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This thesis, directed and approved by the candidate's committee, has been accepted by the Graduate Committee of The University of New Mexico in partial fulfillment of the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

POPULARITY OF MOBILE HOMES IN BERNALILLO
COUNTY, NEW MEXICO: 1965-1975

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POPULARITY OF MOBILE HOMES IN BERNALILLO
COUNTY, NEW MEXICO: 1965-1975

BY

ROBERT L. CLARK

BSME, UNIVERSITY OF WISCONSIN, 1960

THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Business Administration
in the Graduate School of
The University of New Mexico
Albuquerque, New Mexico
June, 1971

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POPULARITY OF MOBILE HOMES IN BERNALILLO
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BY
ROBERT L. CLARK

ABSTRACT OF THESIS

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June, 1971

ABSTRACT

Albuquerque is the population center of Bernalillo County and of the State of New Mexico. This thesis was undertaken to investigate the popularity of mobile homes within the county since 1965, and to determine the market potential of mobile homes within the county through 1975.

Information concerning the Bernalillo County mobile home market was developed through (1) the use of a questionnaire mailed to 700 local mobile home owners; (2) personal interviews with all mobile home dealers active in the county; (3) telephone and personal interviews with the majority of local mobile home park owners or managers; and (4) conversations with other local individuals active in the financing, insuring, and transporting of mobile homes. Information regarding the national development of the mobile home industry since 1930 was gathered from the literature and from the Mobile Home Manufacturer's Association. Finally, data was compiled for comparison purposes on the Bernalillo County economy and on the activity of local builders of conventional single- and multiple-family housing since 1965.

Detailed profiles of local mobile homes, mobile home owners, mobile home parks, and mobile home dealers are presented. The cost of mobile home living is compared with the cost of living in a conventional house of equal size. Factors that will influence the future demand for mobile homes are discussed. The profiles of local mobile homes include information concerning the age, size, and cost distributions of the mobile homes, and the manner in which they are used. The profiles of the owners include

statistical data on their age, family size, spendable income, years of mobile home living, and satisfaction with mobile home living. Descriptive data for mobile home parks include rental costs, vacancy rates, geographic distribution within the county, and comments on management. Dealers are described in terms of average inventory, years in business, models available for sale, and other related characteristics.

The research results support the first two hypotheses: (1) mobile homes have increased in local popularity since 1965, and (2) the majority of mobile homes purchased locally are purchased for features other than mobility. The third hypothesis predicting increasing annual sales of mobile homes through 1975 could not be supported. The activity of local builders of conventional housing units, the recent introduction of modular homes, and the unknown impact of recently passed and currently recommended legislation all tend to suggest that annual sales of mobile homes in Bernalillo County may actually decline between 1971 and 1975.

TABLE OF CONTENTS

	Page
ABSTRACT	i
TABLE OF CONTENTS	iii
LIST OF TABLES	v
LIST OF FIGURES	vii
Chapter	
I. INTRODUCTION	1
Problems	1
Objectives	1
Hypotheses	2
Scope and Limitations	2
Significance	3
II. RESEARCH METHODOLOGY	4
Information and Sources	4
Characterizing Mobile Home Owners	5
Interviewing Park Owners and/or Managers	10
Interviewing Dealers and Manufacturers	11
Interviewing Others	11
Comments on Research Effectiveness	12
III. THE NATIONAL EVOLUTION OF MOBILE HOMES	13
Background of the Industry	13
Increasing Sizes of Mobile Homes	13

Chapter	Page
The Mobile Home Industry Since 1965	16
Mobile Homes Defined	18
IV. THE BERNALILLO COUNTY MOBILE HOME MARKET: 1965-1970	20
Characteristics of Mobile Homes	20
Characteristics of Mobile Home Owners	29
Profiles of Mobile Home Parks	40
Description of Mobile Home Dealers	52
Costs of Mobile Home Living	62
V. THE BERNALILLO COUNTY MOBILE HOME MARKET: 1971-1975	69
Impact of Conventional Housing Sales	69
Impact of Legislation	69
Demand for New Mobile and Modular Homes	72
Demand for New Rental Parks	73
Advent of Modular Home Parks and Subdivisions	74
VI. SUMMARY AND GENERAL CONCLUSIONS	76
Summary	76
General Conclusions	78
BIBLIOGRAPY	79
APPENDIXES	83
A. Description of Bernalillo County Market Area and Housing Situation	A-1
B. Questionnaire Cover Letter Mailed to Mobile Home Owners	B-1
C. Questionnaire Mailed to Mobile Home Owners	C-1
D. Questions for Mobile Home Dealers	D-1
E. Woodall's 1970 Standards for Mobile Home Parks	E-1

