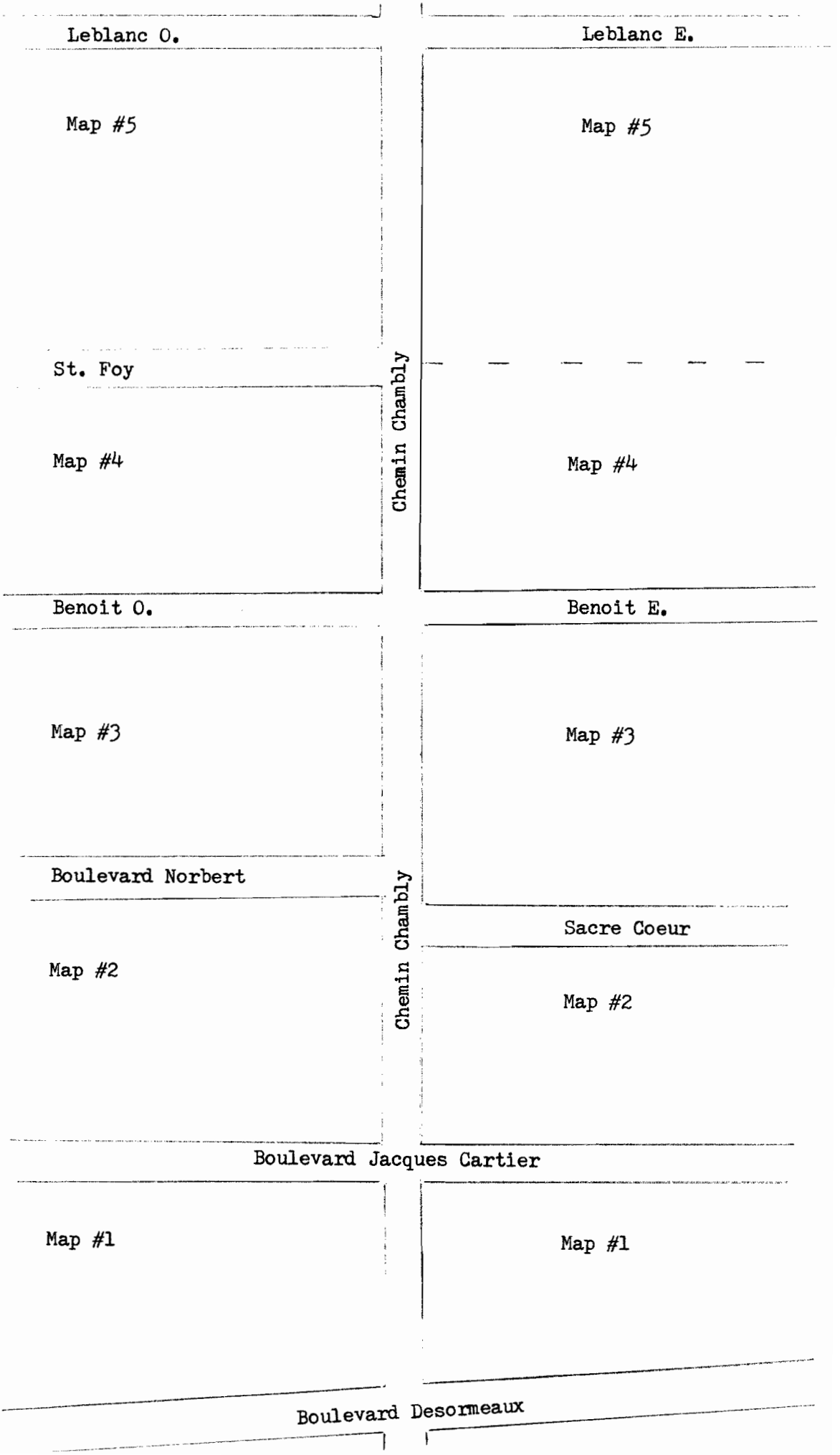
SUGGESTED DIVISIONS FOR FIELD STUDY AREA



NOTE: The number of Students in each group should be determined by the intensity of businesses in suggested divisions.

