VANCOUVER CBD FIELDSTUDY

October 31, 2003

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Hypothesis: Different patterns of usages of land may be observed within short distances of the central business district of Vancouver and the patterns of change will vary depending on the distance from the Central Business District. I believe studying this information and comparing the data to relevant models of urban structure, the Burgess, Hoyt, and Ullman/Harris models, will determine my hypothesis to be true, or false. This information will provide me with useful information on the depth and close strategic planning of the Central Business District of Vancouver.

Introduction: This field study takes place in the central business district area of Vancouver, B.C., Canada, in the year 2003. Vancouver is located in the southwest corner of Canada in the province of British Columbia, at about 49° Latitude and 123° Longitude, next to the Pacific Ocean. It is surrounded by water on three sides and overlooked by mountains. For a more detailed look at the Greater Vancouver region, refer to Map #1. The city of Vancouver started off as a small city dwelling on the sawmill and lumber industry around False Creek; which

was where the sawmills were originally located. Now-a-days,
-1businesses in Vancouver do not revolve around industry, but more so of
providing as offices to the headquarters of forest products, mining
companies, national as well as international banks, accounting and law
firms, and recently expanded as a center for software development and

biotechnology. Also, Vancouver has become a major tourist destination,

possessing the famous Stanley Park.

By 1865, sawmills monopolized the industry in Moodyville, present-day North Vancouver. During the 1870's, the Burrard Inlet of Vancouver was one of the busiest lumber ports of W. North America. Fur-trading forts were established in this area, and small settlements began to bloom. In 1858, gold was discovered in the Lower Fraser Valle y. This attracted many people to the area. A railway, the CPR, was built in 1885, and this helped shipping of natural resources, and made it easier for trade. Soon, Vancouver became connected to the world through the CPR (Empress of India). In 1914, the Panama Canal was opened, and made Vancouver a very important port. Vancouver quickly spread to engulf the south and east, which are Surrey, Langley, Burnaby, Coquitlam,

Richmond, and New Westminster, as of today. The PLVI (peak land value -2- intersection) of Vancouver is located in the intersection of Georgia and the Granville streets. And, the central core of the CBD of Vancouver is believed to be situated in Robson Square; on the corner of Robson and Howe street; it is three blocks concentrated with offices, restaurants, shops, and theatres.

The three streets I have analyzed for my study, are Granville, from Robson to Smithe, east side, Richards, from Nelson to Helmcken, east side, and Homer, from Helmcken to Davie, east side, front and back. For a detailed view at the location of these streets in accordance to the other streets of the city of Vancouver, please refer to Map #2. The City of Vancouver is a fairly large city with a population of approximately 582,045 (year 2001), and the largest cohort, which is 35%, is between the ages of 25-45. Also, Vancouver is very cosmopolitan, thus it is multilingual and multicultural. After English and Chinese, the most common mother tongue languages are Punjabi, German, Italian, French, Tagalog (Filipino), and Spanish. The City of Vancouver possesses a wide range of different businesses; from clothing boutiques, specialty fashion

stores, large department stores, restaurants, entertainment venues, to -3- offices, and banks.

Methods of the Data Collection: To obtain the data of the types of businesses in each of the buildings of the streets, I walked down the streets and recorded all of the names of the businesses I saw. With this knowledge, I was able to analyze the differences of businesses, and compare the differences on each of the streets to find out the purposes each individual street serves. Figure one shows that Homer Street has the most businesses, but most of them are offices. Richards Street has very few businesses, and is mostly a residential area with a lot of construction (refer to figure two). Granville Street serves a very different purpose. Granville has eighteen businesses, of which are all for entertainment or shopping purposes (refer to figure three). This information reveals the difference in land usages between the three streets. Homer street is a place where offices and very few small shops were located, Richards street was a place of exhausted small businesses, and mostly residential areas, and Granville was a place to find entertainment and shop for clothing.

The types of tenants of the buildings on each of the streets confirm the emerging patterns in land usages. To analyze the types of tenants and the number of floors of each of the buildings, a very similar technique was used as in the collection of the types of businesses; recording all the number of floors and looking for tenant listings and recording them on each of the buildings as walking by. To refer to this data, please refer to figure four, five, six. This information depicts how efficiently the buildings are used, and what kind of business is carrying on inside. Homer definitely had the largest amount of tenants, and the majority of the tenants are from offices and small shops. Along Richards, most of the tenants were residents of their home. On Granville, the tenants were small business owners running a small clothing business, or workers of big entertainment places.

