

A RIBBON DEVELOPMENT STUDY IN ONTARIO, OREGON

by

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A RIBBON DEVELOPMENT STUDY IN ONTARIO, OREGON

ABSTRACT: There are conflicts between commercial and agricultural uses of land bordering U. S. Highway 201 southbound from Ontario, Oregon. A questionnaire was developed and administered to businesses located along Highway 201 to determine the most important location factors for commercial users of the ribbon development. The most important factors were central location, customer access, land price, and lot size. An alternative to continued development along Highway 201 which has all four of the most important location factors was proposed to help protect prime agricultural land bordering the highway. In addition, commercial enterprises will be allowed to expand.

INTRODUCTION

The most obvious human needs for land are for food and fiber, living space, industrial and commercial activity, transportation facilities, and recreation. Many times these activities are in competition for the same land. Although rich in land resources, Malheur County is vulnerable to increasing losses of agricultural land, and much of the land being removed from agricultural use is among the most capable of production in terms of soil quality, grade, irrigation, and inherent fertility.

The trend has been that productivity of food and fiber has been increasing while the amount of land involved has been decreasing. However, a good share of the land leaving production is being trans-

formed into irretrievable nonagricultural sectors.¹ The amount of prime agricultural land available in Malheur County is about 17,500 acres, and a sound economic base for the county is totally involved with agricultural production, which is in turn dependent on high quality agricultural land.²

Ontario is the largest city in the county and is the growth center with an estimated population of just under 8,000.³ Retail trade and service industries in Ontario are increasing much more rapidly than are agricultural industries. Therefore, there exists a threat to prime agricultural land being developed by commercial expansion. Because agriculture and commerce are both important to the economy of Ontario, an investigation of nonagricultural productive sites for commercial activities is needed.

This investigation will begin with background into Ontario's population and economic structure. A background discussion will show that growth in the area mandates careful analysis and a full understanding of conflicts between agriculture, and service and retail trade. A particular conflict is occurring along U. S. Highway 201 southbound out of Ontario where commercial enterprises are being developed on some of the best agricultural land in the area.

Commercial development and land capability along Highway 201 will be investigated. There have been other studies on ribbon development and they have determined that there are four types of business patterns: 1) the nucleation which ranges from isolated neighborhood grocery stores to highly developed urban centers; 2) urban arterials, which are also defined as nucleations, but when nucleated they locate on

urban arterials. They too can differ in size according to differences in traffic flow along the highway; 3) the automobile row includes businesses such as auto dealers, used cars, food lockers, and motels, and are associated with the specialized automobile district of larger nucleations; and 4) highway-oriented uses which includes those business types which are successful only when highway-oriented. (gas, restaurant, motel, and fruit and vegetable produce.) Their size is also determined by the volume of traffic moving along the highway.⁴

It is not the purpose of this paper to determine the positive or negative aspects of ribbon developments, but only that they exist and perhaps that one arterial may be better than another for such development. However, the consensus is that ribbon developments have a negative effect on their communities. There is one researcher though, which proposes that it is the secondary effects which create the bulk of the problem, at least as far as traffic is concerned, and not the development itself.⁵

It is important that city planners and developers not be persuaded to make value judgements in contradiction to the majority of local residents involved. According to economic theory, businesses would not locate on a ribbon development unless it is feasible for them to net a profit, and they will not net a profit unless consumers visit their establishments in adequate numbers. Ribbon developments exist because relatively large numbers of people find them worthwhile.

A questionnaire was developed and administered to 73 per cent of the businesses now located along Highway 201 to help determine why they chose that particular site as the optimum location. It is hoped

that the needs of commercial enterprises in this area can be determined so that planners and developers can make intelligent decisions relating to future development. The development, administration, and summary concerning the questionnaire will be discussed.

Other arterials leading into the city will be examined according to their suitability to ribbon development based on the results of the questionnaire. If existing arterials cannot be found to be suitable, then an alternative will be suggested. Their suitability will be determined by comparing the location to needs of commercial entities as described in the questionnaire, plus their suitability compared to the capability classification of the soil and the flood hazard potential.

BACKGROUND ON ONTARIO

The control and management of commercial growth on highly productive farmland is much more plausible in those cities where urban sprawl has only just begun. Ontario, Oregon is such a city. Ontario began as a small farming community with facilities necessary to support the surrounding small family farms. As the farm size increased and the number of people migrating from farm to city increased, just as it did across the nation, the city of Ontario grew and has become a major growth and retail/service center for the area.⁶

Population

It has been estimated that a 1 per cent change in population produces a 1 per cent change in the number of retail establishments in the area in which the change occurred.⁷ The population growth rate of

Ontario is about 4 per cent each year and it has an estimated population of about 8,000. In 1975 Ontario had about 32 per cent of the county's population and is the largest city in Malheur County. The growth of Ontario is expected to continue and by the year 2000 the population has been estimated to be between 12,000 and 15,000.⁸

Population is one of the determining variables for the amount of land needed in an area for each land use activity. Included in population analysis is migration, age mix and distribution, and projections of population. The last decade in Malheur County showed a small increase in population, but it was due to natural increases and not because of immigration. It has been estimated though, that young, educated adults, originally from the area have been returning to Ontario in significant numbers in the last five to eight years.⁹ The past population trends for the county have been large percentages of persons under the age of twenty and over forty. However, the projected 1980 mix is a substantial increase in age groups from twenty to forty. It is estimated that these age groups will increase by about 80 per cent.¹⁰ Significantly large numbers of customers of service and retail trade are in the age groups from twenty to forty. The estimate, then, of 1 per cent change in population producing a 1 per cent change in establishments may be short of the relationship that is likely to occur in Ontario.

Economic Structure

Ontario's population growth reflects its growing importance as a retail and service center. The city is a primary shopping center for its residents, and for farmers in the region, and a secondary center

for the cities of Nyssa, Vale, and the nearby Idaho cities of Payette, Fruitland, and Weiser.¹¹

The county's basic production (export) is dependent on high quality agricultural land. The only industries in the county which have significant location quotients (L.Q.) compared to the State are manufacturing of food and kindred products (4.94), and agriculture (4.42).¹² The city of Ontario is not directly dependent on crop production, but manufacturing of food and kindred products has a significant L.Q. (1.67). Therefore, major industries in Ontario are indirectly dependent on agriculture. Industries which show great strength, in addition to food and kindred products, are retail trade (L.Q. 1.55), services (L.Q. 1.13), and construction (L.Q. 1.03). These industries are not only important as exporters, but they also employ about 70 per cent of the work force in Ontario.¹³

The need for land by agricultural industries may conflict with the need for land by retail trade and service industries, particularly along Highway 201 southbound from the city center. This ribbon development is built over some of the best land suited for crop production. It is also the area where commercial development has been expanding. (Figure 1)