KEY TO MAPS OF FIELD STUDY AREA



MAP # 1

Boulevard Jacques Cartier

Gas

Canadian Tire

Auto Banque

Le Pop Shoppe

Letters Carriers Depot

Boniprix

Depanneur

Consumer Distributors Liquor Commission

Quick Lunch

Bank

C H E M I N C H A M B L Y

Gas

MacDonalds

Gas

PLACE

DESORMEAUX

Gas

Boulevard Desormeaux

Gas

Boulevard Norbert

Sacre Coeur

Gas

Apartments

Printer

Quebec Furniture

House

Gas

Assurances

House

Depanneur

Dunkin Donuts

Paper & Paint

Midas Muffler

Trailers

New & Used Car Sales

House

Metro Store

Speedy Muffler

Ponderosa Steak House

C H A M B L Y

C H E M I N

Vacant Lot

Fruit & Vegetable Market

Pizza

Draperies

Furniture

House

Brasserie

Monsieur Transmission

Hot Dog - Steamed

DOMINION

&

K-Mart

Shopping Centre

Boulevard Jacques Cartier

Benoit O.

Car Dealer

House

House

Vacant Lot

House

Restaurant

House (6)

Western Shoes

Variety Store

Sex Shop

Pharmacy

Photo Supplies

Pizzaria

Hairdresser

Barbershop

Paint Store

Depanneur

Vacant Lot

Garage

House

Used Car Sales

House

Boulevard Norbert

C H E M I N C H A M B L Y

Benoit E.

Self-Serve Gas &

Car Wash

Restaurant

Cycle Shop

Gas

H & R Block

Quebec Light Store

Taxi Stand

Snack Bar

T.V. Sales & Service

Paint Store

Hardware

Mike's Subs

Variety Store

Garage

Soft Drink Centre

Vacant Lot

Sacre Coeur

St. Foy

Auto Electric
Electrical Service
Fruits & Vegetables
Beef
Bank
Finance
Power Tools
Jeweller
Films
Razor Repairs

Meat

Pizzeria

Loans

Mattresses

Hot Dogs

Florist

Firestone Store

Florist

Sport Shop

Dry Cleaning

Garage

Furniture &
Electrical Equipment

Garage

Glass

Drive-in Restaurant

Shoes

Photo Shop

House

Apartments

Dry Cleaners

Equipment Rentals

Furniture

Aluminum Doors

Benoit O.

C H E M I N C H A M B L Y

Place
Jacques
Cartier

Garage

Bank
Clothing

Electrolux

Liquor Commission

Dilallo Burger

Car Stereo

Pizzeria

School

Medical Centre

Pharmacy

Disco

Gas Self-Serve
Gas

T.V.Sales

Car Dealer

Benoit E.

Leblanc O.

Gas
Restaurant
Fish Store
Butcher
Restaurant
Jeweller
Health Studio
T.V. & Appliances
House
Audio Shop
House
House
Carpets
Grocery Store
Clothing
Restaurant
Jeans
Restaurant
Pet Shop
Loans
Music
Bank
Brasserie
Funeral Parlor
Unisex
Barber Shop
Cameras
Paint-Carpets
Mattresses
Restaurant
Finance
Beauty Salon
Loans
Paint
Shoes
Beauty Salon
Children's Shoes & Furniture
Shoes
Shoes
Fourriers
Legare Store
Hairdresser
Finance
Bank
Loans
Cleaners

St. Foy

C H E M I N C H A M B L Y

Leblanc E.

