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THE FEASIBILITY OF ESTABLISHING A HOME MARKETING  
SERVICE IN GREAT FALLS, MONTANA

By

Thomas M. Burger

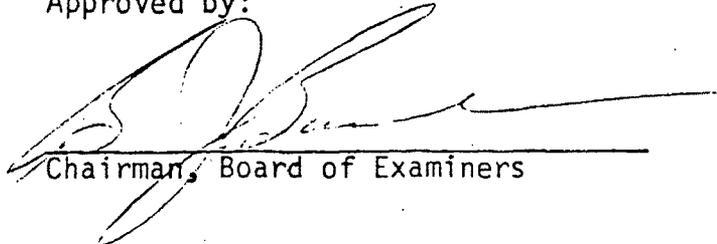
B.S., Florida State University, 1969

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For The Degree Of  
Master Of Business Administration

UNIVERSITY OF MONTANA

1978

Approved by:



Chairman, Board of Examiners



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## CHAPTER I

### INTRODUCTION

This project has been undertaken to evaluate the feasibility and profitability of a new type realtor service. The business evaluated is a seller assistance service, or "for sale by owner" assistance service. In specific terms this feasibility study will address the following subject areas: (1) A definition of the services to be provided by the proposed service; hereafter called Home Marketing Service, (2) an evaluation and definition of the target market population, and its characteristics, (3) an evaluation of the competitive environment which the service will face, (4) a determination of the profit potential of the business.

It is a generally recognized procedure in the business world to perform a feasibility study prior to initiating action on expansion, product line changes, or establishing a new function. It provides management with both decision making information and an implementation plan should a "procede" decision be made. In this specific instance, a study such as this provides the vehicle with which to evaluate the true potential of the business prior to making any irrevocable investment decisions, and it gives the opportunity to make revisions to the marketing plan while still in a no cost environment.

The idea for a new type realtor service is a result of the realization that each year approximately 5.1 million families move from their homes.<sup>1</sup> In the process of selling their homes, there presently exists only two real and usable alternatives. First, the seller can try to sell the house entirely by themselves. Depending upon the number of previous experiences, knowledge of the local housing market, and the individual's sales ability, the transaction may be a success or a complete failure, or somewhere between the two extremes. The second alternative is to hire or contract a real estate sales firm to handle the transaction. At the present national average commission rate of 7 percent,<sup>2</sup> this equates to a commission of approximately \$3,038.00 on the average used home sale.<sup>3</sup> If the projections of Bernard Frieden and Arthur Solomon of the Massachusetts Institute of Technology are correct, the average new home will cost \$78,000 by the early 1980s.<sup>4</sup> Assuming that this is correct, the average commission could then be expected to be in the range of \$5,400.00 if the 7 percent rate remains in effect. The rapid inflation

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<sup>1</sup>Anthony Downs, "Real Estate Forecast: 12 Months of Fair Weather," Real Estate Review, Vol 7, No. 2, Summer 1977, p. 25.

<sup>2</sup>"Real Estate Agents Looking for Ways to Lower Commissions," The Wall Street Journal, 23 June 1977, p. 1.

<sup>3</sup>Computed using \$43,400 (average selling price) From the National Association of Realtors, as of June 1977, as reported in The Wall Street Journal, 9 August 1977, p. 11.

<sup>4</sup>"Average New Home Seen Costing \$78,000 by the Early 1980s," The Wall Street Journal, 4 March 1977, p. 11.

in housing prices has not deterred the realtor industry from raising the customary commission rate from 5 percent to 7 percent in a short period of time. Therefore, not only has the sales price which the commission is computed against risen faster than the cost of living,<sup>5</sup> but the actual commission rate itself has increased. This provides a strong incentive for many homeowners to try and sell their homes themselves to save realtor commissions. I perceive that many people do not value a realtor's services as worth the cost, and yet many sellers are unprepared and do not have sufficient knowledge of the market to adequately handle all phases of home selling in manner that is optimum to their interests. In addition, many prospective home buyers like the "security", help and market orientation that is provided by real estate sales firms, that is not available when they buy a home from an owner.

As a result of these situations, a third alternative is proposed. This third alternative is a service which will prepare and train people for the task of selling their own home, and will provide market orientation for prospective buyers. The service will include many of the technical and advisory services that are now provided only by realtors, but it will not include the actual showing and direct selling of houses. Since a real estate salesman's share of a commission approximates 50 percent,<sup>6</sup> the elimination of the direct selling by salesman and an

---

<sup>5</sup>Suzanne Lesseps, Editorial Research Reports, Housing Outlook (Washington D.C.: Congressional Quarterly Inc., 22 April 1977), p. 291.

<sup>6</sup>Maurice A. Unger, Real Estate Principles and Practice, 3rd ed. (Cincinnati, Ohio: South-Western Publishing Co., 1964), p. 449.

assumption of these duties by the home owner becomes the key marketing ingredient of the proposed service.

The specific hypothesis that will be tested by this study is that there are sufficient homeowners who are willing to assume salesman duties, and that this population represents a large enough volume of annual sales so that the assistance service can be profitable and relatively inexpensive to the user. The term inexpensive is defined as commission rates in the 1½ to 2 percent range. Before going any further, I think that it would be beneficial to the reader to list a quick summary of the services that will be provided by the proposed business. The lists have been divided into those services provided to the seller, and services provided to a prospective buyer. Bear in mind that these items will be discussed more completely in Chapter 6.

#### Services to the Seller

A screening of prospective buyers so that only those individuals capable of purchasing a specific home are referred

A central listing of all homes in the area that are for sale by the owner

Pre-sale advice on house value, high yield fix up projects, etc.

A training seminar on home selling practices and principles

Advertising preparation and placement

Packages of necessary forms and preparation instructions, and brokerage services

A showing room for prospective buyers

Making arrangements for getting the seller and buyer together, making showing appointments

The service would not include the actual showing of the house by a salesman

### Services to the Prospective Buyer

Market orientation, to include fact sheets on each community or neighborhood

Assistance in arranging financing

A showing room where buyers can select homes to look at from photographs and a central listing

This project has been developed using the Great Falls, Montana area as a data base, with the intention of applying the results of the feasibility study to a business in Great Falls. The study only addresses the housing market in Great Falls that is comprized of single family dwellings, and duplex and triplex units. The present market as just defined is limited to approximately 21,000 units<sup>7</sup> with an annual turnover of approximately 2,300 units<sup>8</sup>. The only significant assumption used in this study is the assumption of relative stability in the existing demographic structure and the non-occurrence of any state or federal legislation which would have a major impact on the real estate industry. Such items as a change in the capital gains tax laws or the elimination of tax deductions for mortgage interest would render most existing data useless.

In developing this project, the starting point was to locate any similar realtor services to the one proposed in this study.

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<sup>7</sup>The Municipal Yearbook, 1977, Vol 44, (Washington D.C.: International City Management Association, 1977) p. 25.

<sup>8</sup>This figure is obtained by multiplying the number of houses in Great Falls by the average turnover rate (11.12%). The method used to compute the average turnover rate is detailed in Chapter 3.

Only one such service was originally found to be in operation, later research identified two more. Since the information was sketchy and of questionably validity, it was determined that information on the other services would not be used as a foundation for this study. On the other hand, a great deal of information is available on the general subject of real estate principles and practice, and conducting business feasibility studies and previously published material was used heavily. The text of this study is separated into 7 major topics, or chapters. First, a general demographic description of the Great Falls area, with particular attention to population trends and forecasts. Second, is an analysis of the existing housing market in Great Falls. The emphasis was placed on such items as selling prices, unit turn-over rates, annual dollar sales, the supply and demand balances or imbalances, and new or proposed construction. The third topic is a determination of the target population, and a profile of the target segment. Of particular importance is the determination of who would use the service (by age, sex, educational level, income level, number of previous experiences in buying or selling personal residences, etc.), the size of the target population, and annual home sales for people in the target segment. The target segment is addressed as two groups; those selling houses and those in the market to buy a house. The fourth topic to be addressed is the competition that the new business will face, primarily from existing real estate sales firms in Great Falls. The specific areas covered are: a profile of the Great Falls realtors (sales, number of firms, size, services provided and cost to the seller), a detailed profile of the "average" salesperson employed by the agencies, and an

evaluation of how well they perform the services that they are paid to provide. The fifth subject addressed is a detailed description of the proposed business. This includes the services to be provided, a marketing plan, and a description of the particular consumer needs to be satisfied. This section also addresses operating procedures, and it details any problems that remain to be solved. Chapter 7 contains the financial analysis. In this chapter a comparison is made between operating costs and projected revenues. In the last chapter, Chapter 8 all preceding analysis is brought together with a resultant statement of projected profitability or loss.

In general terms, this project was developed using primarily the historical research method. As with most projects there was also some use of the experimental method (the sample survey) and some limited use of the statistical method during analysis. The use of the historical method was deemed most appropriate for this project since the bulk of the data that was used to determine feasibility of the business was available in secondary sources. Some statistical model building was employed to determine price and demand relationships. The data that were used to profile the target market were obtained through a mail questionnaire to heads of households, residing in owned homes in the Great Falls area. The mailing list was developed using a simple random sample from the Great Falls City Directory. Each name drawn from the Directory was then cross checked against the county tax register to insure validity. Any bad draws were replaced with additional random draws. The confidence level computations for the sample are included in the appendix to this study along with a copy of the questionnaire and

the cover letter that was used. Interviews were conducted with pertinent characters in the real estate, financial and peripheral industries to determine more specific information about the Great Falls home buying and selling market. Nine Great Falls realtors were interviewed on specific topics. The questionnaire used in these interviews is included in the appendix. Each interview that was conducted during the course of this research is noted in the bibliography. The data on demographic features, as well as the data on the housing market and the Great Falls economy were collected through the use of secondary sources listed in the bibliography. Data on the potential users of the home marketing service were collected from a primary source, the questionnaire. Data on the competition were collected from the interviews (primary) and from publications of the related national associations and the periodicals as the secondary source. Operating cost data were collected from both interviews and publications from the Small Business Administration. All other data sources not specifically mentioned here can be assumed to come from items listed in the bibliography.

This study has been prepared using the most accurate and current information that is available; however, the reader must be constantly aware of changing conditions and situations. In the real estate market, particularly in Great Falls, changes are occurring even as this paper goes to printing. Any use of the data contained herein must be tempered with a knowledge that the decisions reached and recommendations presented are only valid so long as the data remains relatively current. In view of the volatile changes taking place in the market it is estimated that this study must be updated within 1 year from

date of publishing. Use of this study beyond that time greatly increases the risk of erroneous decision making.

## CHAPTER II

### DESCRIPTION OF THE MARKET PLACE

#### Geographic and Climatic Factors

Great Falls is located in central Montana on the eastern slopes of the Continental Divide. It is located in a valley formed by the Rockies to the west and the Big and Little Belt Mountains to the south and east. The city sits astride the main branch of the Missouri River, which through a system of hydro-electric dams provides most of the electrical power for the entire central Montana area. The topography of the area is characterized by high plateaus and deep valleys. The city is located at 3,300 feet above sea level. The city is layed out with the central business district along the banks of the Missouri River with the housing areas of town rising up from the low ground near the river to the high ground in all directions. The area immediately surrounding Great Falls is some of the most productive land for the production of dry land crops, primarily wheat and other food grains. Land which is not used for grain production is used for livestock grazing.

The weather in Great Falls is far milder than is expected on the high north plains. Summers are warm and dry and winters are moderated by warm, gusty Chinook winds that keep the ground bare of snow most of the winter. The extreme cold that occurs at times during the winter months normally lasts only a short period before being replaced with

warmer temperatures. The overall climate of Great Falls is semi-arid, with most of the sparse rainfall coinciding with the agricultural growing season of late spring to early fall.

The location of Great Falls makes it readily accessible to excellent winter sports areas, water sports, hunting and fishing or any other outdoor activity.

Since Great Falls is the central retail and wholesale market for a large area of central and north central Montana, more services are available than would normally be expected in a city this size.

#### Demographic Profile

The population of the city of Great Falls as determined by the 1970 census of population was 60,091.<sup>1</sup> Any discussion of the Great Falls population should include a parallel discussion of the Cascade County population, since much of the Cascade County population is concentrated either in the city or in the areas immediately surrounding the city limits. Of particular importance is Malmstrom Air Force Base which is located one mile outside the city limits. The Cascade County population in 1970 was 81,804.<sup>2</sup> The period since 1970 has seen many changing factors with respect to population. Estimates of the present city population vary widely depending upon the method used and the special interests of the party making the estimate. Table 1 and figure 1 present the various calculations for present and estimated population

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<sup>1</sup>U.S. Department of Commerce, Bureau of the Census, City and County Data Book, 1972, p. 714.

<sup>2</sup>Ibid., p. 829.

for the city of Great Falls.

TABLE 1  
GREAT FALLS POPULATION

Year	Census	Federal-State Project	City-County Planning Board	Upper Mid-west Council
1950	39,214	-	-	-
1960	55,357	-	-	-
1970	60,091	-	60,091	-
1971	-	61,619	60,931	-
1972	-	61,305	62,104	-
1973	-	62,117	63,558	-
1974	-	61,749	64,143	-
1975	-	62,252	65,409	-
1976	-	-	66,573	-
1980	-	-	70,000	-
1985	-	-	75,000	95,000
2000	-	-	89,000	-

SOURCES:

Census data: U.S. Department of Commerce, Bureau of the Census  
City and County Data Book, 1972, p. 714.

Federal-State Project Data: Federal-State Cooperative Program for  
Population Estimates, May 1975, as compiled in The Great Falls Area  
Chamber of Commerce Data Book, 1977, p. A-7.

City-County Planning Board Data: Ibid., p. A-1.

Upper Midwest Council Estimates: Neil C. Gustafson, Recent Trends/Future  
Prospects: A Look at the Upper Midwest Population Changes (Minneapolis:  
Upper Midwest Council, January 1973), p. 48.

The charting of these projections, as shown in Figure 1, makes  
it quite evident that different viewpoints are being taken with respect  
to the future growth of the city.

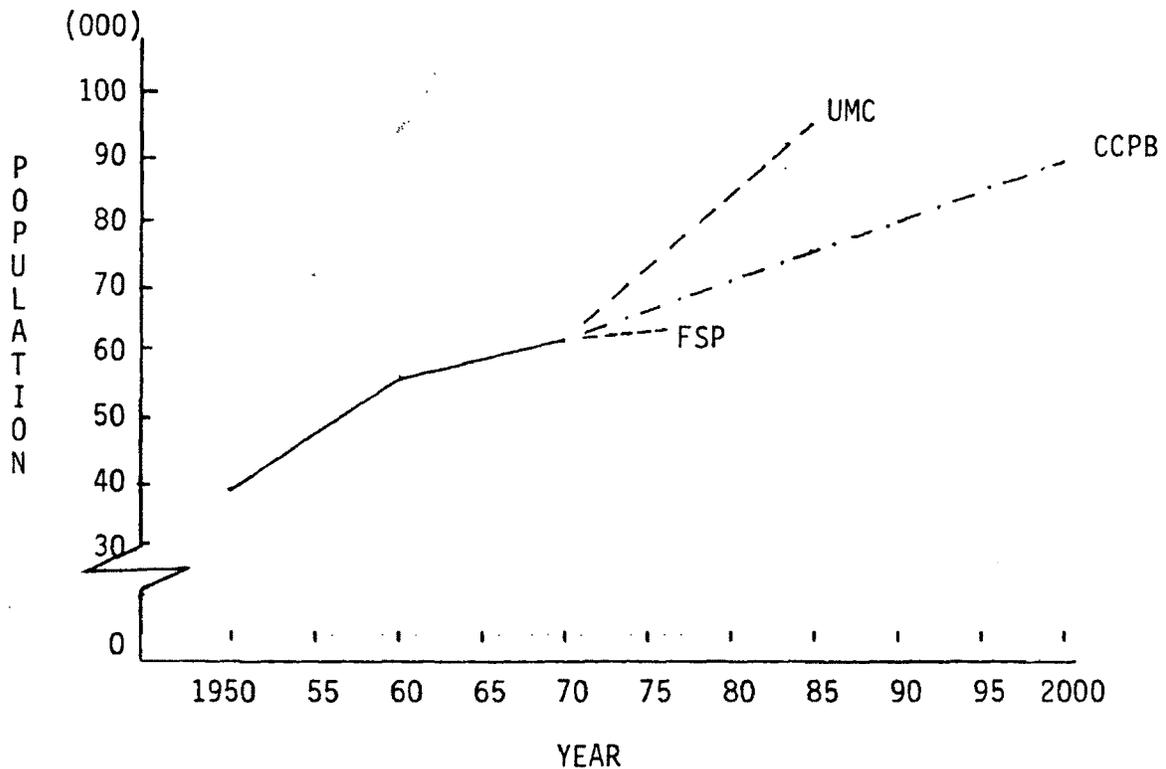


Fig. 1. Population of the City of Great Falls. Solid line denotes the actual population as determined by the U.S. Bureau of the Census. The broken lines represent estimates. The line designated with the abbreviation UMC is the estimate of the Upper Midwest Council, CCPB represents the estimates of the City-County Planning Board, and the line titled FSP represents the estimates of the Federal-State cooperative program.