DEVELOPMENT ALONG HIGHWAY 201

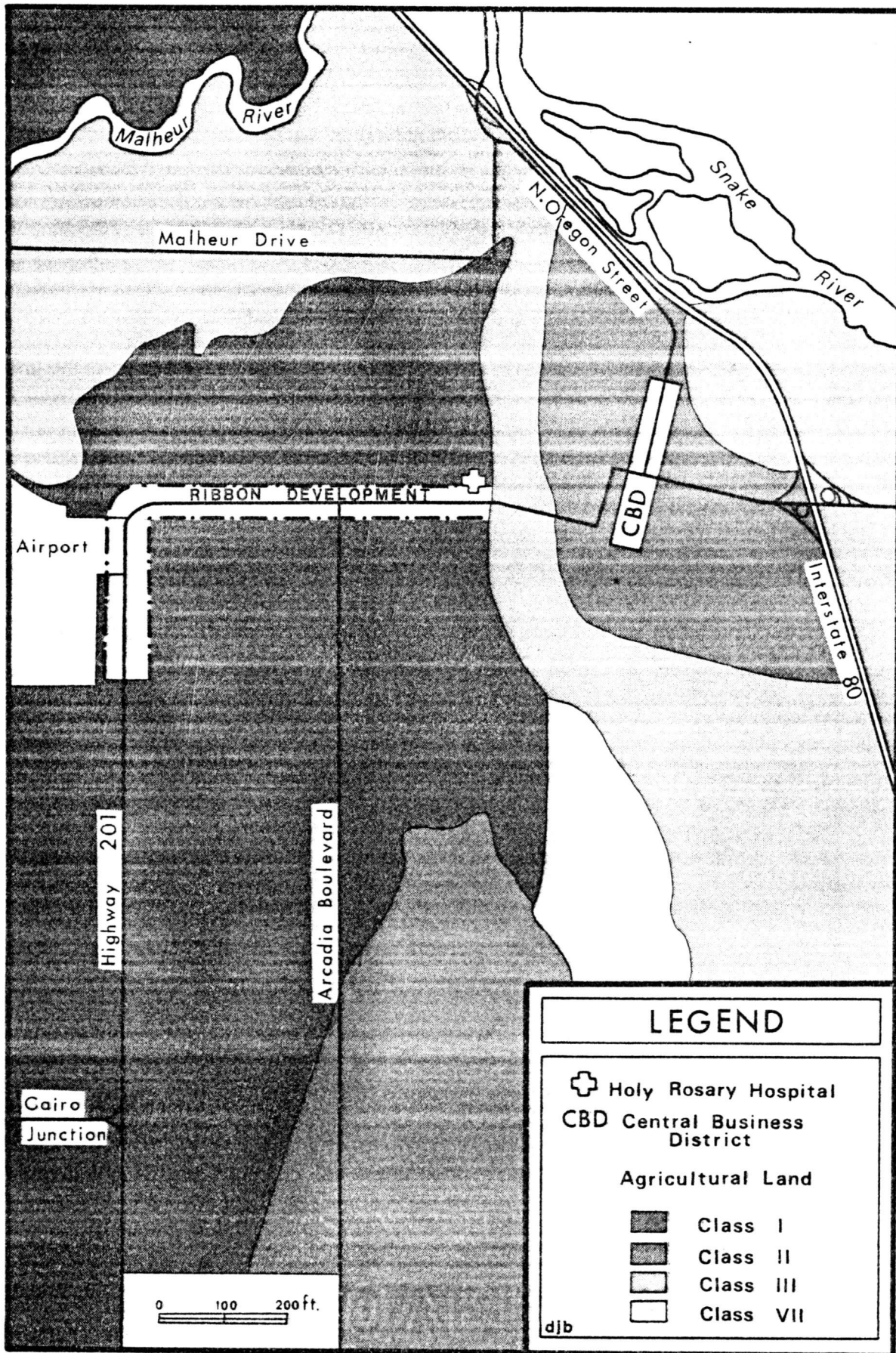
U. S. Highway 201 is a major traffic artery leading into the central business district (CBD) from the south and is the major route traveled by farm residents living south of the city and by Nyssa and Vale residents. The portion of the route under study begins west of

Holy Rosary Hospital and ends north of Cairo Junction. (Figure 1)

Commercial development along this route segment began with a small neighborhood grocery store in 1948. However, only 5.5 per cent of the present businesses existed prior to 1960. Even from 1960 to 1965 the area saw only very small increases in the number of business establishments (7.5 per cent of the present businesses). By 1970 though, 30 per cent of the present businesses were established. At this point in time the arterial had begun to take on the appearance of a ribbon development. Its size and tenant make-up placed it in the category of a community commercial center, which is defined as a shopping area or center with twenty to forty business establishments and a composition of predominantly shoppers goods outlets. It would also include the convenience goods outlets located in neighborhood centers. Convenience goods are defined as those most frequently acquired by consumers where the individual purchase is relatively low in cost and where the process does not generally include selective buying. Shoppers goods include those that are less frequently acquired, the cost is relatively high, and comparative shopping is common.¹⁴

The remaining establishments (70 per cent) were located along Highway 201 following 1970. There is possibly one single driving force which is responsible for this tremendous growth in the last eight years. That force was the construction of a planned community shopping center (West Park Plaza). Construction of the planned center began in 1971, and what followed was a regional shopping development along Highway 201. A regional center is defined to have from 40 to 200 functional units with frequent duplication of market types. It is

FIGURE 1



a center which markets convenience and shoppers goods, and also has service establishments.¹⁵ The ability of West Park Plaza to cause such growth along Highway 201 is possibly the consequence of a process called "pirating." Pirating refers to competitors which take advantage of the planned centers ability to draw customers.¹⁶

As was stated earlier the area's economic base is dependent on agricultural production, which is in turn dependent on high quality agriculturally productive land. The continued growth and southern movement of retail and service development along Highway 201 would mean continued withdrawal of Class I agricultural land. (Figure 1) Class I agricultural land is defined as land with few limitations that restrict its use. These soils can be cropped intensively and need only ordinary crop management practices to maintain their productivity. The soils along Highway 201 are in the Owyhee (144A) and Greenleaf (205A) series.¹⁷ In addition to having the characteristics of capability Class I, these two series have relatively high yield potentials for the crops grown in this region. Furthermore, these soils have few limitations for other uses such as septic tank absorption fields and other sanitary land fills, dwellings with and without basements, small commercial buildings, and roads and streets.¹⁸ Diversified capabilities of this land are responsible for the land use competition which is occurring along Highway 201. The continued commercial growth along Highway 201 will result in highly capable agricultural land being permanently removed from agricultural production.