Gas

Gas Self-Serve

Auto Dealer

Pharmacy & 2 Doctors
Finance
I.G.A. Store

P L A C E

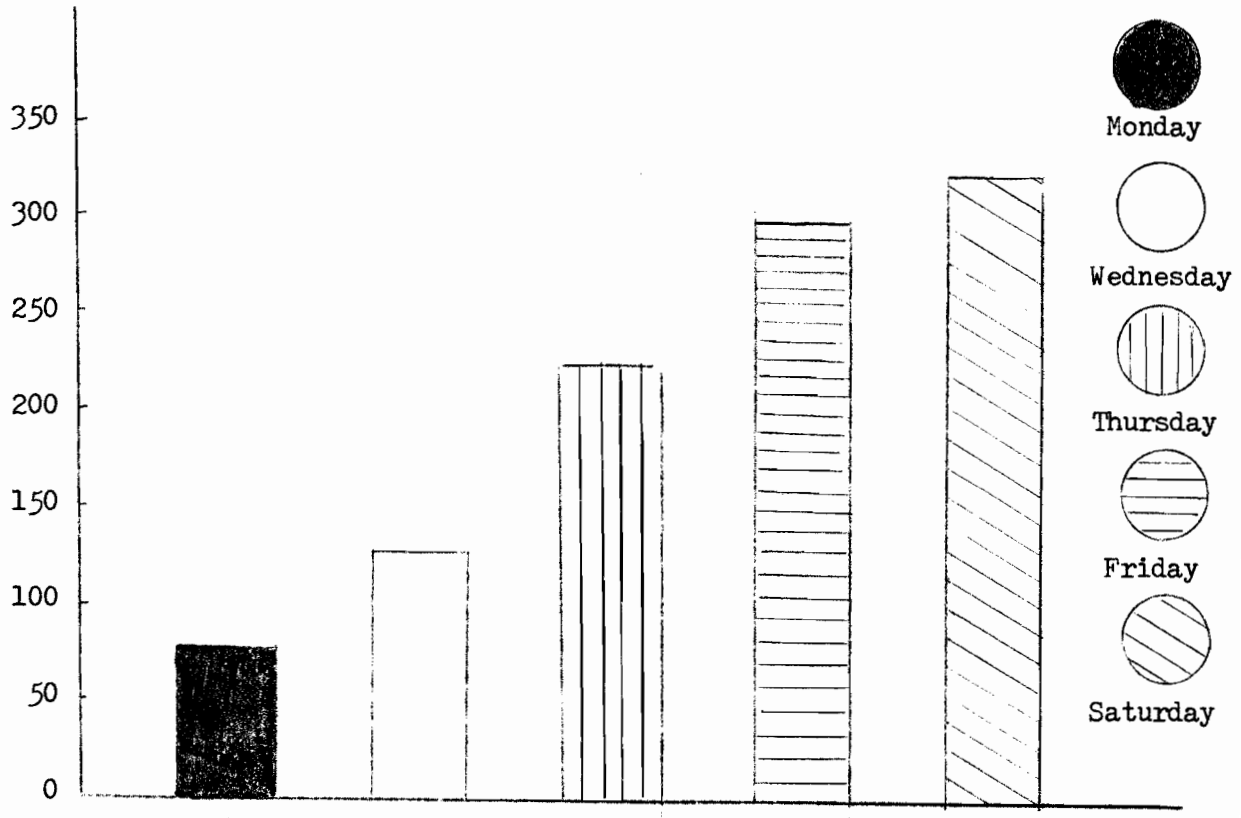