The city population estimates provided by the Upper Midwest Council (UMC) show a net population increase of approximately 30 percent per year from 1970 through 1985. The UMC classifies Great Falls as a very fast growth area.<sup>3</sup> Their estimates are not explained in quantitative terms, but rather subjective terms. Mr. Gustafson, the Council director explains that the high quality of life in the Great Falls area will draw industry and population from the less desirable areas at an

<sup>3</sup>Gustafson, Recent Trends/Future Prospects, P. 48.

increasing rate. The City-County Planning Board estimates are based on the straight line projection of a net increase in population of approximately 1000 per year.<sup>4</sup> The estimates are based on the net increase in the number of residential building permits issued, times a density factor of 2.897 persons per dwelling. The Federal-State Cooperative Program estimates were determined using an abbreviated sampling method similar to that used by the Bureau of the Census. The research conducted for this project showed no apparent cause for the buoyant optimism reflected in the projections of the Upper Midwest Council. In addition, the density factor used by the City-County Planning Board is suspect, by their own admission, of being too high. As a result, any population estimates in this paper are the result of a straight line projection of the Federal-State Cooperative program data.

The County population data (Table 2) are marked by a similar variance to that shown in the city population estimates with the exception that most parties agree on the 1975 estimated population. From 1975 through 1990 the projections differ greatly. Apparently the projection with the greatest sophistication and least personal interest bias is the projection developed by the Bureau of Business and Economic Research, University of Montana.<sup>5</sup> Although specific projections of the Cascade County population beyond 1976 are not available in the article just referenced, it can be inferred from

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<sup>4</sup>The Great Falls Area Chamber of Commerce, Data Book, 1977, p. A-7.

<sup>5</sup>Susan Selig Wallwork, "Montana County Population Estimates: 1975 and 1976," Montana Business Quarterly, Summer 1977, p. 25.

the narrative text that a ½ to 1 percent annual growth in population is a reasonable estimate.

TABLE 2  
CASCADE COUNTY POPULATION

YEAR	CENSUS	CCPB	FSP	EBS	DCA	RERC	MBQ
1950	53,027	-	-	-	-	-	-
1960	73,418	-	-	-	-	-	-
1970	81,804	81,804	81,804	-	-	-	81,804
1971	-	-	84,200	-	-	-	-
1972	-	-	84,200	-	-	-	-
1973	-	83,700	84,800	-	-	-	-
1974	-	-	84,700	-	-	84,300	-
1975	-	84,468	84,700	-	-	-	83,900
1976	-	86,003	-	-	-	-	83,600
1980	-	-	-	99,000	93,293	89,000	-
1985	-	-	-	102,000	99,391	93,000	-
1990	-	-	-	106,000	105,200	97,000	-

LEGEND:

CCPB: City-County Planning Board  
 FSP : Federal-State Cooperative Program for Population Estimates  
 EBS : Economic Base Study  
 DCA : Montana Department of Community Affairs  
 RERC: Real Estate Research Corporation  
 MBQ : Montana Business Quarterly

SOURCES:

CENSUS: U.S. Bureau of the Census, City and County Data Book, 1972, p. 829.

CCPB: The Great Falls Area Chamber of Commerce, Data Book, 1977, p. A-1.

FSP: Ibid., p. A-7.

EBS: THK Associates, Economic Base Study: The City of Great Falls and the County of Cascade, 1974, p. 36.

DCA: Chamber of Commerce Data Book, 1977, p. H-16.

RERC: Ibid., p. H-18.

MBQ: Wallwork, "Population Estimates", p. 25.

Figure 2 is a graphical presentation of the data contained in Table 2. The solid line represents actual data, and the broken lines are the projections.

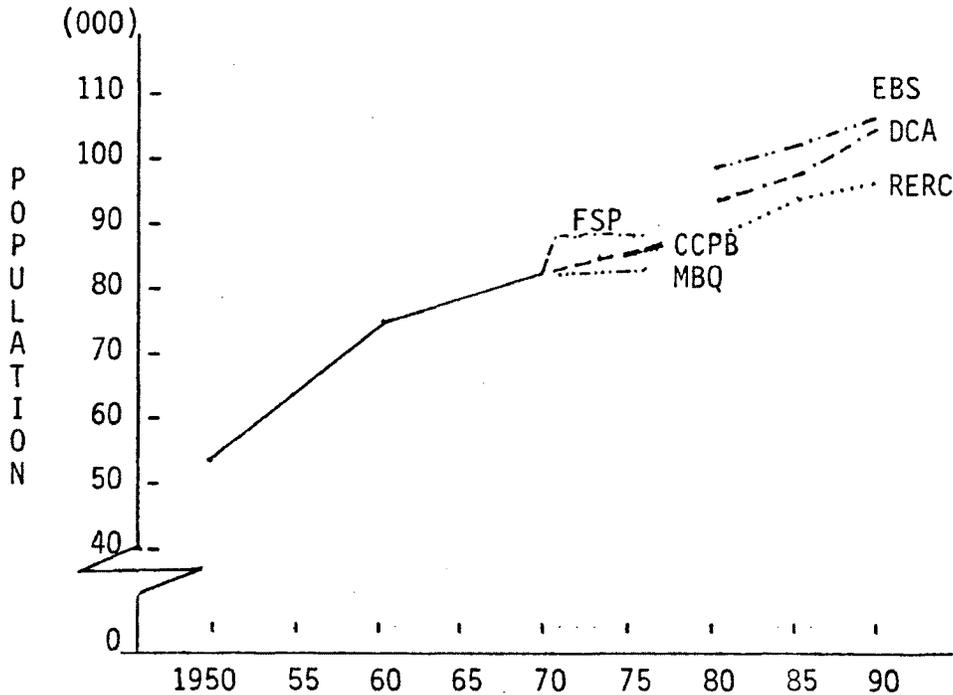


Fig. 2. Population of Cascade County Montana.

The average age of the population, the distribution of age groups, and the male/female proportions of the population are unremarkable for the purposes of this paper. No significant deviations were discovered when the Great Falls data were compared to national averages.

### The Economy

The economy of Great Falls and Cascade County is largely dependent on two segments: Federal and state government, and agriculture. The government segment of the economy is primarily composed of the military and federal civilian work force at Malmstrom AFB.

The governmental segment is relatively stable and lends considerable overall stability to the economy. Of equal or greater importance, in terms of income, is the agricultural segment of the economy. The agricultural segment is characterized by rapid and unpredictable swings from high to low periods. In recent years, the total farm income has risen to a high peak in 1974 and fallen to record lows at the present time. In terms of per capita income, the governmental segment tends to keep personal income in line with the national averages, while the agricultural segment has a negative effect, particularly in the last two years. The loss of most of the primary metal processing industry in 1973 has also had a significant negative impact on the economy. The Anaconda shut-downs removed much of the spark that characterized the Great Falls economy in the late 60s and early 1970s.<sup>6</sup> The economy has now returned to a period of slow to moderate overall growth, with a trend for the per capita income to increase more rapidly and more closely align with the national averages.<sup>7</sup>

The cost of living in Great Falls is, in a total sense, about average. The American Chamber of Commerce Researchers Association (ACCRA) Index of Cost of Living shows Great Falls with an all item index of 101.6, on a scale with 100.0 as the average.<sup>8</sup> This compares with an index of 103.7 for Sacramento, 105.5 for Baltimore, 97.3 for

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<sup>6</sup>Paul E. Polzin, "An Economic Tale of Three Cities", Montana Business Quarterly, Winter 1977, p. 30.

<sup>7</sup>Ibid., p. 17.

<sup>8</sup>Great Falls Area Chamber of Commerce, Data Book, 1977, p. H-4.

Denver, and 122.2 for New York City. The average is somewhat misleading since the 101.6 index figure for Great Falls is the result of high housing prices and transportation costs (110.4 and 127.8) offset by exceptionally low utility costs (78.1). The lack of state or local sales tax raises the otherwise low per capita income to an effective income level and buying power level that is close to the national average.

### Employment

During the period 1970 to 1975 total employment in Cascade County increased at the rate of .8 percent per year.<sup>9</sup> This rate of increase is insufficient to keep up with the annual increase in the labor market. Most observers of the Great Falls employment situation foresee a continuing job gap and the resulting slow out migration of the population. Unless there is a significant influx of new industry, which the optimist think there will be, the pattern of high unemployment will probably continue. The recent increase in activity in the Great Falls economy is not substantial enough to cause any major improvement.

### Summary

The future of Great Falls with respect to population and economic growth can best be summarized with the word moderate. I foresee no major growth or recession patterns in the near future. It is important for the reader to understand that this discussion of the overall economy in Great Falls does not necessarily apply to the Great Falls housing market. The housing market is influenced by, and has been

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<sup>9</sup>Polzin, "Tale of Three Cities", p. 16.

reacting to many factors that do not directly affect the economy as a whole. The reasons for the apparent paradox and the specific happenings within the micro economy of the housing industry are examined in chapter 3.

## CHAPTER III

### THE HOUSING MARKET

#### The National Housing Situation

The national housing market in the last two years has been characterized by extremely rapid inflation of prices and a very strong aggregate demand.<sup>1</sup> The sales rate for used homes recorded a 16 percent rise in June 1977 as compared to the same period in 1976, with a median price of \$43,400. This represents an increase of approximately 2.8 percent per month or 33.6 percent per year.<sup>2</sup> In his recent article in Real Estate Review, Anthony Downs stated: "New housing is so costly that fewer than half of all American households can afford to occupy it directly".<sup>3</sup> As might be expected the price increases in used homes is running parallel to the track of new home prices. If the trends continue, the ominous projection of the \$78,000 price tag on the average new home by the early 1980s may well become a reality.<sup>4</sup> The causes for this situation are complex and will not be addressed in detail; however, in general terms the primary factors are: The rapid escalation in building material costs, the

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<sup>1</sup>John McMahan, "Tomorrow's Changing Demand For Real Estate", Real Estate Review, Vol 6, No. 4, Winter 1977, pp. 72-77.

<sup>2</sup>"Used Home Sales Rose 16% in June From 1976", The Wall Street Journal, 9 August 1977, p. 11.

<sup>3</sup>Downs, "Real Estate Forecast", p.26.

<sup>4</sup>"Average Home Seen Costing \$78,000 by Early 1980s", The Wall Street Journal, 4 March 1977, p. 11.

steadily upward trend in labor costs, the imbalance of supply and demand, the decreased availability of improvable land, and last but certainly not least, costs associated with governmental regulation and controls. The high demand for houses is attributable to many factors, of which the most important are: Increased availability of mortgage money at a rate lower than in the preceding two years, an increase in the house buying population groups, and a general feeling in the population that real estate is probably the single best investment that can be made. In addition to the high cost to purchase a house, the costs of owning a home have risen at an alarming rate. The costs of utilities, property taxes, repair, and insurance combine to squeeze many potential owners out of the market. Each year, fewer and fewer people can afford the luxury of owning a single family home.

#### The Great Falls Housing Market

The economy of Great Falls as a whole is growing at a slow to moderate rate. This is not the case for the housing segment of the Great Falls economy. The period 1976-1977 showed new record highs with respect to the number of houses sold, and prices received. The specific analysis of this situation and the general discussion of the Great Falls housing market is broken into four separate sections: The first section addresses the supply and demand forces in the market; second, is a determination of the turnover rates; third, is a discussion of the price structure; and finally, a look toward the future. Much of the information that follows has been extracted from interviews with nine local realtors, and interviews with members of the peripheral

industries. All references to specific individuals or agencies has been excluded in order to ensure non-attribution, which was guaranteed to each individual prior to beginning the interview.

### Supply and Demand

In the past two years the demand for housing in Great Falls has far exceeded the available supply, resulting in an extremely strong sellers market. The prime reason for a shortage of housing is the moratoriums imposed by the city, which prohibited or limited the accession of land into the city and did not allow for additional tie-ins to the city sewer and water systems. A chronology, showing the dates and type of moratorium imposed, is included in the appendix. In 1975 only 140 permits were issued for the construction of single family dwellings.<sup>5</sup> This number was barely adequate to offset the annual loss in dwelling units due to attrition. Another problem that has contributed to the under supply problem is the lack of good building locations. The city has expanded to a point where housing must now be constructed on converted farm land. The topography and layout of the area is such that additional expansion to the east is impossible due to Malmstrom AFB, further expansion to the west is unacceptable due to the Sun River flood plain, and further expansion to the north and south encroaches on farm land. The result of the increasing demand and fixed supply was, and still is, a disequilibrium in the supply/demand relationship. The competition for the limited available housing units and building lots has caused prices to rise at more than double the annual rate that can

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<sup>5</sup>Building Inspection Report, issued by the Great Falls Building Inspector's Office.

be attributable to general inflation.

#### The Turnover Rate

Each of the realtors interviewed was asked for their estimate of the annual turnover rate for single family dwellings in Great Falls. The figures given ranged from a high of 33 percent to a low of 16 percent per year. The average of all responses is in the range of 22-25 percent per year. This range may apply to the high turnover areas of town such as Riverview, Granda Vista, and the southeast side, but as a whole the historical data shows a much lower rate when considering all housing units in the city. Most realtors were in agreement that Great Falls has an annual turnover rate that is somewhat higher than the national average. The main causes listed were the impact of high military turnover rates, and the increased "house jumping" within the population. The term "house jumping" refers to the situation where people will buy a less expensive house, live in it for a few years while it appreciates in value, then sell it and use the profit to help them afford a more expensive house.

There was considerable disagreement among the realtors interviewed with respect to the seasonality of turnover. The majority stated that the peak period was spring to early summer. Others felt that there was no significant difference from one part of the year to another, that instead each month had a higher turnover than the previous month. In actuality, both points of view are somewhat correct. There were high periods and low periods during the last two years, but the curve plotted by the data shows much less difference between high periods and low periods. One other point of interest is that the larger realtors

experienced less seasonal fluctuation than did the smaller agencies.

Since the turnover rate is one of the foundations for the feasibility projection, it was critical to establish an accurate factor. This was accomplished by computing turnover rates using four separate and unrelated sources. The first computation was based on the responses to question number 6 on the questionnaire. The question asked was: "Do you expect to sell your house in the next two years"? Of the total responses: 21.3 percent said yes; 61.8 percent said no; and 16.9 percent were undecided. Only the affirmative responses were used to project the turnover. The 21.3 percent figure was then divided by two to determine the annual rate. The result was a 10.6 percent turnover rate. The second method involved the use of census data to determine the annual move-in rate.<sup>6</sup> In 1972, 57.8 percent of all home owners in Great Falls had occupied their existing home five years or less. The factor was determined by dividing this percentage by five with the result equalling 11.6 percent. The third method employed was also based on the questionnaire, this time using the responses to question number 5 (Number of years in your present house). The year group percentages were compared to the same data from the 1970 census for verification.<sup>7</sup> Once the sample data was verified, an average number of years in the same house was computed. The average was then divided into 1 to determine the annual turnover rate. The rate resulting from these calculations was 11.5 percent. The fourth method involved determining

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<sup>6</sup>City and County Data Book, 1972, p. 287.