QUESTIONNAIRE USED

One of the objectives of this study is to determine if an alternative arterial can be found for the needed commercial expansion that will necessarily occur in order to slow or stop the continued development along Highway 201. Continued growth along Highway 201 would surely mean continued loss of agriculturally productive land which exists on both sides of the highway. To help find an alternative arterial, it was necessary to determine why businesses now located along Highway 201 chose that particular site. It was believed that the only way to determine the individual and aggregate reasons for locating along Highway 201 was to ask as many of the resident business entrepreneurs as possible why they chose their particular site. To do this a questionnaire was developed with the intention of interviewing the decision-makers of each business located along Highway 201.

Development of the Questionnaire

To determine what questions should be asked, a literature search was made of some studies involving location and the location decision process. It was determined from the literature review that there are seven major location factors which decision-makers of commercial activities often consider when choosing a location. These factors are: 1) The decision-maker; 2) land availability and cost; 3) hierarchial order (supply and demand); 4) transferability of consumers; 5) scale; 6) location of other activities; and 7) constraints and incentives.¹⁹ (Appendix A)

Decision-maker. Decision-makers of commercial activities most frequently have one primary goal: to maximize net profits. In addi-

tion to the profit motive decision-makers are subject to a multitude of other conflicting motives, pressures, and valuations. These conflicts are often recorded as "personal reasons" by analyzers of location decisions.²⁰ They may, however, be indirectly related to other location factors and caution should be taken against accepting personal reasons as valid. These conflicts may also cause decision-makers to find their optimum location through the means of trial and error.²¹ To help eliminate a category labeled "personal reasons" some questions were designed to determine motives, pressures, and valuations of the decision-maker.

Land availability and costs. The amount of land available in any city is unique to that city, but one study showed that in twenty-eight cities with a population from 5,000 to 50,000 about 30 per cent of the retail activity was in the CBD where land is most scarce, yet takes up only about 3 per cent of the city center. The remainder is divided among arterials, major intersections, and residential neighborhoods. About 2 per cent of these three areas is occupied by retail trade.²² There is often surplus land zoned for commercial use in areas outside the CBD. However, when establishments begin to concentrate even outside the CBD land rents go up. Therefore, land availability in most cities in this size class is not the most limiting factor, and cost becomes the primary driving force.²³ The presence of an existing structure on available land may also enter into the decision process. Conversion or reoccupation of an existing building often enables a firm to establish a business when the cost of new construction would be prohibitive. In addition, the amount a firm can afford to pay for land will help

determine the final location, and the amount of financing available may help determine whether the land and building are in a fee simple ownership or lease contract.²⁴ To determine if cost and availability of land was a determining factor, decision-makers were asked about their understanding of relative land costs, availability of land, ownership, and construction.

Hierarchical order (supply and demand). Commercial centers have varying numbers of functions, and can be placed in hierarchical orders, based upon these functions. The freestanding establishments represent the lowest order commercial center; they generally have only one function and serve a relatively small number of people within a small market area. In contrast, the highest order commercial center in a regional context would be a CBD or regional shopping development with 40 to 200 functional units. Such a development would market convenience goods, shoppers goods, and have service establishments.²⁵ Development along Highway 201 can be placed in the category of a regional shopping center. It has over forty functional units with frequent duplication of many units. It markets convenience and shoppers goods, plus it has service establishments. Business diversity, specifically the number of retail establishments in an area, is a function of the number of consumers or consumer aggregate purchasing power. Because of this function, multiple purpose consumer shopping trips can encourage retailers of convenience goods to locate near high-order shoppers goods stores and in this way increase their trade area.²⁶ As mentioned previously, Ontario has a trade area which includes its own residents plus those living in lower order centers. Therefore,

decision-makers in the study area were questioned about their perceptions of their customers and where customers come from. It was also determined whether the firms sell shoppers goods, convenience goods or are service establishments, and whether their decision to locate on Highway 201 was influenced by the size of the trade area.

Transferability of consumers. The location choice of firms is intimately related to minimizing costs of consumer movement. Therefore, spatial patterns are very closely tied to patterns of movement and traffic flow in and around the city. Movement and traffic flow often reflect lines of least resistance or greatest accessibility, and commercial activities tend to benefit from locating in the vicinity of the point of minimum aggregate travel. Ribbon developments attempt to reach the point of minimum aggregate travel by maximizing access to vehicular traffic.²⁷ If a choice of location is available, consumers normally will prefer the one which involves the least effort and most satisfaction. The logic behind transferability of consumers is that if a retailer can save the customer travel time and energy, the customer would logically transfer his purchases from other stores.²⁸ It has also been found that customers frequent stores on the side of the street they are traveling in, rather than cross against traffic to visit stores on the opposite side. Therefore, the side of the street with the greatest traffic flow will generally have a higher trade density, as well as the most automobile sales and gas facilities.²⁹ To ascertain if retailers along Highway 201 considered transfer of customers as a location factor, questions were asked pertaining to their position along the arterial.

Scale. The utility of a shopping trip to the customer increases with the number of shops visited. Therefore, sales potential of a retail center may be directly related to its size. A larger center offers a wider range of goods and services, and attracts consumers from a wider area than a smaller center in the same location.³⁰ Retailers effectively increase the scale of operation by agglomerating and establishing a reputation for a range of alternative sellers. This creates a mutually beneficial advantage to the customer by increasing the selection at one central location. Customers are usually willing to travel only short distances to obtain one or two items, but multiple purposes warrant a longer trip. This effectively increases the trade area of a center.³¹

Some establishments locate on arterials to take advantage of consumer patterns with regard to effective scale of agglomeration. However, many of them also have extraordinary space requirements. Some space is required for showroom purposes, such as that used by automobile, television, and appliance sales. Others may require external space for automobile access and parking, such as grocery complexes. Many relatively large users of land require less expensive sites and therefore take advantage of the arterials leading out of the CBD.³² To determine if scale, site size, or agglomeration motives were a part of the decision process, questions concerning these aspects were asked.

Location of other activities. There is a strong tendency for certain types of activities to locate in close proximity to one another; the results may be that attractive businesses have influencing powers on the locational tendencies of other activities. For example, in one

study estimating the success of retail businesses it was found that women's clothing stores seem to do better when located near variety, department, and shoe stores.³³ In another study of 269 business centers excluding CBD's it was discovered that restaurants and bars have a high frequency of being located next to grocery stores, but a low frequency of being located next to theaters.³⁴ This tendency of similar kinds of activities to agglomerate enables businesses to derive the advantages of scale economics. There is also an additional advantage to shoppers good retailers. Customers are more likely to do comparative shopping in stores which are located near one another.³⁵

Conversely, competitors may find it advantageous not to locate near one another. This is particularly true for planned centers, because increased distances frequently increase the sales potential of such centers.³⁶ Pirating may also occur among competitors and is often found in ribbon developments where planned shopping centers are located.³⁷ Because of the attractive and repelling powers of competitors and associates, questions were asked about consideration for location of other activities.