J A C Q U E S

C A R T I E R

Coffee Shop

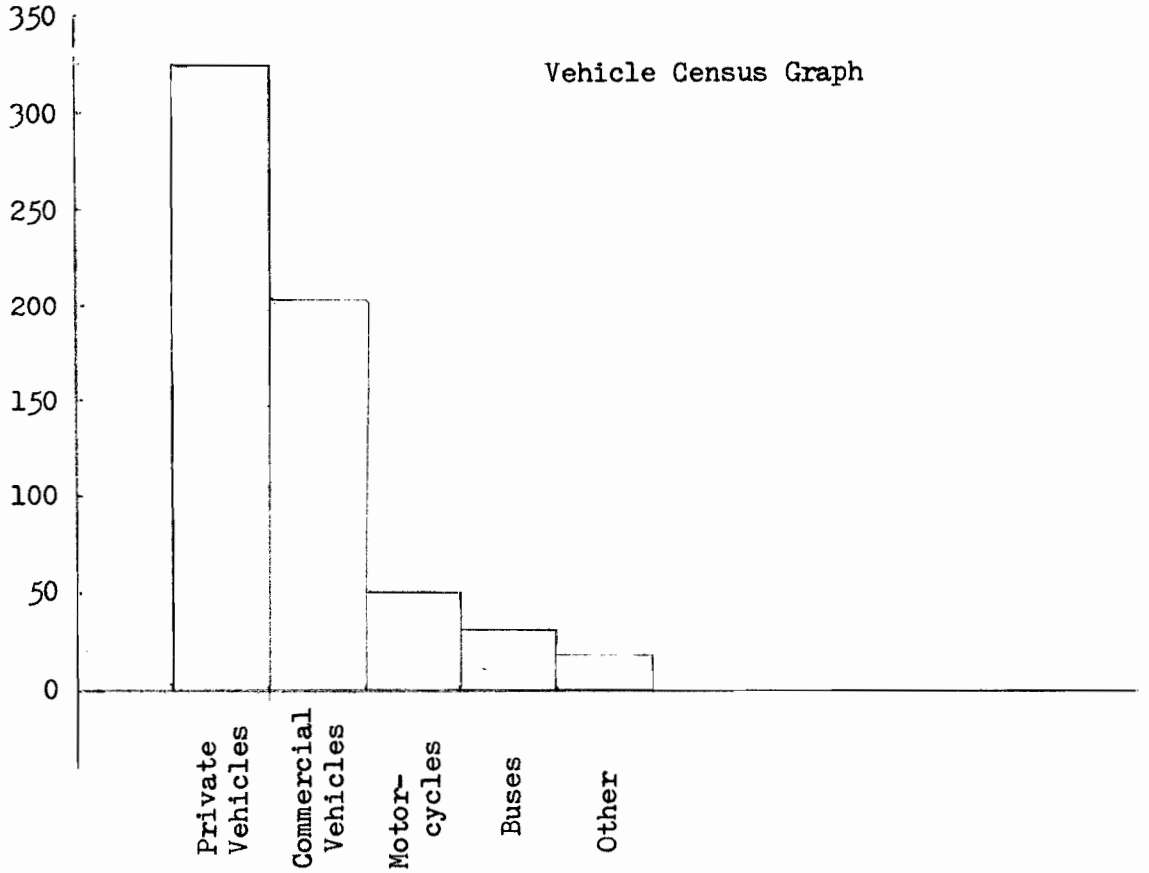
SAMPLE DATA PRESENTATION TECHNIQUES (Cross & Daniels)

