

**ANALYSIS OF COMMERCIAL LAND REQUIREMENTS  
IN THE BROOKSWOOD-FERNRIDGE AREA, LANGLEY, B.C.**

**PREPARED FOR:**

**THE TOWNSHIP OF LANGLEY**

**CORIOLIS CONSULTING CORP.**

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## 1.0 INTRODUCTION

### 1.1 BACKGROUND

Brookwood-Fernridge is an area in the southwest portion of the Township of Langley. It is presently a single family and rural residential neighbourhood with a small component of commercial development. However, the Official Community Plan designates it as an urban growth area which can accommodate additional single family and multifamily housing and commercial development.

A rezoning proposal has been submitted to the Township that includes the conversion of some land from suburban residential to commercial. The proposal is generally consistent with the land use designations in the Official Community Plan, but it does raise questions about the appropriate mix of urban uses in Brookwood-Fernridge. One of these questions is whether the amount of land designated for commercial uses is appropriate.

The Township of Langley commissioned Coriolis Consulting Corp. to conduct a review of the amount of land designated for commercial uses in the Brookwood-Fernridge Community Plan.

## 1.2 METHODOLOGY

We have estimated the total amount of retail, service and office floorspace likely to be supportable by the Brookwood-Fernridge community at the point at which it reaches its maximum population capacity (i.e. all lands designated for housing are developed and occupied). The total supportable commercial floorspace is then split into the portion likely to be satisfied outside of the area and the portion likely to be satisfied in the Brookwood-Fernridge area. This is then compared with the amount of existing commercial floorspace in Brookwood-Fernridge in order to estimate the potential for new commercial development.

The potential for commercial development is then converted to an estimate of the required land area for commercial use.

The estimated required land area is compared to the amount and location of land designated in the Official Community Plan in Brookwood-Fernridge.

## 2.0 EXISTING COMMERCIAL DEVELOPMENT PATTERNS

Langley's commercial centre is the town centre area which includes the commercial core of the City of Langley, the Willowbrook Town Centre (including Willowbrook Shopping Centre) in the Township, and some commercial development in adjacent parts of Surrey. This commercial area includes uses which serve the regional population (major department stores, larger office buildings) as well as uses which are more community-oriented (convenience stores, personal services such as banks and hair salons) and serve the residents of the town centre area.

Smaller commercial areas catering to local residents are located in Cloverdale, Fort Langley, Aldergrove, Murrayville, Walnut Grove and Brookwood. These areas contain uses serving the immediate community such as grocery stores, convenience stores, personal services, and small office buildings. These smaller areas do not contain commercial uses which serve a regional trade area, such as department stores. Some community commercial centres in other parts of Greater Vancouver region contain junior department stores, but all junior department stores in Langley are located in the Town Centre.

Brookwood is currently served by commercial space within the community and by commercial space in the town centre, which is a few minutes drive to the north.

### 3.0 ROLE OF THE BROOKSWOOD COMMERCIAL CENTRE

The Official Community Plan of the Township of Langley states "with the exception of Willowbrook Mall, commercial development in the Designated Urban Growth Centres shall be for local commercial markets only."

Brookswood-Fernridge is a Designated Urban Growth Centre. Therefore, commercial development within the area is intended to serve only the local community.

Commercial uses would include supermarkets, drug stores, personal services such as banks, dry cleaning, hair care and video rental, and small scale office buildings for tenants such as lawyers, physicians, and realty companies. Brookswood-Fernridge would not likely be suitable for large office buildings, department stores or highway commercial uses because the nearby Willowbrook Town Centre serves as a superior location for these uses.

Junior department stores sometimes locate in community commercial centres. However, Zellers and K-Mart are already located in the town centre, which is likely to be the preferred location for any additional department store outlets in western Langley.