Constraints and incentives. There may be constraints and incentives which override the location factors discussed to this point. A zoning ordinance may prevent location at the optimal site. Or, perhaps constraints and incentives will be the deciding factor when two or more sites would be equally adequate. For instance, city services may be available at one site and not another, or there may be neighboring businesses which are willing to share water and sewage facilities.³⁸ In order to determine the constraints and incentives which effect

location decisions of residents along Highway 201, nontraditional questions were included in the questionnaire.

In addition to the questions, each decision-maker was given a list of five summary factors and was asked to rank each factor in order of importance. This should help to quantify responses from the questionnaire.

The value of the questionnaire will be partially determined by the honesty of the respondents. Therefore, as much effort as possible was made to insure the decision-makers that the information would be confidential and the responses would be used only in the aggregate.

Administration of the Questionnaire

The goal was to interview every business decision-maker located along Highway 201, but only 73 per cent were contacted; 11 per cent were unavailable, 4 per cent were government offices, and 12 per cent were absentee owners. However, all three of the major types of commercial activity were represented in the development (service, convenience goods, and shoppers goods), and all three responded to the questionnaire. Of those interviewed 35 per cent were service outlets, 17 per cent were convenience good stores with service, 22 per cent were shoppers good stores with service, 9 per cent were strictly convenience good stores, and 17 per cent were strictly shoppers good stores.

A one-on-one personal contact approach was used to administer the questionnaire. Each owner, or decision-maker of the businesses in the development was contacted. The interviewer explained to them that Oregon State University was doing research in the area, trying to

determine location factors for retail and service outlets, hoping to help planning commissions become aware of the needs of retail and service outlets. Every business contacted along the development granted an interview and most showed a sincere interest in the project.

Summary of Questionnaire Results

It is believed that, over all, the questionnaire served its purpose nicely. The purpose was to determine why each business along Highway 201 chose its particular site. Seventy-three per cent of the businesses along Highway 201 were interviewed. Any sample greater than 60 per cent would generally be considered more than necessary to show significant representation of the entire population.³⁹ In addition to a good sample size, a solid cross section of the different types of commercial activity was represented in the sample.

It is believed that West Park Plaza had great influence on the growth of the development and the questionnaire supported this hypothesis. West Park Plaza did not enter the development until it had become a community commercial center, so the Plaza did not start the development. However, following construction of West Park Plaza, development along Highway 201 grew within less than five years into a regional commercial center.

The questionnaire revealed some of the important location factors: land price, traffic flow, availability of space, central location, and customer accessibility. Location factors which were not considered important were: personal reasons or accidents, location of competitors, availability of city water and sewage facilities. (See Appendix B)

There were two factors of which no conclusions could be drawn

from the questionnaire. These were zoning and location of established business activities. The questionnaire failed to ask enough questions about zoning to make any concrete evaluations about its importance as a location factor. Due to the fast growth of the development following construction of West Park Plaza and 44 per cent of the businesses considering its location, it can be concluded that West Park Plaza had an effect on location. However, other business firms were only considered by 30 per cent of the firms interviewed. Because of this it is doubtful that location of business activities, other than West Park Plaza, had much effect on the location decisions of businesses along Highway 201.

A list of five factors believed to be important was given to each respondent and they were asked to rank them in order of importance. (Table 1) It was hoped that the ranking of these factors would show the most and least important of the factors discussed in the questionnaire. The over all ranking of these factors showed central location as the most important factor, customer access was second, land price third, lot size fourth, and zoning fifth. The rankings of first and second, central location and customer access were very close. Only 5 per cent more of the businesses ranked central location first over customer access. Therefore, the two should probably be considered as nearly equal in importance to businesses along Highway 201. Factors ranked third and fourth were also closely matched. Only 1 per cent of the businesses ranked land price in third place over lot size. They too, should be considered as equally important. There was no question about the fifth place ranking. Sixty-seven per cent of those

interviewed ranked zoning in last place. Because of the failure of the questionnaire to gain an understanding of zoning as a factor, very few conclusions can be derived from the ranking of zoning as least important. However, without proper zoning businesses could not legally locate in the development. Therefore, it is believed that zoning is of little concern, because most businesses would not consider locations where proper zoning does not exist.

Earlier, the importance of protecting Class I agricultural land was explained. If commercial firms are to be expected to by-pass these lands, they must realize two things. First, they must realize how important food production is to the economy of Ontario and to their success. Secondly, they must realize the location of Class I agricultural land.

The questionnaire asked those interviewed to determine the importance of eight different economic sectors in the Ontario area. (Table 2) Food production was ranked as very important by 89 per cent of those interviewed and 56 per cent said their success was most dependent on food production. For Ontario, basic economic sectors are food production, food processing, retail trade and professional services, and construction. More than 50 per cent of the businesses located along Highway 201 ranked all five basic sectors as very important to the economy of Ontario. One hundred per cent realized that their success was dependent on the success of other sectors in the local economy. It is believed then that retailers and service outlets in this development are aware of the importance of protecting Class I agricultural land.

TABLE 1. SUMMARY OF RANKED FACTORS

<u>Factors</u>	<u>No. 1</u>	<u>No. 2</u>	<u>No. 3</u>	<u>No. 4</u>	<u>No. 5</u>
Central Location	35%	24%	19%	13%	9%
Customer Access	30%	41%	16%	10%	3%
Land Price	21%	8%	31%	25%	15%
Lot Size	10%	20%	30%	34%	6%
Zoning	4%	7%	4%	18%	67%

TABLE 2. ECONOMIC SECTOR RANKINGS

<u>Economic Sector</u>	<u>Very Important</u>	<u>Somewhat Important</u>	<u>Not Important</u>	<u>Don't Know</u>
Retail Trade	80%	18%	0	2%
Finance, Insurance & Real Estate	35%	39%	20%	6%
Wholesale Trade	19%	20%	54%	7%
Food Production	89%	5%	4%	2%
Government	19%	26%	46%	9%
Mining (Sand and Gravel)	9%	26%	61%	4%
Food Processing	85%	9%	4%	2%
Construction	56%	31%	11%	2%

The questionnaire also asked what the SCS Land Classification was for the site they are located on. Not one person interviewed knew that their site was classified by the Soil Conservation Service (SCS) as Class I agricultural land. There may be several reasons for the negative reply. One may be the lack of knowledge of the term "SCS Classification." Perhaps it should have been defined. Another may be that they do not know how their site has been classified. If commercial firms in the development are unaware that their expansion is permanently removing Class I agricultural land from production, then an educational campaign is necessary. It should be of particular interest to businesses along Highway 201 because of the realization they have of their dependence on food production.