<sup>7</sup>U.S. Department of Commerce, Bureau of the Census, 1970 Census of Housing: Housing Characteristics for States, Cities, and Counties, Vol 1, Part 28, July 1972, Table 49.

the total units sold and dividing by the total number of housing units. Unfortunately, no records were available through either the city or county government offices to show housing transactions during the past year. A count of the number of houses sold by realtors using the multiple listing service was available, and since the percent of sales which were handled by realtors was known (64%) it was a simple process to determine the reciprocal. This value was then divided by the total number of housing units with the resulting rate equal to 10,8 percent. Table 3 illustrates the four methods employed.

TABLE 3

## TURNOVER RATE COMPUTATIONS

## Method 1:

21.3% stated intentions to sell in the next 2 years.  
(From Questionnaire)

$$\frac{21.3\%}{2 \text{ Years}} = 10.6\% \text{ per year.}$$

## Method 2:

57.8% of all people lived in homes 5 years or less.

$$\frac{57.8\%}{5} = 11.6\% \text{ move-in rate per year.}$$

## Method 3:

8,7 average years in house.

$$\frac{1}{8,7} = 11,5\% \text{ turnover.}$$

## Method 4:

Houses sold by realtors = 1450 (MLS + Non MLS)

TABLE 3 - Continued

1450 = 64% of total sales.	
1450 = .64X	
X = 2266 (annual sales)	
= 10.8%	10.6%
	11.6%
	11.5%
	10.8%
	<u>44.5</u> ÷ 4 = 11.12% Avg annual turnover.

The 11.12 percent turnover rate has been used in all future calculations to determine the number of housing units that can be expected to be put on the market in the next year.

The Price Structure

The housing market in Great Falls is experiencing the same inflationary pressures that impacts the housing markets across the nation. Perhaps the best place to start this section is with a review of housing prices for the last six years. Table 4 shows a six year comparison for houses sold through the Multiple Listing Service (MLS). These data represent approximately two thirds of the total sales for each given year, and is considered to be the most representative of average selling price.

TABLE 4

AVERAGE SELLING PRICE (Used Homes)

Year	Gross Sales (Million)	Number Sold	Average	% Change
1972	\$ 12.7	599	\$21,198	6.0
1973	15.4	673	22,604	4.0

TABLE 4 - Continued

Year	Gross Sales (Million)	Number Sold	Average	% Change
1974	\$ 16.4	698	\$23,519	15.2
1975	23.3	853	27,100	19.3
1976	35.9	1101	32,339	20.4
1977	54.6	1403	38,927	

SOURCE: Multiple Listing Service

Figure 3 presents the data from table 4 in graphical form.

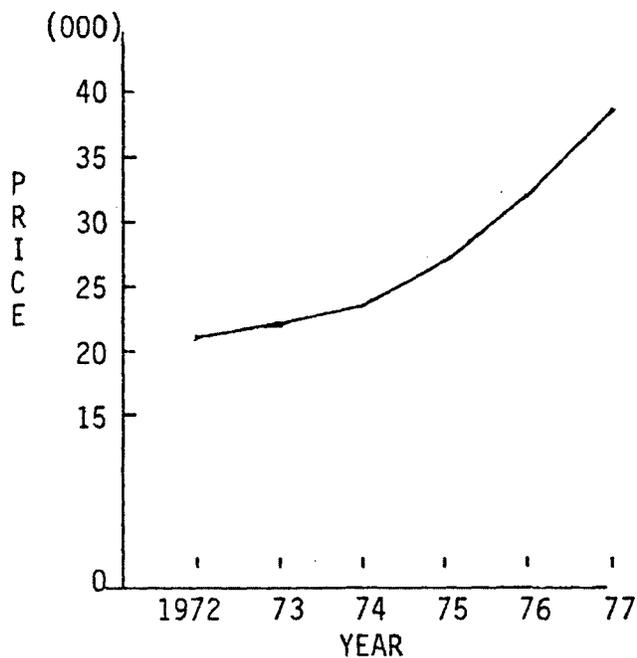


Fig. 3. Average used home selling price.

The general reasons for the steep climb in housing prices have already been discussed earlier in this chapter. The following are the additional factors related specifically to the Great Falls market. The price of a used home is tied directly to the price of new construction, since new construction costs are an important element for most appraisal techniques. The high cost of transporting building materials to Great Falls, and the cost increasing impact of extremely strong trade unions, combine to drive new construction costs up at a rate that

is faster than the national average. New construction costs in Great Falls are now in the \$38 to \$40 per square foot range, for standard construction, excluding the lot. Higher quality construction is now easily into the \$43 to \$46 per square foot range. When the 30 to 40 percent annual increase in improved lot cost is added to the increased building costs, the result is that virtually all newly constructed homes are priced at \$45,000 or higher. The higher cost of new construction pushes up the value of existing homes at a rate far in excess of the general inflation rate. The next situation specifically applicable in Great Falls is the higher than average turnover rate. Each time a house is sold, the owner now expects to make a substantial profit. The more often a house turns, the more often that the price is raised to provide for that profit. This situation is particularly evident in the high turnover neighborhoods. Along the same lines, it is asserted that many people attempt to cover realtor commissions through higher sale prices. This is a highly controversial point of view that many realtors will disagree with; however, approximately a third of the persons in the industry that were interviewed agreed with this assertion.

When comparing the cost of housing in Great Falls to the national average it becomes apparent that the average used home selling price in 1977 (\$38,927) in Great Falls is lower, not higher than the national average (\$43,400). However, when comparing housing costs, the averages are sometimes misleading, as they are in this situation. It is estimated that the average age of homes in Great Falls is from 15 to 20 percent older than the national average; and the average size of homes is 12 to 18 percent smaller than the national average. When these factors are

included in the comparison, housing in Great Falls becomes approximately 10 percent more expensive, than an average house nation wide.

The distribution of market values for homes in Great Falls is presented in Table 5 and Figure 4. The data presented are from question number seven on the questionnaire. When reviewing this information, some caution is necessary, since the data represents the owners estimate of market value. The data from long time residents are particularly questionable. Over half of the responses stating house values in the \$21,000 - \$30,000 bracket came from owners who had occupied the house for more than 10 years. The data shown are unadjusted, and reflect the answer as returned. It is hypothesized that the 14.4 percent figure for the \$21,000 - \$30,000 group is higher than it actually is.

TABLE 5

## DISTRIBUTION OF MARKET VALUES

Market Value	% of Market
\$21,000 - 30,000	14.4
31,000 - 40,000	16.7
41,000 - 50,000	23.2
51,000 - 60,000	22.2
61,000 - 70,000	8.9
71,000 - 80,000	5.6
81,000 +	3.0
No Response/Unknown	5.6

SOURCE: Questionnaire.

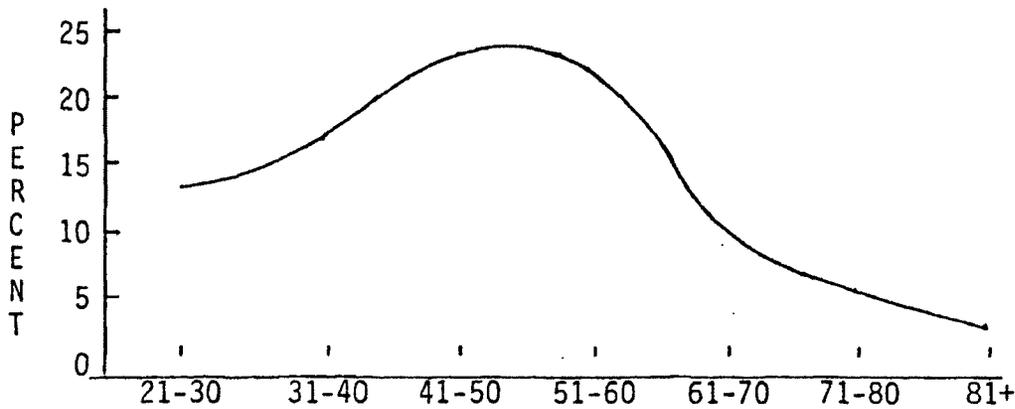


Fig. 4. Distribution of market values for homes in Great Falls.

### A Look Toward The Future

The removal of the building moratorium and the increased profit potential in new home construction has resulted in a significant increase in building activity. Table 6 shows the number of building permits issued during the last three calendar years.

TABLE 6

#### BUILDING PERMITS ISSUED (FAMILY RESIDENCES)

Year	Single Family	Duplex	Triplex	4 Plex
1975	140	0	0	1
1976	222	4	3	7
1977	225	9	5	18

SOURCE: Building Inspection Report.

It is the consensus opinion of realtors in Great Falls that the increase in building activity will help ease the housing shortage and move the supply and demand forces into a more balanced position. Although it is still a sellers market in Great Falls, the trend is toward a general cooling of the housing market, with annual price increases in the 8 to 12 percent range. Most observers of the market also expect the large annual increase in homes sold to level off at about the present rate.

## CHAPTER IV

### THE TARGET MARKET

#### Validation of the Sample

The first step in determining the target market must be the validation of the sample which was used to collect the data. The validation was performed using five measurable and documented characteristics of the population: Years in present home, educational level, sex of the head of household, age, and type of employment. The tabulated results of the questionnaire are compared to the U.S. Bureau of the Census data for each of these population characteristics in the following tables and figures. A discussion of the sample variances, and their impact on the sample representativeness follows the graphical presentation.

TABLE 7

#### SAMPLE VERIFICATION DATA: YEARS IN HOUSE

Years in Present House	Population(%)	Sample(%)	Variance
1 or less	12.19	6.74	-5.45
2	7.44	12.36	+4.92
3	5.44	10.11	-4.67
4-5	11.40	13.48	+2.08
6-10	20.78	23.60	+2.82
11-20	23.90	19.10	-4.80
21 or more	18.84	14.61	-4.23

SOURCE: U.S. Bureau of the Census, 1970 Census of Housing, July 1972, Table 49.

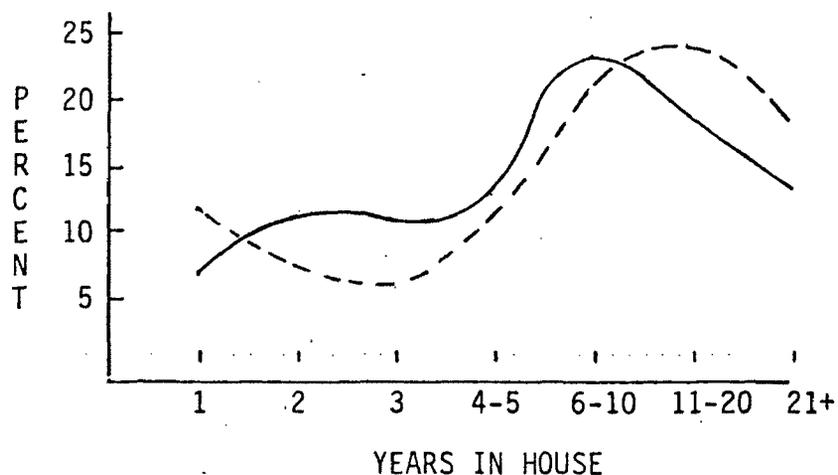


Fig. 5. Years in Present House. The solid line represents the sample, the broken line is census data.

The only variations of any concern are in the first three year groups; however, the smoother pattern shown for the sample is consistent with the recent Air Force policy of longer assignments at each base. The large transient population attributable to Air Force personnel has become less turbulent.

TABLE 8

SAMPLE VERIFICATION DATA: EDUCATIONAL LEVEL

Educational Level Attained	Population(%)	Sample(%)	Variance
Did not complete High School	39.96	14.13	-25.83
Completed High School	31.73	23.91	- 7.82
Some College	17.57	26.09	+ 8.52
Undergrad Degree	6.90	10.87	+ 3.97
Graduate Work or Higher	3.84	25.00	+21.16

SOURCE: U.S. Department of Commerce, Bureau of the Census, Census of the Population, 1970: Detailed Characteristics, Montana, June 1972, Table 148.

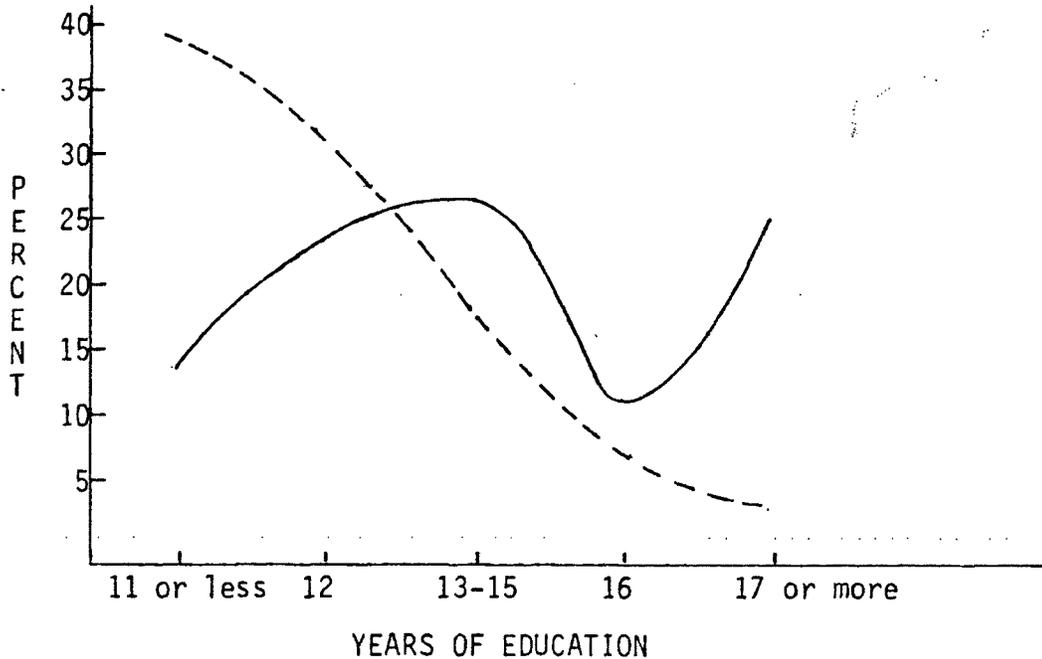


Fig. 6. Years of Education. Survey data is represented by the solid line, census data by the broken line.

Two problems become very evident when comparing the sample data to the population; the wide disparity for the group that did not complete high school and the equally wide disparity at the other end of the scale. A detailed analysis of this factor was performed with the following results: (1) The census data is from the year 1970. Since that time, the overall educational level of the population has risen considerably. (2) The census data included both the urban and rural population, while the sample included only urban households. It is evident: the lower education level in the rural areas had a significant impact on the overall census averages. (3) A review of all questionnaires recording a response of graduate work or higher, showed that 73 percent were military personnel. This is attributable to the availability of graduate education programs and the emphasis placed on advanced education by the Air Force. Even with all of these factors taken into account,

it appears that the overall educational level of the questionnaire respondents is slightly higher than the population. The overall impact cannot be factually evaluated, but it should be kept in mind when evaluating the questionnaire responses.

TABLE 9

SAMPLE VERIFICATION DATA:  
SEX (Head of Household)

Sex	Population(%)	Sample(%)	Variance
Male	92.77	85.87	-6.9
Female	7.23	14.13	+6.9

SOURCE: U.S. Department of Commerce, Bureau of the Census, Census of Housing 1970: Metropolitan Housing Characteristics, Great Falls Montana SMSA, April 1972, Table A-1.

This census data is also from the 1970 census. The increase in female head of household, as shown in the sample data, is probably the more valid figure. I suggest that this is the result of changing social structures and that the sample characteristic is valid.

TABLE 10

SAMPLE VERIFICATION DATA: AGE

Male Head of Household	Age	Population(%)	Sample(%)	Variance
	18-25	1.31	1.33	.02
	26-35	17.31	22.67	+5.36
	36-65	69.30	62.67	-6.63
	Over 65	12.07	13.33	+1.26
Female Head of Household				
	18-64	81.24	81.82	+ .58
	Over 65	18.76	18.18	- .58

SOURCE: U.S. Bureau of the Census, Metropolitan Housing Characteristics, Table A-1.

This characteristic is consistent between the census data and sample data and is considered valid.