#### 4.0 ANALYSIS OF THE BROOKSWOOD TRADE AREA

##### 4.1 TRADE AREA DEFINITION

Taking into account the location of other commercial areas in Langley and southeast Surrey, and the transportation network in the area, the trade area for the Brookswood-Fernridge Commercial core would include the Brookswood-Fernridge planning area plus some adjacent rural areas to the east and south in Langley and to the west in Surrey. The trade area would not likely extend to the north into the City of Langley as residents there would find it more convenient to shop at Willowbrook or in the City.

For this study, the Brookswood-Fernridge planning area is assumed to be the trade area for community commercial development. The population in the adjacent rural areas is only about 2000 and not all of these people would heavily patronize commercial facilities in Brookswood-Fernridge. Based on discussion with the Planning Department, it is estimated that about 50% of the population in the rural area (i.e. 1000 people) will be in the primary trade area for commercial development in Brookswood-Fernridge.



#### 4.2 COMMERCIAL FLOORSPACE INVENTORY

Existing commercial floorspace in Brookwood-Fernridge as of June 1991, can be summarized as follows:

Retail and service	155,480 sq.ft.
Office	<u>23,846 sq.ft.</u>
Total commercial	179,326 sq.ft.

Most of this space is concentrated near 200th St. and 40th Ave., although small commercial nodes are located at 200th St. and 24th Ave. as well as 208th St. and 40th Ave.

Most retail space is located in small strip malls, while most office space is located at grade and is occupied by lawyers, insurance companies, realty companies or medical professionals.

#### 4.3 POPULATION CAPACITY OF THE TRADE AREA

The Brookwood-Fernridge Community Plan indicates the expected population of the area at the time of full development will be about 35,000. To this must be added 1000 people in the rural area, for a total projected population capacity of 36,000.

Estimates of the Brookwood-Fernridge population indicate that about 12,000 people currently (i.e. mid-1991) live in the Brookwood-Fernridge area.

## 5.0 RETAIL AND SERVICE SPACE ANALYSIS

### 5.1 APPROACH

To estimate the amount of retail and service space supportable by the trade area population capacity we use two approaches:

The first method uses the ratio of retail and service floorspace per capita. The steps are:

1. Estimate the trade area population capacity.
2. Calculate retail and service floorspace per capita in developed areas similar to the trade area, in terms of proximity to regional centres.
3. Select a per capita ratio appropriate to the study area.
4. Calculate the total amount of retail and service space supportable in the trade area at the time of full development.

The second method uses estimated retail expenditures within the trade area at the time of full development. The steps are:

1. Estimate the trade area population capacity.
2. Calculate total sales potential per capita by retail and service category.
3. For each category estimate the percentage of sales potential that will remain in the trade area.

4. Estimate the sales per square foot required to support stores in each category of retail and service space.
5. Use steps 1 to 4 to calculate supportable retail and service space by category.

In both cases, we tend to estimate on the high side in order to ensure that sufficient land is available to meet the maximum likely requirement.

## 5.2 COMMUNITY RETAIL AND SERVICE FLOORSFACE PER CAPITA

Community retail and service floorspace is defined as retail and service floorspace not located in a Regional Town Centre, downtown Vancouver, or other regional shopping centres.

The overall regional average ratio of community retail/service space per capita is about 26 sq.ft., although this is probably too high a ratio to apply to Brookswood. This ratio includes department stores outside of regional centres, all highway-oriented commercial space in the region, all motels/hotels, and other retail/service uses not likely to locate in Brookswood. Some individual municipalities provide a better indication of the community retail and service floorspace per capita that should exist in the trade area at the time of full development. The best comparable municipality would probably be Surrey. It is located near Brookswood-Fernridge and, like Langley, has a regional shopping centre which attracts a large amount of the municipality's retail and service spending.

Municipalities which are small geographically, but serve a large trade area, are not good indicators of expected floorspace per capita in Brookswood-Fernridge. New Westminster is an example of this. A municipality which has a large office floorspace inventory would also be a poor indicator, as daytime office workers who commute from other municipalities would help support additional retail and service floorspace. This would lead to a higher retail and service floorspace per capita figure. Burnaby would be a good example of this.