#1

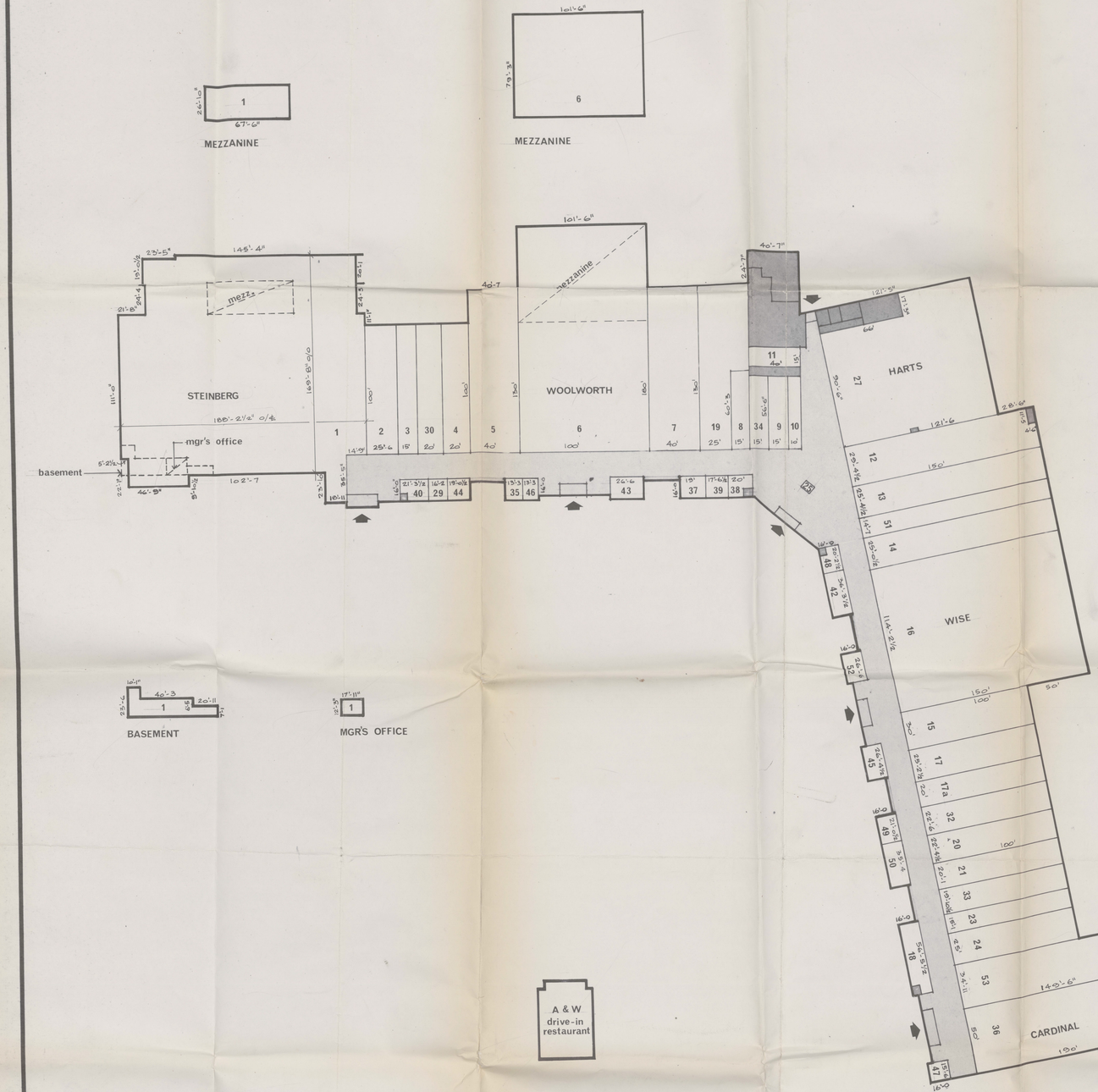


To Show the Use of Parking Lots serving Shopping Centres

#2



To show number of vehicles travelling towards (from) work



SHOPPING CENTRE DATA

BUILDING AREA (includes 2400 sqft. of A&W restaurant)	192,207	sqft.
FLOOR AREA	203,209	sqft.
GROSS LEASABLE AREA	173,261	sqft.
MALL AREA	25,102	sqft.
SERVICE AREA	4,846	sqft.