TABLE 11

SAMPLE VERIFICATION DATA:  
TYPE OF EMPLOYMENT

Employment Category	Population(%)	Sample(%)	Variance
Professional & Technical	14.30	15.73	+1.43
Mgt/Administration	10.17	11.24	+1.07
Sales	6.36	7.87	+1.51
Clerical	14.45	4.67	-9.78
Crafts	12.68	12.36	- .32
Operatives	7.18	9.54	+2.36
Transportation	3.82	2.25	-1.57
Service	13.49	8.99	-4.50
Military/Govmt	15.90	15.73	- .17
Misc	2.0	11.62	+9.62
Retired	13.15	17.97	+4.82

SOURCE: U.S. Bureau of the Census, Detailed Characteristics, Montana, Table 174.

The variations between the census data and the sample data are insignificant except for the clerical, service, miscellaneous, and retired categories. The clerical and service categories are composed primarily of females under the age of 25 and would not be expected to be equally represented in a sample of home owners. The miscellaneous category variation is due to the inclusion of farmers and ranchers who were not included in the census data. The census data for retired is based on the percent of the population over 65, while the sample data is based on those responses where retired was listed for occupation. By deleting the count for those under 65 who stated they were retired,

the census and sample data coincide. The occupational characteristic is considered representative of the population.

### Statistical Validation of the Sample

The statistical validation was performed by computing a required sample size, and then by performing hypothesis testing using the T-test.

#### Sample Size Computations

The initial estimate of required sample size (at 95% confidence of  $\pm 5\%$  accuracy) showed the need for 146 samples. In order to achieve this number of samples, 200 questionnaires were mailed. The sample size was recomputed after the first 85 questionnaires had been returned and tabulated. The result was a decrease in required sample size to 126 samples. The detailed computations are included in the appendix, and only the final calculations are shown below:

Standard deviation of the sample ( $\sigma_s$ ) = \$17,213

Mean market price of the sample ( $\bar{X}_s$ ) = \$41,941

Mean market price of the population ( $\bar{X}_p$ ) = \$38,927

Standard deviate ( $\bar{z}$ ) @ 95% = 1.96

Required sample size ( $n$ )

$$n = \left( \frac{\sigma_s}{\frac{\bar{X}_s - \bar{X}_p}{\bar{z}}} \right)^2$$

$$n = \left( \frac{17,213}{\frac{3014}{1.96}} \right)^2 = (11.192)^2$$

$$n = 125.26$$

Rounded up to 126

Fig. 7. Sample Size Computations

When 126 samples had been received, the required sample size was again computed. Since the required sample size decreased to 121, and 126 samples had already been tabulated, the higher sample size remained in use. A total of 131 questionnaires were returned, three of which were not completed.

### Hypothesis Testing

In order to determine whether the sample mean was significantly different from the population mean, a T-test, or test for significance was performed. Once again, the test was performed after the first 85 questionnaires had been tabulated. The results showed that the sample mean was not significantly different from the population mean, (the sample was acceptable). When the test was performed after 126 questionnaires had been tabulated the T-value computed and the T-value from the table were identical, indicating marginal acceptability. A summary of the T-test data is included in figure 8. The detailed computations are included in the appendix.

T-test @ 85 samples;

$$\sigma_{\bar{x}} = \frac{\sigma_s}{\sqrt{n}} = 1867$$

$$T_c = \frac{\bar{X}_s - \bar{X}_p}{\sigma_{\bar{x}}} = \frac{3014}{1867} = 1.614$$

$T_c$  (1.614) is less than  $T_t$  (2.00)

Therefore the hypothesis, that the sample mean is not significantly different than the population mean, is accepted.

T-test @ 126 samples.

$$\sigma_{\bar{x}} = \frac{15,945}{\sqrt{126}} = 1421$$

Fig. 8. Computation of T-test.

Figure 8 - Continued

$$T_c = \frac{2839}{1421} = 1.99$$

T<sub>c</sub> (1.99) is equal to T<sub>t</sub>(1.99) therefore we can conditionally accept the hypothesis that the sample mean is not significantly different than the population mean.

Fig. 8. Computation of T-test

The combined results of the sample characteristic verification, the sample size requirement verification, and the T-test leads me to conclude that the sample is valid and can be used as an accurate measure of the population.

The Target ProfileThe Sellers

Now that the validity of the sample has been confirmed, the specific results can be analyzed. The first step is the establishment of the target market profile, or characteristics of the home sellers. The initial attempt at determining who would most likely use the Home Marketing Service (HMS) was based on the grouping of questionnaires into 9 separate groups, comparing the answers to question 9 (How was your most recent house sold?), and question 14 (Will you use a realtor to sell your present house?) The data in Table 12 shows the results of this analysis.

TABLE 12

COMPARISON BETWEEN PAST METHOD USED  
TO SELL HOME AND FUTURE INTENTIONS

Last Sale By Realtor	% of Total	% Male/Female	Age M/F	Education Level	Previous Homes
Future Sales By: Realtor	48	64/36	43/61	3.3	2.8
Self	28	80/20	35/45	4.6	2.6
Undecided	24	82/18	47/55	3.3	3.3
Last Sale By Self					
Future Sale By:	(Insignificant - only one such response)				
Realtor	73	57/43	48/45	3.0	3.0
Self	27	86/14	52/63	2.3	3.1
Undecided					
No Previous Home					
Future Sale By:					
Realtor	28	73/27	38/61	3.6	NA
Self	28	77/23	41/41	3.9	NA
Undecided	44	91/9	46/60	2.5	NA

SOURCE: Questionnaire results. The entry for educational level was the result of averaging a weighted factor where 1 point was allowed for these respondents who did not complete high school, 2 points for completing high school, up to 5 points for those with a graduate degree,

The assumption that a distinct market segment, with definite characteristics, could be identified was disproved by this analysis. Except for the preponderance of older females in the first and last category, no distinct characteristic could be identified within any one group. The most noteworthy information contained in this analysis is the apparent perpetuation of past habits. Those who used a realtor before, tend towards using a realtor again; and those who did not use a realtor before state that they will not use a realtor next time. The high response rate for the undecided category should not be interpreted as a lack of response. More than half of the people who marked "undecided", clarified by stating that they will decide to use or not

to use a realtor depending upon the situation at that time they get ready to sell. It became quite apparent that trying to define a target market profile using population characteristics was useless. Instead, the emphasis was shifted to motivational groupings. By combining the reasons given for using a realtor to sell a home, in the past, with the reasons a realtor will be used in the future, a very distinct motivational profile emerges. The same is true for reasons a realtor was not used in the past and will not be used in the future. The result of this analysis is contained in Table 13.

TABLE 13

REASONS FOR USE OR NON-USE  
OF REALTOR TO SELL HOUSE

Use of Realtor to Sell House			Non-use of Realtor to Sell House		
Reason	Times Mentioned	% of Total	Reason	Times Mentioned	% of Total
Convenience	44	28.0	Commission too high	62	54.4
Qualified Prospects	20	12.7	Previous Experience	18	15.8
Advice on Price	19	12.1	House Sold W/out going on the Market	12	10.5
Mult List Service	18	11.5	Sellers Market	12	10.5
Too Complicated	14	8.9	Miscellaneous	10	8.8
Tried FSBO but couldn't Sell	14	8.9			
Speed	12	7.7			
Presale Advice	6	3.8			
Friends in Real Estate	6	3.8			
Miscellaneous	4	2.5			

The data in Table 13 show quite clearly that the sellers motivation for using a realtor is widely varied, with convenience as the largest factor. The data also show that the primary reason for non-use of a realtor is resistance to high commission costs. The selling population can now be defined as two distinct groups: one group is motivated by convenience and assistance, while the other group is highly motivated with respect to cost avoidance. The target population for the proposed Home Marketing Service is between the two existing groups. The size of the sellers target population for the HMS can be determined by measuring the amount of convenience that the first group will do without, for a reduction in cost; and the amount the second group is willing to pay for an increase in convenience and assistance. The measurement of these trade offs was accomplished during sampling. The proposed services to be offered by HMS were presented in the questionnaire. A series of questions were then asked to determine the demand for the services at varying cost levels. The results of this exercise were used to develop the demand/cost models contained in chapter 7. Any further discussion of the specific target population will be postponed until then.

#### The Buyers

As was the case with the selling population, no distinct characteristics could be found in the buying population to explain the use or non-use of realtors. Again, the motivation of the buyer was far more important than the specific characteristics. The data extracted from the questionnaire showing the motives, or reasons for the use or non-use of realtors is contained in Table 14.

TABLE 14

REASONS FOR USE OR NON-USE OF  
REALTOR WHEN BUYING A HOUSE

Use of Realtor to Buy House			Realtor Not Used to Buy House		
Reason	Times Mentioned	% of Total	Reason	Times Mentioned	% of Total
House was Listed	36	25.4	Found FSBO House Was Not Listed	36	47.4
No Previous Experience	31	21.8	Specifically Avoided	20	26.3
Market Orientation	19	13.4	Miscellaneous	16	21.1
MLS	18	12.7		4	5.3
Advice on Property Values	18	12.7	Note: Data excluded those responses indicating that house was purchased from builder. This was approximately 20% of the samples.		
Assist With Financing	16	11.3			
Miscellaneous	4	2.8			

SOURCE: Questionnaire.

In interpreting the results of this analysis, it is important to note the most frequent reason given for using a realtor's service. The implication is that buyers were forced to deal with a realtor because the seller had entered into a listing agreement with a realtor. The same is true with respect to those who did not use a realtor. Only 21 percent specifically avoided realtors, the rest just did not have the need for realtor services, simply because the house was not under a listing contract. The implication is clear; buyers will buy the house they want regardless of whether it is through a realtor or from an owner. This statement is further strengthened by noting the results of question 19 (are you willing to buy from an owner?). Only 6 percent said no to

this question, 14 percent were undecided, and 80 percent said yes. In general terms, this means that there is no specific market segmentation for buyers, and whomever has a house for sale will have adequate potential buyers. With the previous discussion in mind, we now turn to the secondary motivations of the buyer. What motivated one buyer to walk in the door of a local real estate agencies to begin looking for a new home, while another buyer started looking on his own? A review of the narrative comments in the questionnaire provides the answer. Those who used a realtor did so because they liked the "free" service and assistance they can get. Those who looked for houses on their own did so because they did not want to pay for the realtor's service through higher house prices. In neither case was the secondary motivation strong, and it is apparant that either group could easily be induced to change if the prospect of satisfying their primary motive was strong enough.

## CHAPTER V

### THE COMPETITION

#### Profile Of The Great Falls Real Estate Industry

In January 1978 there were a total of 46 real estate agencies operating in Great Falls, 41 of which are members of the Multiple listing service (MLS) and the Great Falls Board of Realtors. The date is important since new offices are opening almost every month. The 41 affiliated offices employ a total of 278 licensees.<sup>1</sup> By way of comparison, there were only 50 licensed realtors in Great Falls in 1970. This represents a six fold increase in the number of operating real estate sales persons, while at the same time the number of transactions handled has roughly doubled. The inevitable result is the marginal profitability of many of the agencies. The average number of sales per office in 1977 was 34.2; however, this figure is very misleading. The distribution of sales closings shows that 27 of the 41 member offices were below the mean, while 14 offices were above the mean. The unequal distribution is further exemplified by noting that 6 of the 41 offices accounted for almost half of the sales closed and over half of the total dollar volume. The overall performance of the member realtors is shown in the six year comparison in Table 15. Although the table does not go back beyond 1972, the fast expansion in the industry occurred during the period shown. It is the majority

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<sup>1</sup>Jim Basta, Executive Vice President, Great Falls Board of Realtors, interview, January 1978.

TABLE 15

## SIX YEAR COMPARISON

	1972	1973	1974	1975	1976	1977
Number listed	1,163	1,231	1,212	1,406	1,739	2,474
Number closed	599	673	698	853	1,101	1,403
Gross sales (\$000,000)	12.7	15.4	16.4	23.3	35.9	54.6
Average number of listings each Mo.	360	366	360	390	445	629
Average price (\$)	21,198	22,604	23,519	27,100	32,339	38,927
% of those listed which sold	50.2%	60.4%	65.3%	60.6%	66.9%	57.0%

SOURCE: Multiple Listing Service.

opinion of those realtors interviewed that the market cannot support the enormous influx of real estate sales people. There is also grave concern among most of those interviewed as to the professional qualifications of many of the sales people. The opinion most often expressed was that the entire industry in Great Falls will be hurt, and the reputation of the core professionals will be marred by the "fly-by-night" newcomers. The term "core professionals" relates to the 15 to 20 percent of the total sales force that account for 75 percent of the closings. The desired ratio of sales people to total population most mentioned during the interviews with realtors was 1 to 300-350. The present ratio is approximately 1 to 230.

The number of closings shown on table 15 represents approximately 64 percent of the total annual transactions in Great Falls. The other 36 percent are accounted for by the for sale by owners (FSBO), direct exchanges, and property settlements.

The nine realtors interviewed were split in their interpretation of this statistic. Three felt that this figure was higher than the national average, three stated it was average, and three felt it was lower than the national average. The national average is 59 percent<sup>2</sup> so there is a somewhat higher reliance on realtors in Great Falls. This is attributable to two reasons: First, the proportionately high number of realtors generates stronger competition, and more energetic searching for listings; and secondly, the practice of all realtors using MLS for most listings. The almost universal use of the MLS in Great Falls is rather paradoxical when you consider that there presently is a strong

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<sup>2</sup>"3 Million Homes Sold in 76", The Wall Street Journal, 29 March 1977, p. 15.

sellers market. I would expect that during good times in the market that realtors would jealously guard their listings with the knowledge that the higher demand would bring people to their door. Traditionally, the MLS was used as a device to attract more activity to a slow moving house or to increase the exposure of all houses during slow times. The apparent willingness of realtors to allow other realtors access to their listings, through the MLS, in the face of increasing competition is an inconsistency that I find most interesting. Although not substantiated, I assume that realtors feel that the fee splitting for many listings is more profitable than receiving all commissions for a smaller number of exclusive listings. One other possible explanation is that the sellers feel that the commission rate savings for exclusive listings has been more than offset by the perceived increase in activity through a multiple listing.

The subject of commission rates has been in the forefront in much of the current literature on the real estate industry. Two subject areas account for most of the discussion: Federal indictment for price fixing, and on the other hand, the trends towards lower rates. The discussion of anti-trust, or price fixing, is centered around the fact that, "By law, an agent's commission is set by negotiation with each house seller"<sup>3</sup>. However; in reality the commission rate is normally determined by the local "custom". The two most recent Federal indictments, as reported in The Wall Street Journal, were the result of 6 brokers in one case and 9 brokers in the other case, raising their

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<sup>3</sup>"Real Estate Agents Looking For Ways to Lower Commissions", The Wall Street Journal, 23 June 1977, p. 1.

customary rate from 6 to 7 percent simultaneously<sup>4</sup>. The key question seems to be one of price leadership versus price fixing. It is rather ironic that at the same time that some real estate agents are being indicted for fixing prices at a higher rate, that others are attempting to attract more business by lowering rates. Most of the general reference articles used for this paper suggest that the inevitable trend for commission rates is down. The customer response to rate decreases in larger cities has prompted a large portion of the real estate agents to reduce rates either overtly, or in the majority of the cases, covertly. With respect to the Great Falls real estate industry, the customary rate is 6 percent, with some variation upward to 7 percent. Contrary to the nationwide trend, 7 of 9 interviewed realtors see the customary commission rate increasing to 7 percent, or more probably 8 percent within the next five years. Half consider this rate structure justifiable due to increasing expenses, while the other half see the increase as unjustified and the result of price leadership. My personal opinion is that the increasingly competitive nature of the Great Falls real estate industry, increasing customer resistance, and the predicted cooling of the market will prevent the commission rate from reaching the 8 percent level. Commission rates will soon become differentiated and will be used as a competitive tool. It should be noted that if, or when, this occurs that the lower end of the range will not go below 5 percent.

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<sup>4</sup>"Federal Grand Jury Indicts"; The Wall Street Journal, 4 May 1977, p. 5.; and "Real Estate Brokers Are Indicted", The Wall Street Journal, 4 April 1977, p. 1.