Table 1 indicates that community retail and service floorspace is about 17 sq.ft. per capita in Surrey. However, even this figure would probably overstate the amount of retail and service space that should be expected in the trade area because it includes

**TABLE 1**

**COMMUNITY RETAIL AND SERVICE FLOORSPACE PER CAPITA**

<b><u>MUNICIPALITY</u></b>	<b><u>COMMUNITY RETAIL &amp; SERVICE FLOORSPACE PER CAPITA</u></b>
BURNABY	27.58
COQUITLAM	18.63
DELTA	25.86
NEW WESTMINSTER	40.49
PORT COQUITLAM	23.84
RICHMOND	21.90
SURREY	17.33
WHITE ROCK	29.46

**SOURCE:**

1. GVRD DEVELOPMENT SERVICES COMMERCIAL AND INDUSTRIAL FLOORSPACE INVENTORY, 1990
2. B.C. PLANNING AND STATISTICS DIVISION MUNICIPAL POPULATION ESTIMATES, 1990.

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uses that are not likely to locate in Brookwood-Fernridge. This includes auto dealerships, hotels, movie theatres and junior department stores. Excluding these uses, it is likely that retail and service space per capita in Brookwood-Fernridge would be about 15 sq.ft. per capita. This translates into 540,000 sq.ft. of retail and service space (36,000 people x 15 sq.ft. per capita) in the trade area at the time of full development. In comparison, the trade area currently contains about 13 sq.ft. of retail/service space per capita.

It should be noted that this is the maximum amount of retail and service floorspace expected in the area (based on the estimated population capacity) because the comparable floorspace per capita figure used from Surrey includes old and new retail and service floorspace. New floorspace requires higher sales per sq.ft. than old space in order to justify the development costs. Since all additional retail and service space in the trade area will be new, the amount of supportable retail and service space in Brookwood-Fernridge will likely be less than 540,000 sq.ft.

### 5.3 TRADE AREA SALES POTENTIAL PER CAPITA

Trade area sales potential per capita is estimated using the following categories:

- supermarkets and grocery stores.
- all other food stores.
- general merchandise stores (department stores, junior department stores, variety stores).
- non-department store DSTM.
- drugs and patent medicine stores.
- restaurants/taverns/fast food.
- laundry and dry cleaning.
- personal care services.
- video rentals.

To estimate sales potential per capita, we use data from Statistics Canada which gives total yearly expenditures for each category for either Vancouver, B.C., or Canada. Based on the population of these areas, total sales figures are converted into sales per capita for each category. An allowance for inflation (5% per year) is made for three categories (laundry and dry cleaning, personal care services, video rentals) because the most recent available data for these categories is from 1986.

No adjustment for differences in average incomes between Langley and BC, Vancouver or Canada is made due to the small difference in average incomes between these areas. The average income per capita as at 1988 in Langley was about 1.5% less than the B.C. average income and about 9.0% less than the Greater Vancouver average income.



Table 2 shows the actual estimates of sales per capita for the various categories of retail goods and services.

**TABLE 2****RETAIL AND SERVICE SALES PER CAPITA**

<b>CATEGORY</b>	<b>1990 TRADE AREA SALES PER CAPITA</b>
SUPERMARKET & GROCERY STORES	\$1,676
ALL OTHER FOOD STORES	N/A
GENERAL MERCHANDISE STORES(1)	\$848
NON DEPT STORE DSTM(2)	\$1,054
OTHER SEMI-DURABLE AND DURABLE GOODS(5)	\$514
DRUGS & PATENT MEDICINE	\$354
RESTAURANTS/TAVERNS/FAST FOOD	\$735
LAUNDRY & DRYCLEANING(3)	\$59
PERSONAL CARE SERVICES(3)	\$109
VIDEO RENTAL(4)	\$18
<b>TOTAL RETAIL &amp; SERVICE SALES PER CAPITA</b>	<b>\$5,367</b>