TENANTS

NO.	NAME	BASEMENT	GROUND FLOOR	MEZZANINE	FRONTAGE	TOTAL G.L.A.	REMARKS
2	BANK OF COMMERCE		2,550		25'-6"	2,550	
3	L'EMERAUDE		1,500		15'-0"	1,500	
4	LA MODE CARTIER		2,000		20'-0"	2,000	
5	HANDY ANDY		5,217		40'-0"	5,217	
7	PHARMACIE LAPLANTE		5,200		40,-0"	5,200	
8	BOUTIQUE INDIGO		904		15'-0"	904	
9	HAUTE COIFFURE		847		15'-0"	847	
10	TEMPO MUSIC		565		15'-0"	565	
11	CARTIER BARBER SHOP		600		15'-0"	600	
12	H. GASCO		4,368		29'-4"	4,368	
13	SUZIE SHIER		3,805		25'-4"	3,805	
14	HARRISON'S		3,756		25'-0"	3,756	
15	REITMANS		3,000		30'-0"	3,000	
17	LEWIS SHOES		2,521		25'-2"	2,521	
17(a)	PETIT POMPOM		2,000		20'-0"	2,000	
18	PAVANE		867		56'-6"	867	
19	FIFTH AVE.		4,296		25'-0"	4,296	
20	MAISON DE CHOIX		2,237		22'-4"	2,237	
21	TRANS CANADA SHOES		2,008		20'-1"	2,008	
24	AGNEW SURPASS		2,500		25'-0"	2,500	
25	LOTO QUEBEC (KIOSK)		24		4'-0"	24	
29	MARCHE DU BAS		258		16'-2"	258	
30	RESTAURANT CHANTECLERC		2,000		20'-0"	2,000	
32	CLASSIC CLEANERS		2,250		22'-6"	2,250	
33	LIBRAIRIE FAUSTO		1,987		19'-11"	1,987	
34	GABY CORSET		847		15'-0"	847	
35	LA FRINGALE		212		13'-3"	212	
37	BOUTIQUE DU CENTRE		304		19'-0"	304	
38	LAINE LONGUEUIL		267		20'-2"	267	
39	GALERIE ELITE		280		17'-6"	280	
40	DIRECT FILM		300		21'-3"	300	
42	BOUTIQUE BULLE		580		36'-3"	580	
43	TEMPO MUSIC		424		26'-6"	424	
44	MON DECOR		304		19'-0"	304	
45	BOUTIQUE LES DEUX		422		26'-4"	422	
46	BOUTIQUE ORIENTALE		212		13'-3"	212	
47	LA SOURICIERE		248		15'-6"	248	
48	PIK-NIK		267		20'-2"	267	
49	MONSIEUR BALAYEUSE		336		21'-0"	336	
50	ATLANTIC RADIO & T.V.		565		15'-4"	565	
51	MONTREAL TRUST		2,187		14'-7"	2,187	
52	BOUTIQUE DES FLEURS LONGUEUIL		424		26'-6"	424	
53	SOCIETE DES ALCOOLS DU QUEBEC		5,256		34'-11"	5,256	
	TOTAL RETAIL					70,695	
1	STEINBERG	928	31,316	2,030	50'-0"	34,274	
6	WOOLWORTH		18,075	8,044	100'-0"	26,119	
16	WISE		17,168		114'-2"	17,168	
27	HART'S		11,939		90'-6"	11,939	
36	CARDINAL		10,667		50'-0"	10,667	
	TOTAL MAJOR STORES					100,167	
	A & W DRIVE IN					2,400	
	TOTAL LEASABLE AREA					173,261	

DATE	REVISIONS	DESS. DRWN.	REF.

COMMUNIQUE RELEASED FOR	DATE	PAR BY
EVALUATION		
ESTIMATING		
SOUMISSION		
TENDER		
ACHATS		
PURCHASING		
CONSTRUCTION		

STEINBERG
DEVELOPPEMENT ET EXPANSION
DEVELOPMENT AND EXPANSION

PROJET / PROJECT
JACQUES CARTIER shopping centre

CONCEPTION DESIGNED		ECHELLE SCALE	as shown
DESSINE DRAWN	N.T.	DATE	sept. 15 76
VERIFIE CHECKED		COMMANDE W/O NUMBER	
APPROUVE APPROVED			

TITRE / TITLE
RENTAL PLAN

DESSIN NO / DRWG NO
RP-1

FEUILLE / SHEET
DE / OF

TRANSLAR 003