Profile of The Great Falls  
Real Estate Salesperson

Since the only significant difference between the services of a full service realtor, and the proposed HMS is the salesperson, an evaluation of the value of the salesperson is required. Most of the service rendered to buyers and sellers is performed by the salesperson. Such items as: sales ability, evaluation of market value, market orientation, pre-sale advice, buyer qualification, attending to details, assisting with arranging financing, and acting as a negotiator, or third party, are listed frequently as key services provided by the salesperson. These are the services that the customer pays for through commission fees. As was mentioned earlier, approximately 70 salespersons account for 75 percent of the total closings. Using this as a basis for computations, the remaining 200 salespersons share the remaining 350 annual sales (1403x.25). Assuming an equal distribution still leaves less than two sales per person, per year. When this figure is multiplied by the average of four years of real estate experience, the average salesperson has handled less than eight transactions. When the core group is removed from the averages, the average experience level drops to less than three years, or six total transactions. There is little doubt in my mind that the core group is knowledgeable, experienced, and totally professional, and earns the fee they receive. The statistics for the remainder tell a different tale, and lend serious question to the professional qualifications or the true worth of their service. There has been a very noticeable increase in the number of part time sales people, and at the risk of sounding chauvinistic, the increase has been largely female. Interviews with persons who deal

with realtors frequently, confirm this supposition. There is unanimous agreement that the real estate sales force has been damaged, both in professional standing and perceived value of their service. The public opinion results, presented in the next section, show quite clearly that many prospective customers are hesitant to pay 50 percent of a \$2,500 commission to the unexperienced and less than professional "average" salesperson.

With these facts in mind, we next turn to the cost of service to the seller. The average commission per sale is approximately \$2,500. On the average, 50 percent goes to the salesperson(s). The average sale in Great Falls consumes about 30 direct hours of salesperson time. This is time spent working directly for the seller. The large expenditure of time in obtaining listings should not be considered in these computations since these are traditionally considered operating expenses. In determining direct cost of service, the \$1,250 salespersons portion is reduced by one third to cover their direct expenses, resulting in \$837.50 in manhour costs, or \$27.92 per hour.

#### Public Opinion

When evaluating the value versus cost of a realtor's service it is quite a simple matter to quantify the costs, as has just been done, but it is virtually impossible to define the value of the service provided in quantifiable terms. Instead, the measure of value that was chosen is satisfaction, whatever that may be to each individual.

The first attempt at determining the satisfaction level was an analysis of questions number eleven and twelve. Question eleven asked those who had used a realtor to sell their last house whether

or not they were satisfied with the service. Question twelve then asked that those people who responded no to question eleven provide a reason for dissatisfaction. The results of this analysis is included in Table 16.

TABLE 16

## SATISFACTION WITH REALTOR SERVICES

Satisfied 59%	Dissatisfied 41%
	Reason(s): %
	Inadequate effort 31
	Salesperson sided with Buyer 26
	Cost too High for Service Provided 25
	Deal Fell Through 10
	Screwups 6
	Miscellaneous 2

SOURCE: Questionnaire.

The information in Table 16 is self explanatory except to note that the title "inadequate effort" is my own wording, used to describe a multitude of similar responses.

The next table (Table 17) presents the responses of buyers when asked whether they were satisfied with the method they used to buy their present home (realtor or no realtor).

TABLE 17

## BUYER SATISFACTION

Bought Through Realtor		Did Not Use Realtor	
Satisfied	78%	Satisfied	100%
Dissatisfied	22%	Dissatisfied	0%
		This count does not include those who bought from builder.	
REASONS			
<u>Satisfied</u>		<u>Satisfied</u>	
	<u>%</u>		<u>%</u>
Good Service	30	Quicker & Less	
Found House Quickly	21	Expensive	47
Professional Handling	19	Got a Better Deal	30
Free Service	12	No pushy salesman	16
Found What We Wanted	10	Simple Procedures	7
Persistence	8		
<u>Dissatisfied</u>		<u>Dissatisfied</u>	
	<u>%</u>	None	
Commission Added to Price	33		
Broken Promises	26		
Pushed to buy houses Agency had listed	18		
Paperwork Problems	13		
Agent ignored us after signing purchase agreement	10		

SOURCE: Questionnaire.

As was mentioned earlier, 64 percent of the total sales were through a realtor and 36 percent were not. The data in Table 17 is based on this split. The group who used a realtor and were satisfied, were so for the reasons realtors give most often for using their services. Those people who were dissatisfied with the realtor, most often named the hidden cost and personal characteristics of the salesperson.

It is interesting to note that none of the people who bought directly from an owner were dissatisfied. The vast majority (77%) stated that cost savings were the key ingredient to their satisfaction.

The last analysis with respect to public opinion is based on question number 19 (Would you be willing to buy directly from an owner who was using the HMS?). Table 18 portrays the responses and the narrative comments.

TABLE 18

## WILLINGNESS TO BUY FROM OWNER

RESPONSE					
Yes: 85%		No: 6%		Undecided: 9%	
REASON	%	REASON	%	REASON	%
Save money	35	Need help	60	Depends on	
Salesman unnecessary	26	Honest Advice	17	Seller	31
Dislike high pres- sure	16	Security	11	Time Avail- able	18
Only real service of realtor is paper- work	11	Act as go between	7	No reason given	51
Lack of professional- ism with realtors	8	No reason given	5		
Realtor is self serving	4				

SOURCE: Questionnaire.

I interpret this data to be representative of the buyers lack of loyalty to any one method of purchasing a home. Although 78 percent of those buyers who used a realtor were satisfied with the realtor's service, 85 percent said that they were willing to deal directly with a buyer.

### Financial and Peripheral Institutions

Before going into the new business proposal (Chapter 6) a few statements need to be made concerning the other institutions involved in the transfer of real estate. I questioned members of the banking industry in Great Falls as to the value they placed on realtors buyer qualification, and realtors assistance with setting up financing. The answers were most interesting. In simple terms, the bankers stated that the exact same services could be provided by the mortgage counselors, and in fact, buyer qualification had to be done from scratch regardless of the prescreening done by realtors. There was some concession on the part of the bankers that certain salespeople could be trusted to do a good job of prescreening but that this was not true for the majority. Earlier in this paper, I addressed the benefits derived from a realtor's service. One of the stated benefits was a knowledge of the inner workings of the transaction (details) once a purchase agreement had been signed. Members of the related industries disagree strongly with this statement. With the exception of the core professionals discussed earlier, the salespeople generally have little more knowledge than the average owner who has sold one or two previous houses.

### Summary

The overall level of professionalism in the real estate industry in Great Falls has shown a steady decline in the last few years, due to a strong influx of non-professional, and improperly trained sales people. The continued strong success of the professionally run and operated agencies is proof that the consumer is aware that there are good realtors and those who are not so good. It is my opinion that this situation will

result in two distinct happenings: First, those people who are convinced that a realtors service is worth the cost will be attracted to the larger and more successful realtors; and second, a growing group of people will decide that the convenience is not worth the cost, and will turn to the other alternative of selling their home themselves.

## CHAPTER VI

### THE NEW BUSINESS PROPOSAL

#### Services To The Seller

As was mentioned earlier in this study, the new business will not provide a salesman to sell the house. Instead, the Home Marketing Service will prepare the owners to do the job themselves. The following list of services provided to the owner-seller will act to supplement and accentuate his sales ability.

a. Buyer Qualification: One area of concern for many people selling their own home is the qualifications of the people that are looking to buy their home. The "Sunday Looker" or the people who look at houses completely out of their affordable range will be eliminated by a pre-screening by the Home Marketing Service. Such information as financial status, amount of down payment money, and commitment towards buying a house can be evaluated before any appointments for showing are arranged. The owner can specify whether or not he wants the address of the house released so people can drive by and look, but all owner showings would be by appointment.

b. Pre-sale Advice: A trained real estate agent can spot many quick repairs and changes to a home that will more than pay for themselves with increased sale prices. As soon as an individual contracts with HMS, a walk through inspection will be conducted and any such improvements will be noted to the owner. Also, the HMS will give any

advice requested by the owner with respect to market value and sales price. It should be noted that in most cases that HMS will suggest that an appraisal be conducted by a qualified appraiser.

c. Training Seminars: Any individual who contracts with HMS will be admitted to the three evening, home selling seminar. Subjects will cover such areas as basic salesmanship, the legal process, how to get the house ready for selling, what to expect at closing, and any and all aspects of selling your home yourself. These training seminars will also be open to anyone who wishes to attend for a \$25 registration fee.

d. Central Listing: At the present, anyone who wishes to buy a home from an owner must search the classified section of the newspaper, and spend long hours driving around looking for signs. The HMS would maintain a central listing, much like the Multiple Listing, showing pertinent information of all homes listed with HMS. The fact that 41 of the 45 existing realtors in Great Falls belong to the Multiple Listing shows the obvious benefit of a central listing. It would be improper to use MLS for the Home Marketing Service, since all listing in the MLS are homes are under contract to realtors, and legal problems would surely result if the owners violated their contract with full service realtors.

e. Advertising Preparation: One of the areas that owners tend to do most poorly in their own efforts, at least in my personal opinion, is the advertising that they prepare and put in the newspaper. The HMS will provide a professional advertisement preparation service and will actually place the ad in the paper, under a single heading block for all ads for homes for sale by owner.

f. Do-it-Yourself Packages. The concept of do-it-yourself is one of the fastest growing ways of doing business. Whether it is home improvements, or do-it-yourself divorces, the American people seem to like the idea of cutting costs by taking the effort to learn how to do something that normally has been expensive or unavailable. The key is to provide the correct instructions and the materials needed. The HMS will provide a complete step-by-step set of instructions and all of the necessary forms and paperwork. In addition, the packages will include lists of persons or establishments that may be needed to complete the transaction. It should be noted at this time that HMS does not advocate a home sale without the use of lawyers. The opposite is true. The HMS will suggest strongly that each party to the contract retain the services of a lawyer throughout the transaction. The fees for lawyers are minimal when compared to the brokerage fees charged by realtors. The lists included in the package will contain the names of lawyers, appraisers, title insurance companies, banks, and fire insurance companies, and their rates. In addition the lists will contain the locations and sequence for required county and city government actions. Also, since the owner-operator of HMS must himself be a licensed broker, by State law,<sup>1</sup> he will be able to provide the actual brokerage service. By now I think that the reader should see clearly that the only service of any significance that is provided by the normal realtor and not the HMS is the actual salesman.

#### Services to The Buyer

As we have seen through analysis of the questionnaire, the buyer

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<sup>1</sup>Real Estate License Act of 1963, Montana State Code, Section 66-1924.

is a singularly motivated person. The only real motive is to find a house that they want. The following list of HMS services to buyers are designed around this motivation:

a. Market Orientation: The HMS would offer a complete, thirty minute market orientation of key market characteristics to any prospective customer who clears the initial screening. The orientation will include a slide show with representative features of each area of town presented. It will also include such information as neighborhood price ranges, up to date information on the money market and financial institution's practices, taxes, assessments, utility rates and building practices and codes. Many of the items contained in the community fact sheets (next item in this section) will be visually portrayed or illustrated in the presentation.

b. Community Fact Sheets: Each prospective buyer will be given a detailed map of each neighborhood. On the back side of the map will be pertinent facts about that neighborhood. Examples of the information include: Location and types of schools, and churches, location of shopping areas, traffic patterns, trends of the neighborhood and known future plans. The fact sheets would also provide a description of the neighborhood composition and the desirable and undesirable features of the area.

c. Showing Room: The showing room will be set up for the comfort and relaxation of the prospective buyer. Each listed home will be presented on photographic slides, showing both the exterior and interior of the home. The slide presentation will be accompanied with listing sheets which detail the specifications of the house. A form similar to the one currently used by the Multiple Listing Service

will provide sufficient information for the prospective buyer to choose which houses are possibilities.

d. Appointment Service: Once the prospective buyer has selected some homes to look at, the HMS will arrange for a time which is mutually acceptable to the buyer and the seller so that the seller can show his home.

e. Assistance Arranging Financing: At such a time as the prospective buyer is ready to start arranging financing, the HMS will provide any assistance desired. These services provided to the buyers will prepare them to go into the housing market with enough knowledge that educated decisions can be made. The HMS will provide the same basic information to the buyer as a salesperson, but without the expense to the buyer. The expense referenced, is the price increases that inevitably are added to the asking price of a house to cover the realtors commission.

#### Operating Procedures

The following procedural items are important to the success of the HMS. Those items relating to general good business practices will not be discussed here, but will be assumed to be in being.

The first procedure is the obtaining of listings. The HMS will use extensive market penetration advertising to attract customers. In addition, personal contact will be made with prospective customers to inform them of the potential benefits of the service. Cold canvassing, which has been instituted by some realtors, will not be used as it is not in keeping with the low cost profile of HMS. The initial listing period will be for 60 days, renewable at the sellers option.

The listing contract will state that payment of commission is due to the HMS upon closing for any sale that occurs during the listing period. The seller must also agree to refer all potential buyers to the HMS for preliminary screening, even if the potential buyer contacts the seller directly. The seller must also agree to using the HMS phone number in all advertising. These procedures will allow HMS to remain in control of all listings and prevent the compromise of the listing contract.

The second key procedural concept involves the negotiations prior to signing purchase agreements. Once the buyer and seller have reached a preliminary agreement, the two parties will be required to meet in the presents of the HMS broker and review all details of the preliminary agreement. The details of this session will be recorded, and any misunderstandings between parties must be resolved in the presents of the broker. The exchange of earnest money and provisions for withdrawal from the contract will be decided upon, and the purchase agreement will be finalized. The reason for this procedure is to take advantage of the third party negotiating relationship and to allow the broker to maintain control over a situation for which he is legally liable.

The third key operating procedure deals with the partial use of HMS services. The HMS broker will provide brokerage only services under the same stipulations listed above for a flat fee. For those individuals who wish to only use the listing service, this can be accomplished at a reduced rate, as can the advertising preparation and placement service.

### Pricing Policy

The pricing policy of HMS was determined by the demand models in the next chapter. By analyzing the data, a pricing method which returned the greatest profit was determined. The highest profit is found using the 2 percent commission rate for the full service HMS transactions. The 2 percent rate not only generated the highest total revenue but also the greatest profit after fixed and variable costs were covered. Another advantage of the percentage rate commission over the flat rate commission is the immediate comparability with the percentage commission rate charged by realtors. One final reason for selecting the percentage rate is its automatic adjustment for inflation. The prices for partial services will be determined on a cost plus basis. The specific dollar values have not been computed, but cost plus 20 percent is a reasonable estimate at this time. Brokerage only fees will not be computed on a percentage, as they are with most brokers, but rather on an hourly basis.

### Advertising

I will not be going into specific details on advertising at this time; however, the key concepts can be presented. The main direction of advertising to the sellers will be price oriented. The drastic reduction in cost with minimal decrease in service will be the main theme. Another important theme early in the campaign is an explanation of what services HMS can provide. The key for advertising to buyers is the presentation of as many good homes as possible in the HMS consolidated ads.

## Office Management

### Office Staff

When first entering into operation a staff of two people will be required. The owner - manager will handle the real estate particulars and a general office helper will assume responsibility for the clerical and secretarial duties. A summarization of the duties of the two positions are listed below:

#### The Owner-Manager:

- (1) Obtaining listings, contracting for HMS
- (2) Inhome inspection of new listing
- (3) Taking photographs, preparing information on listing
- (4) Preparing for and conducting training sessions
- (5) Preparing and updating community fact sheets
- (6) Preparing and updating packages
- (7) Preparing and updating market orientation presentation
- (8) Presenting marketing orientation
- (9) Preparing advertising
- (10) Perform broker or notary services
- (11) Office book keeping, financial transactions
- (12) General office management

#### Clerical Assistant:

- (1) Typing and reproducing listings
- (2) Maintain contract files
- (3) Assist with training sessions
- (4) Typing, reproducing and restocking materials
- (5) Set up appointments for showings
- (6) Verifying listing data through county offices
- (7) General filing and typing
- (8) General secretarial services

It is estimated at this time that it will require another licensed real estate agent at such time as the listings exceed 50 at any one time.

### Layout, Design & Location

The building size requirement is for approximately 900 sq feet.