**NOTES**

1. INCLUDES DEPARTMENT STORES, GENERAL STORES AND VARIETY STORES.
2. INCLUDES SHOE STORES, CLOTHING STORES, HOUSEHOLD FURNITURE & APPLIANCE STORES, HOUSEHOLD FURNISHINGS STORES.
3. BASED ON AVERAGE EXPENDITURES IN VANCOUVER IN 1986 AND INFLATED AT 5% PER YEAR.
4. BASED ON AVERAGE EXPENDITURES IN CANADA IN 1986 AND INFLATED AT 5% PER YEAR.
5. INCLUDES BOOKS, FLORISTS, LAWN AND GARDEN CENTRES, HARDWARE, PAINT, GLASS, WALLPAPER, TOYS, GIFTS & NOVELTY STORES, SPORTING GOODS, BICYCLES, MUSICAL INSTRUMENTS, RECORDS & TAPES, JEWELLRY, WATCH & JEWELLRY REPAIR, CAMERA & PHOTOGRAPHY STORES.

**SOURCES:**

1. RETAIL AND SALES STATISTICS, STATISTICS CANADA CATALOGUE 63-005.
2. RESTAURANT, CATERER AND TAVERN STATISTICS, STATISTICS CANADA CATALOGUE 63-011.
3. FAMILY EXPENDITURES IN CANADA, 1986, STATISTICS CANADA CATALOGUE 62-555.
4. B.C. POPULATION ESTIMATES, PLANNING AND STATISTICS DIVISION.

#### 5.4 ANALYSIS BY CATEGORY OF SALES

In order to estimate the amount of retail and service floorspace in each category that will be supportable by the trade area population at the time of full development, we use the following steps:

1. estimate trade area population capacity. We expect this to be 36,000 people, based on data supplied by the Township.
2. calculate the total sales potential generated by the population of the trade area for each category using the sales per capita figures in Table 2. These sales figures are calculated in 1990 dollars.
3. estimate the proportion of retail and service sales potential generated by the trade area population that will remain in the trade area for each category (the capture rate). This rate is estimated by taking into account the type of retail or service outlet, the relationship of Brookswood-Fernridge to other commercial areas offering the same products and services, and the suitability of Brookswood-Fernridge to offer the products or services.

Our estimated capture rates range from 10% for general merchandise stores, due to the nearby location of the Willowbrook Town Centre, up to 80% for categories that consumers would tend to purchase locally (supermarkets and grocery stores, drugs and patent medicine, laundry and dry cleaning, personal care, video rental).

The estimate of the capture rate for each category requires judgement. Therefore, we have tended to estimate on the high side on the premise that

it is better to slightly overestimate the amount of commercial land required than to underestimate the requirement.

4. estimate the sales per sq.ft. for each retail and service category required to make the space financially viable (the productivity rate). Productivity rates are in 1990 dollars.
5. calculate the supportable floorspace using the figures in steps 1 to 4.

#### Supermarket and Grocery Store

The trade area population capacity will generate about \$60.3 million (1990\$) of supermarket and grocery store sales. Assuming a capture rate of 80%<sup>1</sup> and a productivity rate of \$390<sup>2</sup> per sq.ft., the trade area will support 123,800 sq.ft. (((\$1676 per capita x 36,000 x 80%)/\$390 per sq.ft.) of supermarket and grocery store space.

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<sup>1</sup> We estimate that 80% of all grocery store and supermarket sales generated by the Brookwood population would remain in the Brookwood trade area. A previous study in 1988 by Thomas Consultants for the Walnut Grove area estimated a 60% capture rate for this retail category. Our estimate is higher because we feel that supermarket expenditures are kept in the local community and because we have adopted a general approach of "estimating on the high side" based on the premise that it is better to over-estimate than to under-estimate the required amount of commercial land.