OTHER POSSIBLE ARTERIALS

According to the responses from the questionnaire and the ranked factors, location choices for commercial activities along Highway 201 include finding a locale which is central to potential customers, easily accessible to customers, priced reasonably, and has lot sizes large enough to accommodate extraordinary space requirements and expansion. There are three other traffic arteries leading into the city: North Oregon Street, East Idaho Street, and Arcadia Boulevard. (Figure 2) However, none have all the important locational criteria.

North Oregon Street enters Ontario from the north and fails to be centrally located for city residents and for secondary centers of Nyssa, Vale, Payette, Fruitland, and Weiser. It would be more accessible to

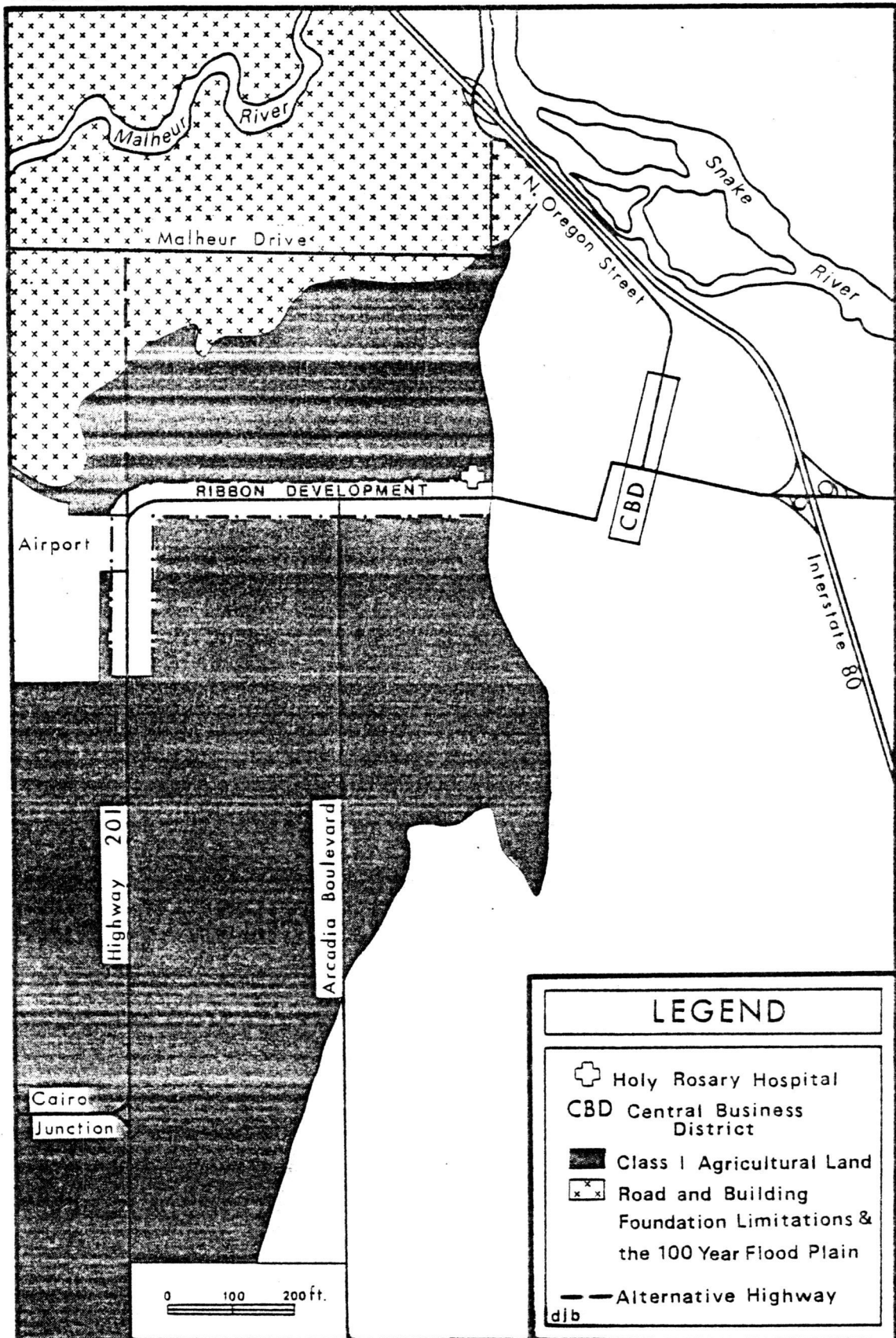
Payette, Weiser, and Fruitland but less accessible to Nyssa and Vale than Highway 201. The lot sizes along North Oregon are relatively small and the highway borders the freeway, preventing businesses from building on the east side of the highway. There are presently highway oriented businesses located along North Oregon, attracting business from travelers of Interstate 80N. Two especially limiting factors are lot size and inaccessability to Ontario, Nyssa, and Vale residents.

East Idaho Street enters Ontario from the east and has direct access from Interstate 80N. It too is not centrally located for Ontario residents and its hinterland. However, it does have easier accessibility for Payette, Fruitland, and Weiser. East Idaho's most limiting factor is space for expansion.

Arcadia Boulevard is more centrally located than the two other alternatives and enters Ontario from the south. Its orientation is similar to Highway 201. Accessibility is only slightly less for all areas and space is abundant. However, it also crosses Class I agricultural land. (Figure 2) Development of this arterial is no better than continuing development along Highway 201.

The conclusion is that existing arterials are not suitable for relieving conflicts along Highway 201. If development along Highway 201 continues as far as Cairo Junction, it would mean a loss of about ninety acres of the best crop land in the county. This acreage estimation is based only on development of lots on either side of the highway and not beyond. However, continued commercial development cannot be expected to stop in Ontario. As stated earlier, retail and service sectors are very important to the basic economy of Ontario. Their

FIGURE 2



growth and development must be allowed to continue.

There is a possibility of continuing the growth of the Highway 201 development, but it would mean construction of a new highway. If Highway 201 were extended north at airport corner to intersect Malheur Drive, approximately the same amount of area as if development continued to Cairo Junction could be developed, and only twelve acres of prime farmland would be lost. (Figure 2) The twelve acres includes land needed to construct the highway and lots on either side of the highway.

It would be a little more difficult to develop this northern section than the southern section because its soils have some road foundation limitations, low building foundation limitations, and part of the area is within the 100 year flood plain boundary. (Figure 2) In addition, part of the area has septic tank absorption field limitations. However, this is true of the area south also, and extending city sewage lines north of airport corner could be less expensive than extending them south.