The modular building concept is ideal for this office as it will allow

for later expansion. The two key features of the layout are the showing room and the outside playground area. The showing room will be designed for maximum comfort and a relaxed atmosphere. Sofas and coffee tables will be set up in front of the rear projection viewing screen. The viewing room will also have a door leading out to a fenced playground area which can be seen from the viewing room. The concept of the showing room is to make it like a living room. The overall design of the building is a matter of personal taste since most of the newer modular designs are reasonably attractive. The location of the business is not critical since walk-in business is not particularly important to a real estate business. Rather, convenience and central location with respect to housing is preferable. A location on 10th Ave. South, east of 15th street but before 25th street would provide an acceptable amount of convenience to all housing neighborhoods in town.

#### The Legal Environment

The licensing requirements for the operation of a real estate business are quite explicitly stated in Section 66 of the Montana State Legal Code. The following excerpts from Sections of the Montana State Real Estate License Act specify the licensing requirements:

66-1924. Title-license required. This act shall be known and may be cited as the "Real Estate License Act of 1963." From and after the effective date of this act it shall be unlawful for any person to engage in or conduct, directly or indirectly, or to advertise or hold himself out as engaging in or conducting the business, or acting in the capacity of a real estate broker or a real estate salesman within this state without first having procured a license as such broker or salesman, or otherwise complied with the provisions of this act.<sup>2</sup>

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Montana State Real Estate Commission, State of Montana Real Estate Manual (Helena, Montana: State of Montana, 1969), p. 236.

Section 66-1925 (paragraph 2) then follows with the definition of a broker:

The term "broker" shall include any individual who for another, or for a fee, commission or other valuable consideration, or who with the intent or expectation of receiving the same, negotiates or attempts to negotiate the listing, sale, purchase, rental, exchange or lease of any real estate... The term "broker" also includes any individual employed by or on behalf of the owner or owners, or lessor or lessors of real estate, to conduct the sale, leasing, subleasing or the disposition thereof at a salary or for a fee, commission or any other consideration; it also includes any individual who engages in the business of charging an advance fee or contracting for collection of a fee in connection with any contract whereby he undertakes primarily to promote the sale, lease or other disposition of real estate within this state through its listings in a publication issued primarily for such purpose, or for referral of information concerning such real estate to brokers, or both.<sup>3</sup>

The HMS meets the criteria, by state law, as a real estate sales activity and requires that the owner-manager be a licensed broker. In addition, any other employees that may be added to HMS in the future must be a licensee unless they are strictly clerical workers. Section 66 also requires that any partners that may be taken on must also be licensed brokers. With the exception of the above listed licensing requirements there are no other significant legal hurdles which HMS must clear before going into operation.

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<sup>3</sup>Ibid., p. 237.

## CHAPTER VII

### FINANCIAL ANALYSIS

#### Demand Models

The first step in determining the expected annual revenue is the building of demand/cost relationships. Question number eighteen on the questionnaire was designed to measure the change in attitude towards the HMS service at varying cost levels. The services to be provided were listed, and then each person sampled was asked "How interested would you be in using these services at the below listed cost?". Four different costs were listed: A flat fee of \$400; and 1, 2, and 3 percent commission. Opposite each cost were five definitions of level of interest, ranging from highly interested to no interest. The responses were tabulated by market value grouping. The percentage response for each interest level (Col A, Tables 19-21) was then multiplied by the annual turnover rate for houses in that price range (Col B). The number of houses in each price range was determined by the distribution of answers for question number seven. The resulting number of annual units (Col C) was then multiplied by a probability factor (Col D). The probability factor was used as a tool to compensate for the overly inflated enthusiasm shown in the questionnaire responses. This situation was identified by analyzing the questionnaire responses against the historical data. Far less than 64 percent of the survey respondents indicated that they would use a realtor, and yet, realtors consistently handle 64 percent of the sales. The probability factor was computed as follows: The responses to question number 14 shows that 23.46% of

all home owners planned on using a realtor for their next sale, 24.69% stated that they would not use a realtor, and 51.85% were undecided. The percentage responses for the "yes" and the "undecided" answers were totaled. This figure (75.31%) was then reduced by the realtor's historical market percentage (64%). The result being 11.31%. Next, the percentage response for those who stated that they would not use a realtor (24.69%) was reduced by 50% (24.69% Times .5), resulting in a figure of 12.34%. The two figures (11.31% and 12.34%) were added together with the result (23.6%) being the probability that the "highly interested" group would actually use the HMS. The probability factors for the "Some Interest" through "Little Interest" categories were determined by reducing the highest probability factor by a proportional amount. By multiplying Col C times Col D an expected annual listing figure was determined. The summation of Col E values for each cost level was later used as the X-value in the model building. Table 19 shows the computations for the market in the \$21,000-\$40,000 range, Table 20 for the \$41,000-\$60,000 range, and Table 21 for the \$61,000 and up range. The data in Tables 19-21 were analyzed through the use of regression analysis. The data were run using linear and non-linear, bivariate analysis. A scatterdiagram of the data revealed that three separate populations existed and as a result, three separate regression models were built. The input data used, and the resulting regression models and statistics are contained in Tables 22-24. You will note that the power model consistently had the lowest standard error of the estimate, but was not used. Since only four data plots were used for each run, and the data was widely dispersed, the power

TABLE 19

COMPUTATION OF ANNUAL LISTINGS  
(\$21,000-\$40,000 MARKET VALUE)

Cost	Interest	(A) %	(B) Annual turnover	(C) units	(D) probability	(E) Annual listings
\$400 Flat Fee	Highly Interested	19.0	726	137.9	23.6	32.5
	Some Interest	23.8	"	172.8	12.3	21.3
	Do not Know	23.8	"	172.8	3.8	6.6
	Little Interest	14.3	"	103.8	1.0	1.0
	No Interest	19.0	"	137.9	0	0
						Total
1% \$300	Highly Interested	23.8	726	172.8	23.6	40.8
	Some Interest	23.8	"	172.8	12.3	21.3
	Do not Know	14.3	"	103.8	3.8	3.9
	Little Interest	9.5	"	69.0	1.0	.7
	No Interest	28.6	"	207.6	0	0
						Total
2% \$600	Highly Interested	9.5	726	69.0	23.6	16.3
	Some Interest	9.5	"	69.0	12.3	8.5
	Do not Know	28.6	"	207.6	3.8	7.9
	Little Interest	19.0	"	137.9	1.0	1.4
	No Interest	33.3	"	241.8	0	0
						Total
3% \$900	Highly Interested	4.8	726	34.8	23.6	8.2
	Some Interest	9.5	"	69.0	12.3	8.5
	Do not Know	23.8	"	172.8	3.8	6.6
	Little Interest	19.0	"	137.9	1.0	1.4
	No Interest	42.9	"	311.5	0	0
						Total

SOURCE: Questionnaire.

TABLE 20

COMPUTATION OF ANNUAL LISTINGS  
(\$41,000-\$60,000 MARKET VALUE)

Cost	Interest	(A) %	(B) Annual turnover	(C) units	(D) probability	(E) Annual listings
\$400	Highly Interested	53.1	1060	562.9	23.6	132.8
	Some Interest	21.9	"	232.1	12.3	28.5
	Do not Know	9.4	"	99.6	3.8	3.8
	Little Interest	6.2	"	65.7	1.0	.7
	No Interest	9.4	"	99.6	0	0
						Total
1% \$500	Highly Interested	31.2	1060	330.7	23.6	78.0
	Some Interest	31.2	"	330.7	12.3	40.7
	Do not Know	12.5	"	132.5	3.8	5.0
	Little Interest	6.2	"	65.7	1.0	.7
	No Interest	18.8	"	199.3	0	0
						Total
2% \$1000	Highly Interested	9.4	1060	99.6	23.6	23.5
	Some Interest	28.1	"	297.9	12.3	36.6
	Do not Know	15.6	"	165.4	3.8	6.3
	Little Interest	21.9	"	232.1	1.0	2.3
	No Interest	25.0	"	265.0	0	0
						Total
3% \$1500	Highly Interested	6.2	1060	65.7	23.6	15.5
	Some Interest	21.9	"	232.1	12.3	28.5
	Do not Know	21.9	"	232.1	3.8	8.8
	Little Interest	15.6	"	165.4	1.0	1.7
	No Interest	34.4	"	364.6	0	0
						Total

SOURCE: Questionnaire.

TABLE 21

COMPUTATION OF ANNUAL LISTINGS  
(\$61,000 OR GREATER MARKET VALUE)

Cost	Interest	(A) %	(B) Annual turnover	(C) units	(D) probability	(E) Annual listings
\$400 Flat Fee	Highly Interested	78.6	409	321.5	23.6	75.9
	Some Interest	14.3	"	58.5	12.3	7.2
	Do not Know	0	"	0	3.8	0
	Little Interest	0	"	0	1.0	0
	No Interest	7.1	"	29.0	0	0
						Total
1% \$700	Highly Interested	28.6	409	117.0	23.6	27.6
	Some Interest	28.6	"	117.0	12.3	14.4
	Do not Know	28.6	"	117.0	3.8	4.4
	Little Interest	7.1	"	29.0	1.0	.3
	No Interest	7.1	"	29.0	0	0
						Total
2% \$1400	Highly Interested	7.1	409	29.0	23.6	6.8
	Some Interest	21.4	"	87.6	12.3	10.8
	Do not Know	21.4	"	87.6	3.8	3.3
	Little Interest	28.6	"	117.0	1.0	1.2
	No Interest	21.4	"	87.6	0	0
						Total
3% \$2100	Highly Interested	7.1	409	29.0	23.6	6.8
	Some Interest	14.3	"	58.5	12.3	7.2
	Do not Know	21.4	"	87.6	3.8	3.3
	Little Interest	21.4	"	87.6	1.0	.9
	No Interest	35.7	"	146	0	0
						Total

SOURCE: Questionnaire.

form resulted in a force fit directly through the four data plots. This situation resulted in each data plot setting the slope and shape of the curve in its immediate proximity. This was considered undesirable. In all cases, a more moderately responsive model (square root xy) was used to develop a regression line that was more representative of the overall demand patterns.

TABLE 22

REGRESSION ANALYSIS  
(\$21,000-\$40,000 MARKET VALUE)

<u>X-Value</u> (Listings)	<u>Y-Value</u> (\$ Cost)				
66.7	300				
61.4	400				
34.1	600				
24.7	900				
Models Tested:	<u>Sy/x</u>	<u>R-Value</u>	<u>R<sup>2</sup>-Value</u>	<u>F-Test</u> (.95)	
Linear	95.62	.955	.913	Failed	
Power	48.39	.981	.963	Passed	
Hyperbola	201.01	.784	.615	Failed	
*Square root XY	73.49	.976	.952	Passed	
Model Selected: *					
$Y_c = (46.434 - 3.503\sqrt{x})^2$					

TABLE 23

REGRESSION ANALYSIS  
(\$41,000-\$60,000 MARKET VALUE)

<u>X-Value</u> (Listings)	<u>Y-Value</u> (\$ Cost)				
165.8	400				
124.4	500				
68.7	1000				
54.5	1500				
Models Tested:		<u>Sy/x</u>	<u>R-Value</u>	<u>R<sup>2</sup>-Value</u>	<u>F-Test</u> (.95)
Linear		233.06	.927	.859	Failed
Power		87.81	.993	.986	Passed
Hyperbola		427.58	.725	.525	Failed
*Square root XY		163.22	.968	.937	Passed
Model Selected: *					
$Y_c = (60.856 - 3.293 \sqrt{x})^2$					

TABLE 24

REGRESSION ANALYSIS  
(\$61,000 OR MORE MARKET VALUE)

<u>X-Value</u> (Listings)	<u>Y-Value</u> (\$ Cost)				
83.1	400				
46.7	700				
22.1	1400				
18.2	2100				
Models Tested:		<u>sy/x</u>	<u>R-Value</u>	<u>R<sup>2</sup>-Value</u>	<u>F-Test</u> (.95)
Linear		423.88	.890	.792	Failed
Power		177.01	.993	.987	Passed
Hyperbola		3787.10	0	0	Failed
*Square root XY		298.70	.958	.916	Passed
Model Selected: *					
$Y_c = (63.141 - 4.931 \sqrt{x})^2$					

The three demand/cost models are graphed in Figure 9.

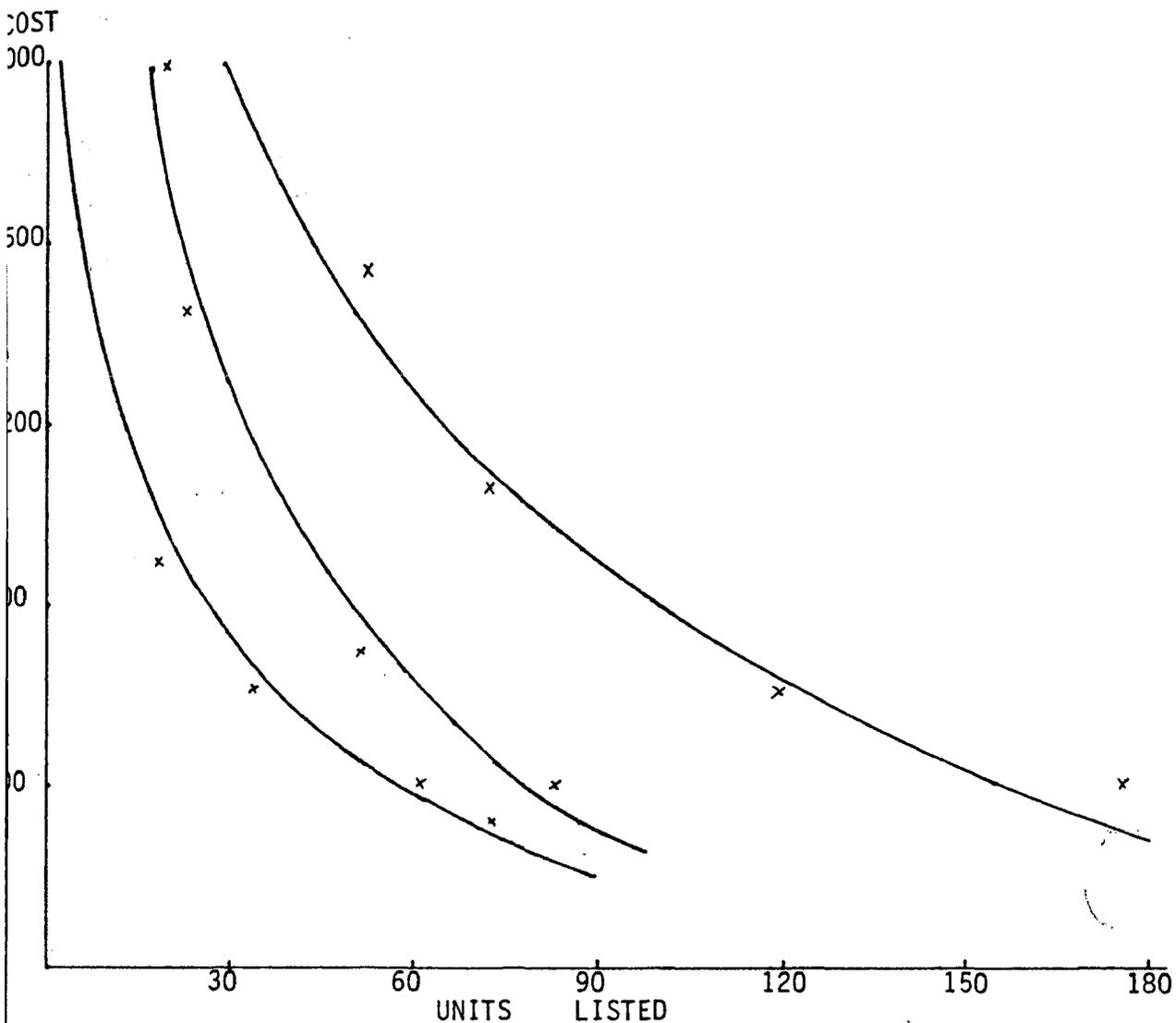


Fig. 9. Graph of demand/cost equations. The control limits are not drawn on this figure due to space limitations; however, all data plots are within the 1 standard error control limits.