<sup>2</sup> This productivity rate was estimated by examining the median sales rates per sq.ft. of supermarkets as reported by the Urban Land Institute's (ULI) Dollars and Cents of Shopping Centres (1990). The Walnut Grove study uses a productivity rate of \$425 per sq.ft. for supermarkets and grocery stores and \$350 per sq.ft. for all other food stores. Therefore, our productivity rate is very similar to the rate used in the Walnut Grove report.

### General Merchandise Stores

The trade area population capacity will generate \$30.5 million (1990) in general merchandise store sales. Assuming a productivity rate of \$150<sup>3</sup> per sq.ft., supportable general merchandise floorspace would be 203,500 sq.ft. ((\$848 per capita x 36,000)/\$150 per sq.ft.) However, the Brookwood-Fernridge trade area would probably capture little of this supportable space due to its proximity to the Willowbrook Town Centre. Any new department stores are likely to be built in the town centre area. We assume that small general merchandise or variety stores might capture say 10%<sup>4</sup> of sales potential, supporting about 20,000 sq.ft. space.

### Non-Department Store DSTM

DSTM (Department Store Type Merchandise) includes goods such as clothing, shoes, accessories, home furnishings and appliances. Non-department store DSTM includes all DSTM sold in outlets other than general merchandise stores (i.e. department stores and junior department stores).

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<sup>3</sup> This rate is approximately the median productivity rate of junior department stores in Canadian community shopping centres according to the ULI (1990).

<sup>4</sup> Although we do not expect any large general merchandise stores to locate in Brookwood (i.e. junior department stores or department stores), some small retail outlets are classified as general merchandise outlets. Therefore, we have allowed for some of the sales potential of this category to be captured by the trade area. The Walnut Grove report did not allow for any sales potential of this category to remain in the trade area.

The trade area population capacity will generate about \$37.9 million (1990) of non-department store DSTM. At a 50%<sup>5</sup> capture rate and a productivity rate of \$200<sup>6</sup> per sq.ft., the Brookswood-Fernridge area would support 94,200 sq.ft. ( $(\$1054 \text{ per capita} \times 36,000 \times 50\%) / \$200 \text{ per sq.ft.}$ ) of non-department store DSTM floorspace. This 50% rate is high, given the conclusion that department stores (which attract other retailers) are not likely to locate in the Brookswood area.

#### Other Semi-Durable and Durable Goods

This category includes goods such as books, hardware, glass, toys, bicycles and sporting goods.

The trade area population capacity will generate about \$18.5 million (1990) in sales of other semi-durable and durable goods. Assuming a 50%<sup>7</sup> capture rate and a

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- <sup>5</sup> We have allowed for 50% of all non-department store DSTM sales generated by the trade area population to be captured by the trade area because we expect that a fairly large portion of sales in this category would be made in locations near resident's homes. The Walnut Grove report estimated that 20% of sales in this category would be captured by the trade area. We have allowed a high percentage to be captured by the trade area because of our approach that it is better to over-estimate than under-estimate the required amount of commercial land.
- <sup>6</sup> An analysis of DSTM retailers listed in the Dollars and Cents of Shopping Centres (1990) indicates that most of these retailers had productivity rates ranging between \$120 per sq.ft. and \$320 per sq.ft. but most were about \$200 per sq.ft. The Walnut Grove report estimates that productivity rates for this category range between \$125 and \$300 per sq.ft.
- <sup>7</sup> We use a 50% capture rate for this category because we feel that a significant amount of sales in this category would be made to community residents. Again this estimate could be high, but we believe it is better to over-estimate than to under-estimate the required amount of commercial land. The Walnut Grove report did not analyze this category of goods separately.

productivity rate of \$200<sup>8</sup> per sq.ft., these sales would support 46,200 sq.ft. ( $(\$514 \text{ per capita} \times 36,000 \times 50\%) / \$200 \text{ per sq.ft.}$ ) of retail and service.

#### Drugs and Patent Medicine

The trade area's population capacity will support about \$12.7 million (1990) in drugs and patent medicine sales. Assuming a capture rate of 80%<sup>9</sup> and a productivity rate of \$400<sup>10</sup> per sq.ft., the trade area would support 25,500 sq.ft. ( $(\$354 \text{ per capita} \times 36,000 \times 80\%) / \$400 \text{ per sq.ft.}$ ) of retail space for drugs and patent medicine.