The information in the Restaurant Quality Index was obtained by walking into restaurants, and observing the selection and price range in the menus, interior designing, as well as observing the exterior and parking areas outside of the restaurants. To record this data, table formats were chosen. Please refer to figure seven and eight for the

tables. Information from the Restaurant Quality Index depicts the types of -5restaurants on the streets, and their ranking of quality as they are farther or closer to the central business district area. Richards street did not have any restaurants or businesses; suggests the differentiation of utilization of land. Whereas, the quality of restaurants on Homer street and Granville street were recorded. All four of the restaurants on Homer street were given points that exceed fifty. The three restaurants of Granville score very low points near the fifty marking, with one failing to meet fifty.

The Shopping Environment Quality Index (figure nine) was conducted in a very similar way as the Restaurant Quality Index. From outside, observations of the number of customers, the appeal of the exterior designs of the shop buildings, and the count of pedestrians outside of the stores were taken into account. Also, the value of goods inside the stores were noted and taken into account when pulling the Shopping Environment Quality Index together. This information is relevant to this field study because this information also shows how the street has a high shopping environment quality or a low, and this

determines the patterns of land usages. Homer street ranked the highest,
-6and then Granville, and Richards street comes in last.

Figure ten is a chart that shows the traffic of cars, buses, trucks, taxis, bikes, motorcycles, and pedestrians for in a ten-minute time frame in each of the streets. To obtain this data, the approximate middle of the streets were chosen and each type of traffic was recorded as observed. Richards street had the most car, truck, and taxi traffic, but the least pedestrians. This is probably because Homer street had approximately half the car traffic that Richards street had, and a few pedestrians.

Granville street had the most pedestrians and least amount of car traffic. This information serves to show that the land usages in each of the three streets are different, therefore, the types of traffic in each of the streets are very different.

A sketch map of each of the buildings were drawn to depict business functions, floor usages, and the numbers of floors. From the data collection, sketch maps of the buildings were drawn and colored to scale. The sketch map helps visually confirm the data collected in a more visual manner. This may help one visualize the streets to confirm the

collection of data.

Analysis: The closest street of analysis to the CBD is Granville street, and then second closest is Richards street, and the street that is farthest away from the CBD is Homer street.

☆Granville Street

By far, Granville was the most popular place of all, for pedestrians and customers.

Granville Street

A typical day on Granville street after lunch break for employees of neighborly businesses.

An overwhelming total number of 155 pedestrians were counted in the

short time frame of ten minutes. On the other hand, only four cars, bikes, and taxis were seen. Five trucks were also recorded, but the largest number of buses of the three streets were recorded under Granville. Clearly, (figure 10) public transport by bus, or simply transport by foot was illustrated. Granville scored seventy -five points on the overall presentation of the Shopping Environment Quality Index, second to Homer street, which scored eighty points. Figure nine demonstrates the break down material in which Granville scores the maximum number of points for the numerous shoppers it has, and three out of five, for the appeal of the exterior, and value of goods. Granville also s cores high, four out of five, for weight balance of more pedestrians versus traffic parking. Logically, the high scoring of Granville may be due of the fact that the street is very much part of the PLVI of Vancouver; which means that businesses in this area must have the ability to produce a large gross income to pay for the area they possess in rental fees. Figure ten visually illustrates the dominance of stores, and entertainment venues of this area. Figure eight shows the quality of the restaurants on Granville. On average, Granville scores forty-eight points. The fact that most of the restaurants on Granville are fast food restaurants. Thus, Granville street

-9serves a purpose of fulfilling shopping and entertainment desires to the
many pedestrians and customers. In addition, Granville holds restaurants,
most of them being fast-food, and a very small office sector. The
restaurants serve the purpose of meeting the demands of the pedestrians
and customers on-the-go, and the small office, Lingua, serves as an
office serving the public linguistically. In conclusion, Granville is a very
"customer service" prone area, that serves the public in the aspect of
entertainment, shopping, fast-food, and linguistic office for the public.

Possesses high concentration of entertainment venues, and shopping boutiques

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. * Richards Street

On Richards Street, only nine pedestrians were recorded in the ten-minute time frame. Of the three streets, Richards street possesses the least amount of pedestrians, whereas in the aspect of car traffic, Richards exceedingly possesses the highest concentration. An incredible count of 139 cars, nine trucks, and five taxis (figure 10) were noted. With this information, one may conclude that Richards street is not a very attractive place for pedestrians or customers, but a street for cars and public transport to pass through. For the Shopping Environment Quality Index, (figure 9) Richards street scores poorly with only thirty-five points. Very few shoppers, non-attractive exterior, and low value of goods were the basis of the scoring. But, there were more pedestrians versus traffic parking, so four, out of five points were rewarded. The main function of this street is not commercial, or industrial, as it may seem. Noticeably, there are many construction sites on Richards dedicated to developing high-rise residential buildings. Old residential houses were degenerated to efficiently use this part of land to build

higher residential areas to provide for more people.

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Richards

A view of the construction sites.