The next required step is the determination of total expected annual listings. This is done by solving each of the three demand/cost equations in terms of  $X$ , and substituting varying  $Y$  values. This was accomplished using seven different flat fee amounts, and the 1, 2 and 3 percent commissions. The three, expected annual listing figures were

then multiplied by the associated Y value (price) with the result being the unadjusted total annual revenue. Since revenue is only generated by listings which actually close, the total annual revenue figure was adjusted downward to reflect a 60 percent closing rate. These computation and the resulting expected annual adjusted total revenue is shown in Table 25.

TABLE 25

## EXPECTED ANNUAL TOTAL REVENUE

PRICE	\$21,000-40,000		\$41,000-60,000		\$61,000 or more		UNADJUSTED TOTAL REVENUE	ADJUSTED TOTAL REVENUE
	UNITS	REVENUE	UNITS	REVENUE	UNITS	REVENUE		
\$300	72	\$21,600	170	\$51,000	85	\$25,500	\$91,800	\$58,860
400	61	24,400	152	60,800	76	30,400	115,600	69,360
500	49	24,500	136	68,000	69	34,500	127,000	76,200
600	41	24,600	122	73,200	61	36,600	134,400	80,640
700	33	23,100	108	75,600	54	37,800	136,500	81,900
800	27	21,600	98	78,400	49	39,200	139,200	83,520
900	21	18,900	88	79,200	44	39,600	137,700	82,620
1%	72	21,600	136	68,000	54	37,800	127,400	74,640
2%	41	24,600	79	79,000	27	37,800	141,400	84,840
3%	21	18,900	45	67,500	12	25,200	111,600	66,960

SOURCE: Questionnaire.

Cost Data

The first cost that was determined was the monthly operation cost. All cost estimates are the result of verified best judgement, using the Small Business Administration formats and checklists. Once the monthly costs were determined, the individual items were extended out to determine the amount of cash on hand needed to start up the business. The operating costs, the debt service cost and the equipment amortization costs were then added together to determine the total fixed costs. These computations are shown in Tables 26-28.

TABLE 26

FIXED COST COMPUTATION  
MONTHLY OPERATING COSTS

ITEM	Monthly Cost
Salary of Owner-Manager	\$2000
Other Salaries (1 general office asst)	650
Rent	450
Advertising (general)	60
Supplies	30
Telephone	30
Utilities	65
Insurance	35
Taxes (including Social Security)	270
Maintenance	50
Legal and Other Professional Fees	50
Office Machine Rental	150
Miscellaneous	150
	<u>\$3,990</u> Monthly operating costs

FORMAT SOURCE: U.S. Small Business Administration; Small Marketers Aid, No. 71, September 1977, p. 6.

TABLE 27

## CASH NEEDED FOR BUSINESS START UP

ITEM	CASH NEEDED	EXPLANATION
Salary of Owner-Manager	\$ 4,000	2 Months salary
Other Salaries	1,950	3 Months salary
Rent	1,350	3 Months rent
Advertising (General)	180	3 Months adv
Supplies	90	3 times monthly
Telephone	90	3 times monthly
Utilities	195	3 times monthly
Insurance	35	1 Months premium
Taxes	1,080	4 times monthly
Maintenance	150	3 times monthly
Legal & Professional fees	150	3 times monthly
Office Machine Rental	450	3 times monthly
Miscellaneous	450	3 times monthly
Fixtures & Equipment	2,750	Actual cost
Decorating & Remodeling	600	Actual cost
Installation of Equipment	500	Actual cost
Starting supplies	300	Actual cost
Deposits with Utilities	150	Actual cost
Legal & Professional Fees	500	Actual cost
Licenses & Permits	100	Actual cost
Advertising for Opening	500	Actual cost
Cash	500	Actual amount
	<hr/>	
	\$16,070	Required cash on hand for start up.

FORMAT SOURCE: U.S. Small Business Administration, Small Marketers Aid, No. 71, September 1977, p. 6.

TABLE 28

## COMPUTATION OF TOTAL FIXED COSTS

Assuming that only \$6,070 of the required start up cash is available from the owner, a loan of \$10,000 would be required.

Assuming: \$10,000 @ 9% for 5 years, the annual debt service requirement =

\$3,078

Annual operating costs = \$3,990 per month X 12 =

\$47,880

Amortization of equipment in 5 years = \$2,750 ÷ 5 =

\$ 550

\$ 3,078

47,880

550

\$ 51,508 Annual Fixed Costs

When computing the variable costs, two separate costs were considered: The cost per listing and the additional cost per closing. The listing cost (VC<sub>1</sub>) was computed for all expected annual listings, while the closing cost (VC<sub>2</sub>) was included only for the expected 60 percent closing. The computation of variable costs at different commission prices is shown in Table 29. The costs associated with the listing (\$73.00) are primarily related to advertising, while those for closing (\$25.00) are all miscellaneous costs.

TABLE 29

## COMPUTATION OF TOTAL VARIABLE COSTS

Price	Expected Annual Listings (EAL)	VC <sub>1</sub> (EAL X \$73.00)	VC <sub>2</sub> (EAL X .6)(\$25.00)
\$300	327	\$ 23,871	\$ 4,905
400	289	21,097	4,335
500	254	18,542	3,810
600	224	16,352	3,360
700	195	14,235	2,925
800	174	12,702	2,610
900	153	11,169	2,295
1%	262	19,126	3,930
2%	147	10,731	2,205
3%	78	5,694	1,170

SOURCE: Questionnaire.

Now that all costs and revenues have been defined and computed, the overall profit or loss can be determined. Table 30 details these computations.

TABLE 30

TOTAL REVENUE VERSUS TOTAL COST  
(ANNUAL)

Price	FC	TVC <sub>1</sub>	TVC <sub>2</sub>	TC	TR	Profit (loss)
\$300	\$51,508	\$23,871	\$4,905	\$80,284	\$58,860	\$(21,424)
400	51,508	21,097	4,335	76,940	69,360	( 7,580)
500	51,508	18,542	3,810	73,860	76,200	2,340
600	51,508	16,352	3,360	71,220	80,640	9,420
700	51,508	14,235	2,925	68,668	81,900	13,232
800	51,508	12,702	2,610	66,820	83,520	16,700
900	51,508	11,169	2,295	64,972	82,620	17,648
1%	51,508	19,126	3,930	74,564	74,640	76
2%	51,508	10,731	2,205	64,444	84,804	20,360
3%	51,508	5,694	1,170	58,372	66,960	8,588

The results show that the HMS can make a profit at any commission fee from \$500 to \$900 or at any of the three percentage rates. The greatest profit will be earned by charging a 2 percent commission fee.

The final information needed to complete the financial analysis is the break-even point (BEP) computation. The total variable cost per sale is computed to be a constant \$146.00 for the flat fees. For the percentage rates, a separate BEP had to be computed for each of the three market value categories, since the price varied with market value. The break even points are shown in Table 31.

TABLE 31

BREAK-EVEN POINT COMPUTATIONS  
(ANNUAL SALES)

Price	BEP	Expected Annual Sales	Difference
\$ 300	334	196	-138
400	203	173	- 30
500	146	152	6
600	113	134	21
700	93	117	24
800	79	104	25
900	68	92	24
1%	157	157	0
2%	65	88	23
3%	42	47	5

Summary

In order to properly interpret these statistics and data, the reader must recognize that all cost data were developed using the most liberal estimates. When any doubt existed, the higher cost

was used. The reverse is true for revenue data. The most conservative estimates were used. You will note that the revenue computations do not include revenue for those partial services listed in chapter 6. This conservative approach is the only proper way to evaluate financial feasibility. Even under these criteria, the HMS service returns a substantial profit.

One additional caution is required when evaluating this feasibility study. The majority of the revenue projection computations were based on data extracted from the questionnaire. There can be no guarantee that the questionnaire respondents will actually carry through with their stated intentions. This problem, which is inherent to all questionnaires, has been minimized through the use of probability factor adjustments based on historical data; however, the reader must be aware that this situation does exist.

## CHAPTER VIII

### CONCLUSIONS

The two key questions asked at the beginning of this project were: Is this type service feasible, and will it be profitable. The answer to both questions is yes. In terms of feasibility, no obstacles were found of any significance. In terms of profitability, the figures in the previous chapter show quite conclusively that there is sufficient demand to make the service profitable and at the same time less expensive to the customer.

One question that was continuously asked during the research for this project related to what happens if the owner is unsuccessful at selling his own house through the HMS service. The answer is really quite simple. The HMS would refer the seller to one of the professional full service realtors in town and would recommend that he ungrudgingly pay the 6 percent commission.

Before closing, one final comment needs to be made. The overall impression that was received from reading the returned questionnaire is that there are three distinct groups of homeowners in Great Falls. The first group, which is by far the largest, places a high value on the service provided by the realtors and showed little interest in any other option. The second group is composed of people who will never want, nor pay for any help with selling their homes. The third group contains those people who are dissatisfied with the existing two options of "go it alone" or "pay the price". It is this group that

consistently expressed the strongest interest in the HMS. If the Home Marketing Service is professionally and ethically run, this third group of people will respond and provide the financial reward necessary to the survival of the third alternative.

APPENDIX

COVER LETTER USED TO TRANSMIT QUESTIONNAIRE

I am a graduate student at the University of Montana, School of Business Administration, and I am conducting a research project on the real estate business in the Great Falls area.

Your name has been randomly selected from a list of Great Falls homeowners to participate in the survey.

This survey is designed to provide information needed for the research project, which has been sanctioned by the University of Montana, Graduate School of Business Administration.

The information gathered from this survey will be used only for academic research purposes in the completion of this project. Please be assured that this survey is not a sales "come-on", nor a means of identifying leads for a sales program. The survey is totally anonymous and will not result in follow-up phone calls or visits from a salesman.

The questionnaire attached to this letter has been prepared and mailed at my own personal expense. Since I must have all questionnaires returned to me to insure sufficient data for my project, I would greatly appreciate you taking a few minutes to answer the questions and return the completed questionnaire in the enclosed, pre-addressed, pre-stamped envelope.

The questionnaire is intended to be completed by the head of the household, and is only intended to be completed by persons who own a home or are buying a home.

If you have any questions concerning the survey, please feel free to contact me at my home phone in Great Falls, 727-6948. (after 5 pm). Thank you in advance for helping me with this research project.



THOMAS M. BURGER  
Graduate Student  
University of Montana

QUESTIONNAIRE

AGE: Under 25\_\_\_, 26-35\_\_\_, 36-55\_\_\_, 55-65\_\_\_, Over 65\_\_\_

SEX: Male\_\_\_ or Female\_\_\_

EDUCATIONAL LEVEL: Put a check mark next to the highest level achieved.

\_\_\_ Did not complete high school

\_\_\_ Completed high school

\_\_\_ Some college, but did not graduate

\_\_\_ Undergraduate degree

\_\_\_ Graduate work, no degree

\_\_\_ Graduate degree

PRESENT OCCUPATION: \_\_\_\_\_

NUMBER OF YEARS IN YOUR PRESENT HOUSE: \_\_\_\_\_

DO YOU EXPECT TO SELL YOUR HOUSE IN THE NEXT 2 YEARS? Yes\_\_\_, No\_\_\_, Undecided\_\_\_

ESTIMATED PRESENT MARKET VALUE OF YOUR HOUSE:

\_\_\_ Under \$20,000

\_\_\_ \$21,000-\$30,000

\_\_\_ \$31,000-\$40,000

\_\_\_ \$41,000-\$50,000

\_\_\_ \$51,000-\$60,000

\_\_\_ \$61,000-\$70,000

\_\_\_ \$71,000-\$80,000

\_\_\_ \$81,000 or more

HOW MANY HOUSES HAVE YOU OWNED, INCLUDING YOUR PRESENT HOUSE? \_\_\_\_\_

HOW WAS THE MOST RECENT HOUSE YOU SOLD HANDLED? \_\_\_ By a realtor  
 \_\_\_ By yourself  
 \_\_\_ Other (Specify)  
 \_\_\_ No previous house(skip to #14)

0. REASON WHY YOU USED A REALTOR TO SELL YOUR LAST HOUSE (If applicable). Check each item that you consider to be a reason.

\_\_\_ To take advantage of a  
 \_\_\_ Multiple Listing Service.  
 \_\_\_ Needed advice on house value.  
 \_\_\_ Wanted pre-sale advice.  
 \_\_\_ Wanted only qualified prospects  
 \_\_\_ looking at your house.  
 \_\_\_ Tried by yourself but could not sell.  
 \_\_\_ Convenience  
 \_\_\_ Had to move before house was sold.  
 \_\_\_ Did not know how to do it yourself.  
 \_\_\_ Other (Please specify) \_\_\_\_\_

REASON FOR SELLING YOUR LAST HOUSE YOURSELF (If applicable). Check each item that you consider to be a reason.

\_\_\_ To avoid paying commission.  
 \_\_\_ House was sold before it  
 \_\_\_ went on the market.  
 \_\_\_ Successfully sold previous  
 \_\_\_ houses by yourself.  
 \_\_\_ Other (Please specify) \_\_\_\_\_

1. IF YOU USED A REALTOR FOR THE LAST SALE, WERE YOU SATISFIED WITH THE SERVICE?

\_\_\_ Yes \_\_\_ No \_\_\_\_\_ Does not apply

2. IF YOUR ANSWER TO THE PREVIOUS QUESTION WAS NO, PLEASE EXPLAIN WHY YOU WERE NOT SATISFIED: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

3. IF YOU USED A REALTOR FOR THE LAST HOUSE YOU SOLD, WHAT WAS THE COMMISSION RATE? \_\_\_\_%. OR IF THE CHARGE WAS A STRAIGHT FEE, HOW MUCH WAS IT? \$ \_\_\_\_\_. OR IF YOU SOLD THE HOUSE YOURSELF, ESTIMATE HOW MUCH YOU SPENT ON ADVERTISING, LAWYERS, SIGNS, ETC. \$ \_\_\_\_\_.

4. WILL YOU USE A REALTOR WHEN YOU GET READY TO SELL YOUR PRESENT HOUSE?  
 \_\_\_\_ Yes      \_\_\_\_ No      \_\_\_\_ Undecided.

5. WHY? PLEASE EXPLAIN. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

6. WHEN YOU BOUGHT YOUR PRESENT HOUSE, DID YOU BUY IT THROUGH A REALTOR?  
 \_\_\_\_ Yes      \_\_\_\_ No

If Yes, Why? Check as many items as apply.

If No, Why? Check as many items as apply.

- \_\_\_\_ Wanted housing market orientation.
- \_\_\_\_ Wanted convenience of a listing service.
- \_\_\_\_ Wanted advice on property values.
- \_\_\_\_ Wanted help arranging financing.
- \_\_\_\_ Had no previous experience at buying a house and you thought it best to rely on a realtor.
- \_\_\_\_ The house you wanted had been listed by a realtor, so you had to deal with a realtor.
- \_\_\_\_ Other (Please specify) \_\_\_\_\_  
 \_\_\_\_\_

- \_\_\_\_ Found house by yourself.
- \_\_\_\_ The house you picked was not listed by a realtor.
- \_\_\_\_ Specifically avoided a realtor since you could get a lower price from an owner than you could through a realtor.
- \_\_\_\_ Other (Please specify) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

7. WERE YOU SATISFIED WITH THE METHOD YOU HAD TO CHOOSE? \_\_\_\_ Yes \_\_\_\_ No \_\_\_\_ Undecided  
 Please Comment: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

8. Please answer this question as if you were ready to SELL the home you presently own.

If a "For Sale By Owner" assistance service was available to aid you in selling your house yourself, and provided the following services:

- |   |  |
|---|--|
| a. Buyer qualification.                         | e. Advertising preparation.  |
| b. Central listing of homes for sale by owners. | f. Packages of necessary forms with step by step instructions.                               |
| c. Pre-sale advice.                             | g. Technical advice.   |
| d. Training seminars.                           | h. Showing room for prospective buyers.  |
|   | i. Make arrangements for showing your house but <u>NOT</u> do the actual showing or selling. |

HOW INTERESTED WOULD YOU BE IN USING THIS SERVICE AT THE BELOW LISTED COSTS?  
 (Please mark the appropriate block for the straight fee and each of the three percentage rates).