#### Restaurants/Taverns/Fast Food

The Brookwood-Fernridge trade area's population capacity should generate about \$26.5 million (1990) in restaurant, tavern and fast food sales. Assuming a 25%<sup>11</sup>

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<sup>8</sup> The Dollars and Cents of Shopping Centres (1990) indicates that most of the retailers in this category have productivity rates of about \$200 per sq.ft.

<sup>9</sup> We use an 80% capture rate for drugs and patent medicine because we believe that most residents would purchase these items within their community. The Walnut Grove report uses an estimate of 60%. We use a fairly high estimate because we believe it is better to over-estimate than to under-estimate the required amount of commercial land.

<sup>10</sup> The Dollars and Cents of Shopping Centres (1990) indicates that media drug store sales are about \$400 per sq.ft. The Walnut Grove report also uses \$400 per sq.ft.

<sup>11</sup> We estimate a 25% capture rate for this category of goods because we believe that a relatively small amount of sales in restaurants, taverns and fast food are made to trade area residents. The Walnut Grove report does not analyze this category separately.

capture rate and a productivity rate of \$200<sup>12</sup> per sq.ft., the trade area would support 33,100 sq.ft. ( $(\$735 \text{ per capita} \times 36,000 \times 25\%) / \$200 \text{ per sq.ft.}$ ) of restaurant, tavern and fast food space.

#### Laundry and Dry Cleaning/Personal Care/Video Rental

The trade area will generate about \$6.7 million (1990) in sales of laundry and dry cleaning, personal care, video rental. Assuming an 80%<sup>13</sup> capture rate and a productivity rate of \$200<sup>14</sup> per sq.ft., these sales would support 26,800 sq.ft. ( $(\$186 \text{ per capita} \times 36,000 \times 80\%) / \$200 \text{ per sq.ft.}$ ) of floorspace.

#### Other Retail and Service Commercial Uses

Due to a lack of available data we cannot analyze some retail and service uses by sales per capita. These uses include liquor stores, hotels, automotive sales, service stations, art galleries and specialty food stores.

An analysis of the existing commercial floorspace in Brookwood-Fernridge indicates that about 16% of all retail and service floorspace is comprised of these type of uses.

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<sup>12</sup> The Dollars and Cents of Shopping Centres (1990) indicates that productivity rates for outlets in this category are usually about \$200 per sq.ft.

<sup>13</sup> We estimate an 80% capture rate for this category because laundry and dry cleaning, personal care, and video rental expenditures tend to be made locally. The Walnut Grove report does not analyze this category separately.

<sup>14</sup> The Dollars and Cents of Shopping Centres (1990) indicates that most outlets in this category have productivity rates of about \$200 per sq.ft.



It is reasonable to assume that these other retail and service uses would account for an additional 20% of retail and service floorspace in the trade area at the time of full development. This translates into an additional 74,000 sq.ft. (20% x 370,200 sq.ft., which is the total for the above categories).

### Summary

This analysis of supportable retail and service floorspace by category indicates that the trade area should support about 445,000 sq.ft. of retail and service space at the time of full development, for the indicated categories.

Given our intentional selection of capture rates that may be "on the high side", our estimate of supportable retail space in the trade area should be regarded as an upper end estimate.

## 5.5 SUMMARY OF SUPPORTABLE RETAIL AND SERVICE SPACE

Two methods of analysis were used to estimate supportable retail and service floorspace in the trade area at the time of full development. By applying a community retail and service floorspace per capita rate found in a comparable municipality (Surrey) to Langley, we estimated the trade area should support about 540,000 sq.ft. retail and service floorspace at build-out.