The area south does not have the SCS designation of severe limitations on roads and foundations as the area north does. However, severe limitation designations by SCS does not necessarily mean there is a restriction to development activity. Rather, it is a framework for land use decisions and prior to construction, consideration of potential problems and planning for their correction is necessary.⁴⁰ Concerning the area within the flood plain boundary, all building foundations must be above the 100 year flood plain to be within the regulations of the Flood Disaster Protection Act. Therefore, any development in the flood plain boundaries would require enough fill to

raise the foundations of the buildings above the flood plain.

It is believed at this time that development north of airport corner would satisfy the important location factors required by potential commercial enterprises in the Ontario area. It would offer them about the same centrality as Highway 201, and it should increase accessibility for some customers. It would probably not change accessibility for Nyssa, Vale, or for local residents. But it should increase accessibility for Payette, Fruitland, and Weiser customers. In addition, the new highway may act as a by-pass and give the existing development increased accessibility to Idaho customers. It is difficult to accurately predict what land prices in the new area might be, but they should be comparable with existing development land prices. The new area would also offer necessary lot sizes required by highway development residents.

CONCLUSION

With the expected increase in population, particularly young adults, service and retail trade industries can only increase and become increasingly important to the economic well being of Ontario. However, it must be remembered that service and retail trade, and all other sectors in the economy of Ontario, are dependent on crop production which is in turn dependent on agriculturally productive land.

Conflicts between commercial use of land and crop production are not intrinsically a part of economic growth. A realization of both needs and dedication to provide these needs may resolve conflicts which occur. Development of a new highway from airport corner to Malheur

Drive is a definite possibility and it meets the criteria for location choices established by decision-makers in the existing development along Highway 201. In addition, it adds some protection to needed prime farm land along Highway 201. It should resolve the present conflict between commercial development along Highway 201 and crop production. However, before such changes are made a more detailed study of costs and benefits should be undertaken. The cost of developing the highway and making the necessary changes to remove limitations may be greater than the benefits derived from protecting Class I land along Highway 201. In addition to a cost-benefit analysis, absolute compliance with the comprehensive plan for both the city and the county would be necessary.

APPENDICES

A. The Questionnaire	27
B. Analysis of the Questionnaire	35

APPENDIX A
The Questionnaire

Firm Name _____

INTRODUCTION

I am Sylvia Clark, a graduate student at Oregon State University from Nyssa. We are doing some research into reasons why activities locate where they do. We feel that planners and community developers do not understand all of the needs of retail and service activities and would like to ask you some questions relating to your locational needs.

May I have a few minutes of your time? I would like to assure you that the questionnaire will be held in strict confidence and that the results will only be used in the aggregate.

QUESTIONNAIRE

1a. Does the business own, rent, or lease this property on which it is located?

____ Own (go on to question 1b.)

____ Rent (go to Q 1d.)

____ Lease (go to Q. 1c.)

1b. Did you build or convert an existing building?

____ Build (go to Q. 1c.)

____ Convert (go to Q. 1c.)

____ Other (Please specify): _____

1c. In what year was the property purchased? _____

1d. In what year was the property first rented? _____

1e. In what year was the property first leased? _____

2a. Do you feel you paid a reasonable or unreasonable price for the property in this area (Ontario)?

_____ Reasonable (go to Q. 2b.)

_____ Unreasonable (go to Q. 2b.)

2b. When you purchased this property did you contact a realtor or the previous owner?

_____ Realtor (go to Q. 3.)

_____ Owner (go to Q. 2c.)

2c. What was the occupation of the person this property was purchased from? _____ (go to Q. 3.)

3. Was there major remodeling before you opened for business?

_____ Yes

_____ No

4. What year did you open for business at this location? _____

5. Did you use the land for any other purpose before building the present business?

_____ Yes (Describe the purpose: _____)

_____ No

Now I would like to ask why you located on this site. First.....

6. How important was the price of the land to you....; was it:

_____ Very important

_____ Somewhat important

_____ Not very important

_____ Not a consideration

7a. When you were looking for a site, did you prefer another location but find that the land was not for sale?

___ Yes (go to Q. 7b.)

___ No (go to Q. 8.)

7b. In what area was the preferred site? _____

8. Did you think that land prices on this site were higher, lower, or about the same as in other parts of the city?

___ Higher

___ Lower

___ About the same

___ Don't know

9. When you located on this site was Highway 201 a major traffic artery leading into Ontario?

___ Yes

___ No

10. What other traffic arteries, if any, did you consider as possible location sites? _____

11a. Was there any particular reason why you chose this side of the street to locate on?

___ Yes (go to Q. 11b.)

___ No (go to Q. 12.)

11b. What was the reason? _____

12. Did you consider the traffic flow when you located here?

___ Yes

___ No

13. Do you recall what this area you are now in was zoned when you established here?
14. About how many business establishments were in this development when you located here? _____
15. Did the location of West Park Plaza enter into your decision process when you located here?
- ____ Yes
- ____ No
16. Do you happen to recall what was located on each side of you when you opened for business? _____
17. If they are no longer here, what happened: Did they go out of business, relocate, or what? _____
- 18a. Did you consider the location of other business firms when locating here?
- ____ Yes (go to Q. 18b.)
- ____ No (go to Q. 19.)
- 18b. Why was their location a consideration? _____
- 18c. Did any other local business encourage you to locate here? _____
- _____

- 18d. Did any business discourage you? _____
19. Did the number of other business activities in this development encourage or discourage you from locating here?
- ____ Encourage
- ____ Discourage
- ____ No effect
-

20. Were you discouraged from locating elsewhere because of competition?

____ Yes

____ No

21. Did your particular space requirements effect your decision to locate here, rather than on another site?

____ Yes

____ No

22a. Do you require a relatively large amount of space for parking, display, or storage?

____ Yes (go to Q. 22b.)

____ No (go to Q. 23.)

22b. Was the space requirement a consideration for locating here?

____ Yes (go to Q. 22c.)

____ No (go to Q. 23.)

22c. Did the availability of space in this development allow you to consider expanding your business space?

____ Yes

____ No

23a. Are you on city water and sewage facilities?

Water:

Sewer:

____ Yes (go to Q. 23b.)

____ Yes (go to Q. 23b.)

____ No (go to Q. 23c.)

____ No (go to Q. 23c.)

23b. Were city services available when you came here?

____ Yes (go to Q. 24.)

____ No (go to Q. 24.)

23c. Do you share services with anyone else?

____ Yes

____ No

24. Was the availability of sewer and water services an important consideration in your decision to locate here?

____ Important

____ Not important

25. Do you happen to know if your customers do comparative shopping with your competitors?

____ Yes they do

____ No they do not

26. Do you think that customers who visit your store also visit other stores in this development during the same trip?

____ Yes they do

____ No they do not

27a. Do you have customers from outside the Ontario area? i.e., from Nyssa, Vale, Payette, Weiser, Etc.)