The sketch map illustrates the dominance of the residential areas on Richards, with the decrease of entertainment venues and services or stores, comparatively speaking, to Granville street. One may note, that there are two offices on Richards, an increase in contrast to Granville. Another differentiation on Richards is the excessive construction, which does not exist on Granville. Hence, a focus on Richards is the residential

purpose, with small entertainment venues and services/stores that are $^{-12-}$ offered to the general public.

Richards

Main function: residential.

★ Homer Street

On Homer street, the car count was seventy-five, with three trucks and two taxis. This is neither the highest or lowest in comparison of Granville and Richards. The pedestrian count was twenty-three, also neither the highest or lowest. In figure nine, the Shopping Environment Quality Index, Homer Street scores the highest with 80 points putting

Homer in the lead in front of Granville(75). On the other hand, Homer

-13scores an average of only sixty-six points in the Restaurant Quality

Index. The low score results are because of the lack of parking space in front, or near the restaurants.

Homer

Possesses many offices and restaurants.

The sketch-map of Homer is Homer front-side, but Homer back-side
has also been analyzed for comparison reasons. Homer front-side is
dominated by offices. There are quite a few restaurants that are probably

to satisfy the office employees during lunch breaks. Homer back -side

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has warehouses for storage. There are quite a few construction sites on Homer back-side, that seem to be for the purpose of newer and better offices or warehousing storage space.

In comparison, Granville street was mostly filled with stores and -15entertainment venues, and Richards street was mostly filled with
residential areas and coming-to-be residential areas. In conclusion,
Homer street firstly serves as an administrative street with many offices.

.* Comparisons to the urban models

Granville street, is a perfect example of the Bid-rent theory. It states that the highest bidder gets the use of land, and the highest bidders are those who are able to obtain the highest profits in terms of business income. In return, they will pay the highest rent. Because of the situation of the land, and its accessibility in the downtown district, the businesses are likely to attain large amounts of sales from customers.

Richards street is a good example of the multiple nuclei theory.

The multiple nuclei theory states that cities grow from an independent nucleus; which is a growth point with different functions, that is not necessarily the CBD. Sooner or later, the outward growth will form a merger: an urban center. In our case of Richards street, layers of different functions are present in certain locations. This is due to the fact that one may not be able to afford a desirable location. One may still

benefit from the close location to the core of the CBD. The residential

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area on Richards is classified as either the medium, or high residential

area; and this fits the Ullman and Harris model. In addition, the

residential area lies quite close to the center of the CBD, and spreads in

different layers of functions.

As for the three streets as a whole in Vancouver, near the CBD, I do not believe it fits into the Concentric Ring Model, or the Sector model, or the Multiple Nuclei Model because of the limitations of Vancouver geography itself. Because Vancouver is not built on flat land, the bodies of water surrounding Vancouver, mountains, and the Canadian -American border, Vancouver is only able to expand in one direction. This contradicts some of the assumptions made in the three models. In all three of the models, it is stated that one that is less wealthy will reside near the CBD, in this case of Vancouver, this is not true. Housing near the CBD is very financially demanding, thus, ones that are not wealthy or well equipped financially, cannot afford to live near the CBD. Also, another assumption made in the three models is: public transport is very cheap, and convenient, and wealthy people can afford transportation, so

they live further away from the CBD. Again, in Vancouver's case, transportation can be prohibitive to one, and it does not extend in all directions. Although there are many characteristics of Vancouver that are not adequate with the assumptions of the models, there are also some characteristics that do. For example, Hoyt's sectors of similar land uses in one area: Granville is a commercial area with a lot of clothing shops and entertainment venues, offices dominate on Homer, and night entertainment venues are grouped together in one location; Richards. The CBD of Vancouver may not possess all the qualities named in the Concentric Ring Model and the Sector Model, but it does qualify for the Multiple Nuclei Model. Similarities can be noted that, land value does decrease in affordability, and demand, as the distance from the CBD becomes greater. Many nuclei of different land usages around the CBD area were observed.

<u>Conclusion:</u> The multiple nuclei model of Ullman and Harris seemed to be a match to the CBD of Vancouver. Different patterns of land usages within shorts distances of the CBD were discovered, hence, the nuclei. A variety of business functions were found in small areas. One

of the many reasons may be the planning of the district before it was built, which results in the patterns noted in the streets. Another may be advances in technology and transportation to fulfill ones' needs to relocate into certain areas. My hypothesis proves to be correct that land usages and patterns change within short distances of the CBD, and that the patterns will change varying on the distance. Although the models of Burgess and Hoyt did not quite fit the CBD of Vancouver, there were some similarities the sectors of similar land usages, and decrease in affordability of land as the distance increases away from the CBD. Some ways of improving the results of this investigation, is by selecting a larger area of land to examine the streets more accurately similarly to the perspectives of the models. Also, to take into account the time changes of the urban models and the advances in technology to better grasp the depth and close strategic planning of the Vancouver CBD.