Flat Fee of \$400:	<input type="checkbox"/> Highly Interested,	<input type="checkbox"/> Some Interest,	<input type="checkbox"/> Do Not Know,	<input type="checkbox"/> Little Interest,	<input type="checkbox"/> No Interest
6 Commission:	<input type="checkbox"/> Highly Interested,	<input type="checkbox"/> Some Interest,	<input type="checkbox"/> Do Not Know,	<input type="checkbox"/> Little Interest,	<input type="checkbox"/> No Interest
Commission:	<input type="checkbox"/> Highly Interested,	<input type="checkbox"/> Some Interest,	<input type="checkbox"/> Do Not Know,	<input type="checkbox"/> Little Interest,	<input type="checkbox"/> No Interest
Commission:	<input type="checkbox"/> Highly Interested,	<input type="checkbox"/> Some Interest,	<input type="checkbox"/> Do Not Know,	<input type="checkbox"/> Little Interest,	<input type="checkbox"/> No Interest

Please answer this question as if you were new to the Great Falls area, and are looking for a house to BUY.

If you were in the market for a house, and the following services were provided directly to you, the buyer, by a "For Sale By Owner" assistance service:

- a. Market orientation.
- b. Community fact sheets, which gave pertinent facts about each section of the city. (Example: location of schools, churches and shopping areas; Neighborhood composition; and other desirable or undesirable features of the area.)
- c. Appointments made for the owner to show you their home.
- d. Assistance in arranging financing.
- e. Showing room where you could select homes to look at from photographs and listing sheets.

WOULD YOU BE WILLING TO BUY DIRECTLY FROM AN OWNER WITHOUT THE ASSISTANCE OF A REALTOR?  Yes  No  Undecided

Please Comment: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Thank you for completing this questionnaire. If you wish to make any other comments, please feel free to do so below.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

REALTOR SURVEY

1. NAME OF REALTOR:
2. YEARS IN BUSINESS/ YEARS IN BUSINESS IN GREAT FALLS: \_\_\_\_\_ / \_\_\_\_\_
3. GENERAL VIEWS ON THE SINGLE FAMILY DWELLING MARKET IN GREAT FALLS:
  - A. Price Structure:
  - B. Supply/Demand:
  - C. Turnover Rate: Overall, sectional, seasonal, compared to other cities.
  - D. Reliance of Buyers and Sellers on Realtors: Above or Below Average.
  - E. What Do You Foresee in The Future:
4. VIEWS ON THE PRESENT GREAT FALLS REALTOR STRUCTURE: Too Many?, Too Few?
5. WAS 1977 A TYPICAL YEAR IN THE MARKET: # of Listings, # of Sales, Etc.
6. ONLY 57% OF THE HOMES LISTED IN 1977 WERE SOLD, WHAT HAPPENED TO THE REST:
7. WHAT IS YOUR BREAK-EVEN POINT: Units Sold
8. FOR THE HOMES THAT ARE SOLD, WHAT IS THE AVERAGE TIME ON THE MARKET:
 

Under \$30,000	_____
30,000-50,000	_____
51,000-80,000	_____
Over 80,000	_____
9. WHAT PERCENTAGE OF CUSTOMERS ARE 1ST TIME BUYERS/ SELLERS: \_\_\_\_\_ / \_\_\_\_\_

10. HOW DO YOU VIEW YOUR RESPONSIBILITY TO BUYERS:

11. WHAT DO YOU SEE AS THE GREATEST NEED OF:  
BUYERS:

SELLERS:

12. ON THE AVERAGE, HOW MANY MANHOURS ARE SPENT GETTING AND SETTING UP  
A LISTING:

13. ON THE AVERAGE, HOW MANY MANHOURS ARE SPENT PER SALE: After Listing,  
through closing.

14. WHAT ARE YOUR RATES: Fixed or Variable, Negotiable, decrease with time, etc.

15. DO YOU PROVIDE ANY SPECIAL SERVICES:

16. WHAT DO YOU FORESEE THE FUTURE RATE STRUCTURE TO BE:

17. PROFILE OF SALES STAFF:

# FULL TIME \_\_\_\_\_  
# PART TIME \_\_\_\_\_  
# OTHER \_\_\_\_\_

# MALE \_\_\_\_\_ / FEMALE \_\_\_\_\_

AGE(MALE) \_\_\_\_\_ / AGE(FEMALE) \_\_\_\_\_

GENERAL DESCRIPTION OF EDUCATIONAL BACKGROUND:

AVERAGE # OF YEARS EXPERIENCE IN REAL ESTATE \_\_\_\_\_

AVERAGE # OF YEARS IN GREAT FALLS REAL ESTATE \_\_\_\_\_

18. WHAT ARE YOUR THOUGHTS ON THE MINI-SERVICE REAL ESTATE AGENCIES:

STATISTICAL VALIDATION COMPUTATIONS

1. The first step was to compute the arithmetic mean of the sample.

This was accomplished using the following formula:

$$\bar{X}_s = \frac{\sum(fm)}{N}$$

Where  $\bar{X}_s$  = mean of the sample

f = The number of houses sampled in the market value group.

m = The average market value in the group.

n = 85

<u>f</u>	<u>m</u>	
13	\$25,000	The resulting $\bar{X}_s = \$41,941$
15	35,000	
20	45,000	
20	55,000	
8	65,000	
5	75,000	
4	85,000	

2. The next step was to compute the standard deviation of the sample.

This was done using the equation:

$$\sigma_s = \sqrt{\frac{\sum f(m - \bar{X}_s)^2}{N}}$$

The resulting  $\sigma_s = \$17,213$

3. Now the sample size computations can be completed using the following equation:

$$n = \left( \frac{\frac{\sigma_s}{\bar{X}_s - \bar{X}_p}}{z} \right)^2$$

Where  $n$  = Samples required  
 $\bar{X}_s = \$41,941$   
 $\bar{X}_p$  = Mean of the universe  
 (from historical data)  
 $z$  = Standard normal deviate  
 @ 95% confidence

The required sample size was computed to be 126.

4. In order to compute the T-test value, the standard error of the mean had to be computed first. This was accomplished using the equation:

$$\sigma_{\bar{X}} = \frac{\sigma_s}{\sqrt{n}}$$

where  $\sigma_{\bar{X}}$  = standard error of the mean

$\sigma_s$  = standard deviation of the sample

$$n = 85$$

The resulting  $\sigma_{\bar{X}} = 1867$

The T-value was then computed using the formula:

$$T_c = \frac{\bar{X}_s - \bar{X}_p}{\sigma_{\bar{X}}}$$

where  $\bar{X}_s - \bar{X}_p = 3014$

$$\sigma_{\bar{X}} = 1867$$

$$T_c = 1.614$$

Since  $T_c$  is less than the T-table value at .05 and 84 degrees of freedom (1.99), the hypothesis that there is no significant difference between the sample mean and the population mean is accepted.

5. When the required 126 samples were received and tabulated, the procedures just shown were repeated, using the revised f values, with the following results:

$$\bar{X}_{s1} = \$41,767$$

$$\sigma_{s1} = \$15,945$$

$$n = 121 \text{ (which is smaller than the sample size already collected)}$$

$$\sigma_{\bar{X}_1} = 1421.12$$

$$T_c = 1.99$$

$$T_c = T_t$$

CHRONOLOGY OF EVENTS ASSOCIATED  
WITH ANNEXATION MORATORIUMS

- 1963: Moratorium imposed on land development south of the city if additional sewer service was required.
- Sept 16, 1968: Total moratorium imposed for all annexation.
- Nov 3, 1969: All moratoriums were recinded. Requests for annexation to be handled on a one-for-one basis. Annexation would be allowed if sewer and water systems were deemed to be adequate.
- Dec 8, 1969: Moratorium reimposed preventing any new development south of the city.
- May 22, 1972: Total moratorium reimposed preventing any new annexation.
- April 1973: Although the moratorium was not officially recinded, the new city engineer began approving selected annexation requests on a merit basis.
- Feb 1978: Requests for annexation and building permits are reviewed for merit and impact on water and sewer facilities.

## Bibliography

### Books:

1. Cartwright, John M., Handbook of Real Estate Law. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969
2. Chase, Samuel B. Jr., Montana Economic Study Research Report. University of Montana School of Business Administration, 1970.
3. International City Management Association, The Municipal Yearbook 1977. Washington D.C.: International City Management Assn, 1977
4. Kratovil, Robert, Real Estate Law, 5th Ed. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969.
5. Mercer, Glenn H. and Davey, Homer C., National Guide to Real Estate. Englewood Cliffs, N.J.: Prentice-Hall Inc., 1972.
6. Murray, Henry T., The Montana Realtor. Montana Association of Realtors, 1974.
7. State of Montana Real Estate Manual., Montana State Real Estate Commission, Helena Montana, 1969.
8. Turner, David R., Real Estate Salesman and Broker, The National License Guide. New York: Arco Press, 1973
9. Unger, Maurice A., Real Estate Principles and Practice. 3rd Ed. Cincinnati, Ohio,: South-Western Publishing Co., 1964.
10. Weschsler, Abraham S., Real Estate Law For Salesman and Broker. Brooklyn N.Y.: Alpert Press, Inc., 1964

### Periodicals:

1. "Average New Home Seen Costing \$78,000 By the Early 1980s." Wall Street Journal, 4 March 1977, p. 11.
2. Cook, Edgar D. Jr., "Should the Real Estate Professional Be Called Doctor?" Real Estate Review, Vol 1, No. 3, Fall 1971, pp. 85-88.
3. Dooley, Thomas W., "Residential Brokerage Enters a New Era." Real Estate Review, Vol 4, No. 3, Fall 1974, pp. 49-56.
4. Downs, Anthony, "Real Estate Forcast: 12 Months of Fair Weather." Real Estate Review, Vol 7, No. 2, Summer 1977, pp. 25-31.

5. Duffey, Robert E. Jr., "The Real Estate Settlement Act of 1974." Real Estate Review, Vol. 5, No. 4, Winter 1976, pp. 84-90.
6. "Real Estate Brokers Indicted." Wall Street Journal, 4 May 1977, p 5.
7. Goldstein, Charles A., "Real Estate Transactions and the Lawyers." Real Estate Review, Vol. 4, No. 2, Summer 1974, pp. 34-41.
8. Herzfeld, Herbert C., "Quo Vadis, Broker? What's Your Role." Real Estate Review, Vol. 2, No. 2, Summer 1972, pp. 24-30.
9. Johnson, Maxine C., "The Montana Economy: Changing Course in the Mid-Seventies?" Montana Business Quarterly, Vol 15, No. 1, Winter 1977, pp. 3-14.
10. McMahan, John, "The Future of The Real Estate Industry: New Directions and New Roles." Real Estate Review, Vol. 7, No. 2, Summer 1977, pp. 91-96.
11. McMahan, John, "The Real Estate Industry Reshapes Itself." Real Estate Review, Vol. 6, No. 3, Fall 1976, pp. 84-90.
12. McMahan, John, "Tomorrow's Changing Demand For Real Estate". Real Estate Review, Vol. 6, No. 4, Winter 1977, pp. 72-77.
13. Polzin, Paul E., "An Economic Tale of Three Cities." Montana Business Quarterly, Vol 15, No. 1, Winter 1977, pp. 15-33.
14. Polzin, Paul E., "Employment Projections for Montana to 1985." Montana Business Quarterly, Vol 14, No. 1, Winter 1976, pp. 17-24.
15. "Protecting The Consumer." Wall Street Journal, 16 June 1977, p. 20.
16. "Real Estate Agents Looking For Ways To Lower Commissions." Wall Street Journal, 23 June 1977, p. 1.
17. "3 Million Homes Sold in 76." Wall Street Journal, 29 March 1977, p. 15.
18. Tucker, Stefan F., "Don't Sell Your Real Estate, Exchange It." Real Estate Review, Vol. 5, No. 4, Winter 1976, pp. 94-101.
19. "Used Home Sales Rose 16% in 76." Wall Street Journal, 9 August 1977, p. 11.
20. Wallwork, Susan Selig, "Montana County Population Estimates 1975 and 1976." Montana Business Quarterly, Vol 15, No. 3, Summer 1977, pp. 23-26.
21. Weaver, Park, Jr., "Real Estate Service Firms Must Sell Themselves." Real Estate Review, Vol. 4, No. 4, Winter 1975, pp. 45-50.

22. Westward. Kaiser Steel Corp., Oakland Calif: 1970.
23. "You Can Sell Your House by Yourself." Changing Times, March 1977, p. 28.

Interviews:

1. Basta, James. Executive Vice President, Great Falls Board of Realtors. Interview, January 1978.
2. Bergum, Kae (Riley). Owner-Broker, Associated Realtors. Interview, February 1978.
3. Booth, Richard. Vice President, SAFECO Title Insurance Co. Interview, February 1978.
4. Cogswell, Jack. Broker, Cogswell Agency. Interview, February 1978.
5. Grove, Corky. General Manager, Robbins and Associates. Interview, February 1978.
6. Hagfeldt, Jerry. Owner-Broker, Hagfeldt Investment Properties. Interview, February 1978.
7. Hoover, Carol. Manager, Town and Country Realty. Interview, February 1978.
8. Mastrandrea, Robert. Senior Vice President, Great Falls Federal Savings and Loan. Interview, February 1978.
9. Mather, Tom. Owner-Broker, Tom Mather and Associates Realty Co. Interview, February 1978.
10. Nelson, Greg. Office Manager, Bruce Nelson Realty. Interview, February 1978.
11. Shoemaker, Dave. Owner-Broker, Golden Post Realty. Interview, February 1978.
12. Wenger, Jack. Owner-Broker, La Casa Real Estate. Interview, February 1978.

Other Publications:

1. Angell, William J., The Home Sellers Guide. Agricultural Extension Service, University of Minnesota: 1975.
2. Angell, William J., Selling Your House Yourself. Agricultural Extension Service, University of Minnesota: 1975.
3. Great Falls Area Chamber of Commerce, Data Book: 1977, June 1976.

4. Gustafson, Neil C., Recent Trends, Future Prospects: A Look at the Upper Midwest Population Changes. Minneapolis: Upper Midwest Council, January 1973.
5. Kass, Benny L., Home Buyers Checklist. Washington D.C.: National Homebuyers and Homeowners Association, 1973.
6. Lesseps, Suzanne, Editorial Research Reports, Housing Outlook. Washington D.C.: Congressional Quarterly Inc., 22 April 1977.
7. Malone, Bette, Sold, Moving Consulting Service, undated.
8. Marcin, Thomas C., Projections of Demand For Housing By Type of Unit and Region. Agriculture Handbook No. 428., U.S. Dept of Agriculture, May 1972.
9. Summary of Real Estate Research Reports. California Dept of Real Estate, April 1969.
10. The American Society of Real Estate Counselors, The American Society of Real Estate Counselors, Undated.
11. The National Association of Real Estate Boards. The National Association of Real Estate Boards, April 1969.
12. THK Associates, Economic Base Study: City of Great Falls and County of Cascade, Montana, 1974.
13. U.S. Department of Commerce, Bureau of the Census, We the Americans- Our Homes. Washington D.C.: U.S. Government Printing Office, May 1973.
14. U.S. Department of Commerce, Bureau of the Census, City and County Data Book: 1972. Washington D.C.: U.S. Government Printing Office, June 1973.
15. U.S. Department of Commerce, Bureau of the Census, City and County Data Book, 1956. Washington D.C.: Government Printing Office, April 1957.
16. U.S. Department of Commerce, Bureau of the Census, 1970 Census of Housing: Metropolitan Housing Characteristics, Great Falls Montana SMSA. Washington D.C.: U.S. Government Printing Office, April 1972.
17. U.S. Department of Commerce, Bureau of the Census, 1970 Census of Housing: Housing Characteristics for States, Cities, and Counties. Washington D.C.: U.S. Government Printing Office, July 1972.
18. U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population: Detailed Characteristics, Montana. Washington D.C.: U.S. Government Printing Office, June 1972.

19. U.S. Small Business Administration, Checklist for Going Into Business. Washington D.C.: U.S. Government Printing Office, September 1977.
20. U.S. Small Business Administration, Real Estate Business. Washington D.C.: Government Printing Office, June 1973.