____ Yes (go to Q. 27b.)

____ No (go to Q. 28.)

27b. From where?

____ Nyssa, ____ Vale, ____ Payette, ____ Fruitland, ____ Weiser,

____ Other (List most important: _____)

27c. Which customers from outside Ontario did you expect?

____ Nyssa, ____ Vale, ____ Payette, ____ Fruitland, ____ Weiser

28. Do you think this particular location increased trade with.....

____ Nyssa residents, or not? ____ How about Vale? ____ Payette,
____ Fruitland, ____ Weiser

29a. When you located here did you happen to consider locating within
the city center, or not?

____ Yes (go to Q. 29b.)

____ No (go to Q. 30.)

29b. Why didn't you? _____

30a. Is this a relocation or a primary location within the Ontario area?

____ Relocation (go to Q. 30b.)

____ Primary location (go to Q. 31.)

30b. Did you increase, decrease, or not change your store size when
you moved?

____ Increased

____ Decreased

____ No change

31. Are there any other considerations which we have not discussed
that you feel influenced your location decision? _____

Now, I would like to ask you a few general questions relating to the
economy of the Ontario area.....

32a. First, there are several different economic sectors in the area.

As I read a few of them would you please tell me if they are very
important, somewhat important, not important, or do not know how
important, to the economy of Ontario?

<u>Economic Sector</u>	<u>V.I.</u>	<u>S.I.</u>	<u>N.I.</u>	<u>D.K.</u>
Retail trade	_____	_____	_____	_____
Finance, Insurance, and Real Estate	_____	_____	_____	_____
Wholesale trade	_____	_____	_____	_____
Food production	_____	_____	_____	_____
Government	_____	_____	_____	_____
Mining sand and gravel	_____	_____	_____	_____
Food processing	_____	_____	_____	_____
Construction	_____	_____	_____	_____

32b. Think about the industries you said were important...which one would you say is most important for the Ontario area?_____

33a. Do you feel that your success is dependent on the success of other sectors in the local economy or not?

_____ Yes (go to Q. 33b.)

_____ No (go to Q. 34.)

33b. Which one are you most dependent on?_____

34a. Do you happen to know the SCS Land Classification of this site?

_____ Yes (go to Q. 34b.)

_____ No

34b. What is the SCS Classification?_____

OBSERVATIONS

1. Is this a shopping goods store, convenience goods store, or a service outlet?

_____ Shopping goods, _____ Convenience goods, _____ Service

APPENDIX B

Analysis of the Questionnaire

The goal was to interview every business decision-maker located along Highway 201. However, only 73 per cent were contacted; 11 per cent were unavailable, 4 per cent were government offices, and 12 per cent were absentee owners. However, all three of the major types of commercial activity were represented in the development (service, convenience goods, and shoppers goods) and all three responded to the questionnaire. Of those interviewed 35 per cent were service outlets, 17 per cent were convenience goods stores with service, 22 per cent were shoppers goods stores with service, 9 per cent were strictly convenience goods stores, and 17 per cent were strictly shoppers goods stores. All responses to each question were tabulated and percentages were calculated to determine what per cent of those interviewed answered each question in a similar manner.

Ownership

The first few questions were concerned with ownership and property purchasing to help determine investment responsibility and the date each opened for business. It was hoped that the data would show what influence West Park Plaza had on the growth of development along Highway 201. Of those interviewed, 6 per cent owned the property on which the business was located, and 37 per cent rented or leased the property. Most (65 per cent) of the businesses built new buildings prior to opening for business and the remainder converted existing buildings, or bought an existing business. It is assumed from the amount of initial investment required for property purchase, new

buildings, or renovation of existing buildings, that owners believed this to be their optimum location. It is also assumed that the owners had enough information on their location to rule out the possibility of trial and error being the method used to find the optimum location.

Apparently West Park Plaza, built in 1971, did have an effect on the growth of the study area. About 70 per cent of the present businesses opened for business following construction of West Park Plaza. However, only about half added new buildings to the development. The other 35 per cent purchased existing buildings that were being used as residences or for other business activities.

Location Factors

Cost of property can have an influence on location.⁴¹ Therefore, questions were asked about land prices. Of those that purchased property, 79 per cent felt they paid a reasonable price for the property. Most (62 per cent) did not purchase the property through a realtor, which may have some effect on land price. Of those interviewed, 39 per cent thought the price of land, either purchased, leased, or rented, was very important; 26 per cent thought it was somewhat important; 15 per cent not very important; 15 per cent not a consideration; and 5 per cent gave no reply. Fifty per cent thought land prices along Highway 201 were higher than other parts of the city, 35 per cent thought they were about the same, 7.5 per cent thought they were lower, and 7.5 per cent did not know. Of those that thought land prices were higher, 40 per cent were relatively close to West Park Plaza, and another 7.5 per cent were in the section closest to the city center. Most in the section furthest from city center and West Park Plaza

thought prices were about the same, or lower than in other parts of the city. Even though most thought land price was important and that prices in the development were higher, they did not prefer another site above the one they occupied. Only 20 per cent preferred another site, and 50 per cent of those preferred another site along Highway 201.

There have been cases where the decision to start a business follows the purchase of property.⁴² In this case all land was purchased for the purpose of starting the existing businesses. However, 10 per cent were leased to farmers, residents, or other retailers prior to opening the present business.

Amount and direction of traffic can have an effect on location, and 98 per cent of those interviewed considered Highway 201 a major traffic artery leading into Ontario when they located there.⁴³ However, only 32 per cent considered locating on other traffic arteries. Half of the respondents had a specific reason for choosing the side of street they were located on, but only one-fourth of those gave as their reason anything to do with traffic. Still, 80 per cent of those interviewed did consider traffic flow when they chose their site along Highway 201. Only 20 per cent did not consider traffic flow. Apparently amount of traffic is important, while traffic direction has less effect.

It is commonly believed that zoning has a direct effect on land use patterns, and it may have in this development also.⁴⁴ However, 11 per cent of those in the development did not know what the land they were located on was zoned, and 26 per cent thought it was zoned other than commercial when they located in the development. The remaining 63 per cent did not locate in the development until it was

zoned commercial.

The situation of other businesses often has an effect on location, but it seems to have only a border line effect on businesses along Highway 201.⁴⁵ Forty-four per cent considered the location of West Park Plaza, and 30 per cent considered the location of other business firms. Very few businesses seemed to have suffered significantly because of neighbors. Fifty-eight per cent of the businesses have the same neighbors they began with, and 34 per cent had vacant lots adjacent to them. Therefore, only 8 per cent changed neighbors. Of those 8 per cent, one-half went out of business, and the other one-half changed location.

In addition to specific neighbors, the number of other commercial activities can affect location.⁴⁶ Half of those interviewed thought the number of other activities in the development encouraged them to locate there. The other 50 per cent said numbers had no effect.