By calculating the retail and service sales potential by category (for selected categories) for the trade area, we estimated that the Brookwood-Fernridge area should support about 445,000 sq.ft. of retail and service floorspace at the time of full development. However, this method has excluded some retail categories, particularly junior department stores. Allowing for the addition of one store would increase the total on the order of 100,000 sq.ft. While it is unlikely that a junior department store would locate in Brookwood-Fernridge (because of its proximity to the Langley town centre), it may be appropriate to retain the possibility by maintaining sufficient land area. Therefore, we suggest using the higher estimate (540,000 sq.ft.) as the basis for calculating land requirements for retail and service space.

## 6.0 OFFICE SPACE ANALYSIS

### 6.1 APPROACH

In order to estimate the amount of office floorspace that the Brookwood-Fernridge area will likely contain at the time of full development, we examine office floorspace per capita in other similar areas.

We calculate the amount of office space per capita that is located outside of Regional Town Centres in various municipalities.

The municipalities which we feel are good comparables to Langley are identified and the floorspace per capita figures for these municipalities are applied to the Brookwood-Fernridge population capacity to estimate total office space in the trade area at the time of full development.

## 6.2 PROJECTED OFFICE SPACE IN BROOKSWOOD-FERNRIDGE

Municipalities which are not major regional business centres are likely the best indicators for predicting the amount of office floorspace supportable in Brookswood-Fernridge at the time of full development. The municipalities of Coquitlam, Surrey, White Rock and Port Moody would be the best indicators.

Suburban municipalities such as Burnaby (Canada Way) and Delta (Annacis Island) would be poor indicators of office space per capita in Brookswood-Fernridge.

Non-Regional Town Centre office floorspace per capita in Coquitlam, Surrey, White Rock and Port Moody ranges between about 6 sq.ft. to 8 sq.ft. per capita (Table 3).

With a population capacity of 36,000, Brookswood-Fernridge would support between 216,000 sq.ft. (6.0 sq.ft. x 36,000) and 288,000 sq.ft. (8.0 sq.ft. x 36,000) of office floorspace at the time of full development.

However, this range could be lower given the trade area's proximity to the Langley Town Centre. This may be demonstrated by the fact that Brookswood-Fernridge currently contains about 2 sq.ft. of office space per capita.

**TABLE 3**

**NON REGIONAL TOWN CENTRE OFFICE FLOORSPACE PER CAPITA**

<b><u>MUNICIPALTY</u></b>	<b><u>NON RTC OFFICE FLOORSPACE PER CAPITA</u></b>
BURNABY	23.00
COQUITLAM	5.47
DELTA	10.77
NEW WESTMINSTER	24.60
PORT COQUITLAM	18.27
RICHMOND	20.64
SURREY	6.56
WHITE ROCK	7.85
PORT MOODY	6.13

**SOURCE:**

1. GVRD DEVELOPMENT SERVICES COMMERCIAL AND INDUSTRIAL FLOORSPACE INVENTORY, 1990.
2. B.C. PLANNING AND STATISTICS DIVISION MUNICIPAL POPULATION ESTIMATES, 1990.

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## 7.0 SUMMARY OF COMMERCIAL FLOORSPACE REQUIREMENTS

Our analysis of retail and service floorspace indicates about 540,000 sq.ft. of retail and service space will be supportable in Brookwood-Fernridge at the time of full development. Our analysis of office floorspace indicates that the trade area will contain between 216,000 sq.ft. and 288,000 sq.ft. of office floorspace.

Therefore, total commercial floorspace should range between 756,000 sq.ft. and 828,000 sq.ft. when Brookwood-Fernridge reaches the population capacity of 36,000.

## 8.0 LAND REQUIREMENTS

### 8.1 NET ADDITIONAL LAND REQUIRED

#### Retail and Service

Currently there is about 156,000 sq.ft. of retail and service floorspace in Brookswood-Fernridge. Our estimate of total supportable retail and service space at the time of full development is 540,000 sq.ft. Therefore, the trade area will support about 384,000 sq.ft. of additional retail and service floorspace at capacity.

Commercial zoning by-laws in the Township of Langley generally allow 40% site coverage. Most retail and service space in Brookswood-Fernridge will probably be one storey, suggesting a maximum floorspace ratio of 0.4. However, most single storey retail/service development achieves a somewhat lower floorspace ratio, after parking, landscaping and other land areas are accommodated. We suggest that an overall average floorspace ratio of 0.35 is appropriate.

This means that an additional 1,097,100 sq.ft., or 25.2 acres, of land is required to support future retail and service development in the trade area.

#### Office

Currently, there is about 24,000 sq.ft. of office floorspace in the trade area. Our estimate of potential office space in Brookswood-Fernridge at capacity is 216,000 sq.ft. to 288,000 sq.ft. Therefore, an additional 192,000 sq.ft. to 264,000 sq.ft. of office floorspace could exist in the trade area at the time of full development.

Commercial zoning by-laws in the Township of Langley generally allow 40% site coverage. Assuming most office space would be two storeys, this translates into an average floorspace ratio of 0.8 for office space.

This means that an additional 240,000 sq.ft. to 330,000 sq.ft., or 5.5 acres to 7.6 acres, of land will be required for future office space development in Brookwood-Fernridge.

Overall, additional commercial land requirements in Brookwood-Fernridge appear to range between 30.7 acres and 32.8 acres. This total does not allow for mixed use development. Some office space is likely to be built over retail space, reducing the total land requirement. This estimate does not include an allowance for roadways and other undevelopable lands.

Given that our approach is based on the premise that it is better to over-estimate than under-estimate the required amount of commercial land, our estimate is likely an upper end of the additional commercial land requirement in the trade area. We think it is highly unlikely that more than 30 to 35 acres of commercial land will be required to support additional retail, personal service, office and related uses in Brookwood-Fernridge. It may be possible to reduce this commercial land requirement in the future.



## 8.2 COMPARISON OF LAND REQUIREMENTS WITH DESIGNATED COMMERCIAL AREAS

The existing Community Plan designates several commercial locations in Brookswood-Fernridge.

Based on information from the Planning Department, the existing situation can be summarized as follows:

<u>Location</u>	<u>Total Designated Area</u>	<u>Currently Used For Commercial</u>	<u>Remaining</u>
24th & 200th	15 acres	8 acres	7 acres
32nd & 200th	55 acres	0 acres	55 acres
40th & 200th	20 acres	20 acres	0 acres
40th & 208th	<u>10 acres</u>	<u>10 acres</u>	<u>0 acres</u>
Total	100 acres	38 acres	62 acres

There is a total of 62 acres available for additional commercial development. Our analysis indicates a requirement for 30 to 35 acres of additional development to serve a population of 36,000.

There appears to be good reason to reduce the commercial land designation, particularly considering that an additional 40 acres are designated for service commercial development near 24th and 196th.

The commercial designation could be reduced by about 27 to 32 acres (or say 30 acres in round numbers).

### 8.3 CHANGES TO THE DESIGNATIONS

There are only two alternatives for reducing commercial land designations:

- reduce the 24th and 200th designation (a drop of 7 acres) and reduce the 32nd and 200th designation.
- reduce only the 32nd and 200th designation.

The second alternative allows the development of new community commercial space in two locations to serve different parts of the community, while retaining the possibility of making 32nd and 200th the commercial core of Brookwood (because a reduction of 30 acres would still leave 20 available for development. Twenty acres can accommodate approximately 305,000 sq.ft. of space at an FSR of 0.35. Therefore, we recommend reducing the land area at 32nd and 200th, if the Municipality wants to more closely match the designated land area with the estimated total requirement for commercial space.

The next question, of course, is which sites to retain for commercial use. The plan currently designates land in all quadrants of the 32nd and 200th intersection for commercial use. It is not possible to make specific recommendations without a detailed look at the specific sites and the overall design of the area. However we recommend that at least one quadrant of the commercial focus be large enough to accommodate a large commercial project that could form the core of a town centre for Brookwood-Fernridge.