Location of competitors can effect location decisions, but this does not seem to be the case for those located along Highway 201.⁴⁷ Only 6 per cent considered the location of competitors as a discouraging factor, and yet, 89 per cent thought their customers did comparative shopping with competitors. Eighty-five percent thought their customers visited other stores in the development during the same shopping trip.

Extraordinary space requirements are a common characteristic of businesses which locate in highway developments.⁴⁸ According to those interviewed 65 per cent of businesses along Highway 201 require relatively large amounts of space for parking, display, and/or storage. Fifty-four per cent of the businesses considered locating in the

development because of particular space requirements. In addition, 44 per cent felt availability of space in the development has allowed them to consider expanding business.

Many businesses do not find an optimal location the first time.⁴⁹ Of those interviewed, 40 per cent said this was a relocation for them, suggesting that previous locations were not optimum. There were many different reasons given for relocating, but 82 per cent said they increased their store size when they moved. This further illustrates the importance of size and space.

One constraint which may prevent businesses from locating at the optimum site is availability of water and sewage facilities.⁵⁰ Seventy per cent of the businesses along Highway 201 are on city water services, and 75 per cent are on city sewage services. Even with the high percentage of city water and sewage facility users, only 41 per cent considered availability of city services an important location consideration, while 59 per cent thought it was not important.

Ease of accessibility by consumers and distance they must travel both affect location decisions.⁵¹ Highway 201 is easily accessible to potential customers in Ontario, Nyssa, and Vale. The development is moderately accessible to Fruitland, Payette, and Weiser customers. The development is also relatively centrally located to these areas. It is therefore not surprising that 98 per cent of the businesses have customers from outside the Ontario area. Ninety-six per cent had customers from Nyssa and Vale, 89 per cent had customers from Payette and Fruitland, and 93 per cent had customers from Weiser. When these businesses located along Highway 201, 91 per cent expected

customers from Nyssa, Vale, and Fruitland. Ease of accessibility is high for Nyssa and Vale residents, and Fruitland is relatively close. Eighty-nine per cent of the businesses expected customers from Payette and Weiser. Payette customers have the second least distance to travel, but must come through the city center, which decreases accessibility. Weiser customers have much less accessibility and have a greater distance to travel than Payette, and yet they were expected by a large share of businesses. This can not be explained by the questionnaire results. When asked to compare their present location with other possible locations, 63 per cent felt that their present location increased trade with Nyssa and Vale residents, and 46 per cent felt it increased trade with Payette, Fruitland, and Weiser residents.

Overall distance and accessibility by customers to the city center is about the same as the ribbon development. Distance increases slightly for Nyssa and Vale residents, and accessibility is greater for Payette, Fruitland and Weiser residents, but less for Nyssa and Vale residents. In spite of this, only 22 per cent of the businesses considered locating in the city center. Of those that did consider locating in the city center, most (58 per cent) said space was the limiting factor. The second most limiting factor was cost (25 per cent).

Ranked Factors

The questionnaire identified some factors which are important to commercial enterprises. To determine which factors were most or least important, each person interviewed was asked to rank five common factors according to their importance. (Table 1) Central location was ranked

number one by 35 per cent of those interviewed, and customer access was ranked number two 41 per cent of the time. Central location was ranked either first or second 59 per cent of the time, and customer access was ranked either first or second 71 per cent of the time. Factors ranked third and fourth were also closely matched. Land price was ranked third by 31 per cent, and fourth by 25 per cent, but lot size was ranked third by 30 per cent, and ranked fourth by 34 per cent. Zoning was definitely ranked least important. It was ranked fifth by 67 per cent of the respondents.

According to location theory, the central city is generally the most central location.⁵² It seems very incongruous that businesses located on a ribbon development would rank central location as the most important factor. This incongruity is further exemplified by those who looked at the central city as a possible location site. They did not rank central location number one. Only 25 per cent of those who considered locating in the central city ranked central location number one, compared to 35 per cent over all. In contrast, 41 per cent of those who did not consider the central city as a possible site ranked central location as the most important factor. One possible explanation, in the case of Ontario, is that the central city may not be centrally located for customers. Another possibility is that the city center and the fringe area development are relatively close causing them to be considered equally central.

Traffic arteries are commonly believed to be easily accessible to customers.⁵³ Therefore, it is not surprising that customer access is ranked high by those located along Highway 201. It is also not surpris-

ing that of those which considered other traffic arteries, most (47 per cent) ranked customer access as most important. Those which did not look at other traffic arteries as possible location sites ranked central location as most important. This further supports the possibility that the area under study is central to customers in the area.

Land price was ranked third overall, but 40 per cent either ranked it fourth or fifth. Ranking land price third, next to central location and customer access, is not surprising. If a retailer is not located where he/she can be easily reached either through short distance or accessibility, it does not matter what price he/she paid for land. Land price was more important for those who felt they paid a reasonable price for land than those who paid an unreasonable price. Most (30 per cent) who paid a reasonable price ranked land price as most important. Most (40 per cent) of those who paid an unreasonable price ranked land price fourth.

Some studies have shown that businesses which locate in ribbon developments often require large amounts of space.⁵⁴ This is also true for Highway 201. Sixty-five per cent said they required a relatively large amount of space, and yet most (34 per cent) ranked lot size fourth. When separating those that required space and those that did not, there was little difference in the ranked position of lot size.

Until recently, zoning has not been applied or enforced outside city limits. This may account for the lack of concern for zoning. Zoning was ranked as least important by 67 per cent of those inter-

viewed. Most of the present businesses did not locate in the development until after a considerable part of the area was annexed and zoned commercial. Therefore, some of the lack of concern for zoning may be based on the fact that most decision-makers only consider those locations that are zoned commercial.

Understanding Economic Sectors

The respondents were asked to explain the importance of eight separate economic sectors for the Ontario area. (Table 2) It was believed that an understanding of the importance of food production is necessary if Class I agricultural land is to be protected. Understanding of each important economic sector was high. Eighty-nine per cent of those interviewed realized food production was very important to the economy of Ontario. Forty-two per cent thought it was the most important sector, and 56 per cent thought their business was most dependent on food production. For Ontario, basic economic sectors are food production, food processing, retail trade and professional services, and construction. More than 50 per cent of the businesses located along Highway 201 ranked all five basic sectors as very important to the economy of Ontario. One hundred per cent realized that their success was dependent on the success of other sectors in the local economy.

They were not aware, however, that the land they were located on has been classified by the Soil Conservation Service (SCS) as Class I agricultural land. This may have been the fault of the question. Perhaps the term "SCS Classification" should have been defined.

FOOTNOTES

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 - 25 Northam, op. cit., footnote 14, p. 224.
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