LIST OF TABLES

Table	Page
1. Questionnaire Returns By Batch	9
2. Response to Questionnaire By Type	9
3. Changes in Mobile Home Dimensions; Selected First Quarter Shipments, 1960-1970	17
4. Age Distribution of Mobile Homes Owned by Respondents . .	22
5. Price Distribution of Mobile Homes	24
6. Width Distribution of Mobile Homes	25
7. Length Distribution of Mobile Homes	26
8. Floor Space Distribution of Mobile Homes	27
9. Uses and Locations of Existing Mobile Homes	29
10. Distribution of Occupants per Mobile Home	30
11. Age Distribution of Heads of Households Owning Mobile Homes	32
12. Comparison of Income Distribution; Mobile Home Owners Versus the Entire Bernalillo County Market Area	34
13. Number of Years of Mobile Home Living	35
14. Number of Mobile Homes Lived In	36
15. Degree of Satisfaction Expressed by Mobile Home Owners Toward Mobile Home Living	37
16. Factors Mobile Home Owners Liked Most and Least about Mobile Home Living	38
17. Distribution of Parks by Year Built	44
18. Number of Local Parks That Can Park Various Sizes of Mobile Homes	46
19. Mobile Home Spaces, Vacancies, and Rental Rates by Albuquerque Area Quadrant	48

Table	Page
20. Mobile Home Sites Available for Purchase by Albuquerque Area Quadrant	51
21. New Mobile Homes Shipped Into New Mexico, 1965-1970	55
22. Typical Costs of Moving Mobile Homes Within the State of New Mexico	66
23. Cost Comparisons of Double-Wide Mobile and Conventional Single-Family Homes	67

LIST OF FIGURES

Figure	Page
1. Geographic Divisions of Albuquerque	49
2. Typical Mobile Home Floor Plans	59

CHAPTER I

INTRODUCTION

Bernalillo County is the major population center in the State of New Mexico. Appendix A describes the general economy of the County and the availability of housing. That material shows that the majority of conventional housing being built is economically available to only the upper income minority of the population.

Mobile homes present an alternative to conventional single- and multiple-family dwellings as a form of shelter.¹ In this thesis, the national development of mobile homes is examined, the local popularity of mobile homes since 1965 is determined, and projections are made for the mobile home market in Bernalillo County through 1975.

Problems

1. To determine the popularity of mobile homes as a form of year-round housing in Bernalillo County from 1965 to 1970.
2. To determine the market potential for mobile homes in Bernalillo County from 1971 through 1975.

Objectives

1. To give the reader a clear understanding of how mobile homes evolved and why there is a certain amount of social stigma attached to

¹For purposes of this thesis, conventional housing units are defined as houses or apartments built "on-site", using conventional building techniques, by a licensed contractor or the owner of the housing unit.

mobile home living.

2. To describe both new and used mobile homes in Bernalillo County and the characteristics of mobile home owners.

3. To describe local mobile home parks and dealers, and discuss the costs associated with mobile home living.

4. To describe factors that will influence the demand for mobile homes and mobile home parks through 1975.

Hypotheses

1. Mobile homes have become increasingly popular since 1965 as an alternative form of housing in Bernalillo County.

2. Mobile homes are purchased for shelter rather than mobility.

3. New mobile home sales in Bernalillo County will increase yearly through 1975.

Scope and Limitations

This thesis is restricted to considering new and used mobile homes located in Bernalillo County, New Mexico. Mobile homes, for purposes of this thesis, are defined as units designed to be used as year-round dwellings. In general, this means units measuring 10 feet wide by 40 feet long, or larger. Some exceptions to this size restriction occur in older 8 feet wide units no longer being produced but still being used as year-round residences. Campers and small mobile homes sold for recreational purposes are not included. The time period considered is 1965 to 1975 with occasional reference made to 1960 data when that data is considered to be of value in discussing one or more aspects of the mobile home or competing conventional home markets.

Significance

An exhaustive search of all known references to published literature indicates that this thesis represents the first study ever undertaken to analyze the popularity of mobile homes as a type of housing in Bernalillo County.

CHAPTER II

RESEARCH METHODOLOGY

This chapter contains a description of the techniques that were used by the author in developing the information used in later chapters to describe the growth of the national mobile home industry and the characteristics of the local market for mobile homes.

Information and Sources

Information was obtained or developed for this thesis through:

- (1) extensive reading of literature dealing with the national mobile home industry since its inception in 1930;
- (2) mail questionnaires addressed to local mobile home owners;
- (3) telephone and personal interviews with local mobile home park managers and owners;
- (4) personal interviews with all 31 mobile home dealers active in Bernalillo county;
- (5) attendance at meetings of the New Mexico Mobile Home Dealers Association;
- (6) correspondence with the national Mobile Home Manufacturer's Association, California dealers association, and others;
- and (7) interviews with representatives of financial institutions, government agencies, insurance companies, and transport companies active in the general field of mobile homes.

The combined information is adequate to support descriptions of mobile homes, the people who own them, the places they are parked, the dealers who sell them, and the various costs associated with owning a mobile home.

One potential source of information that was investigated with

negative results was dissertations. University Microfilm, Ann Arbor, Michigan was asked to conduct a search of all dissertations catalogued by them since 1950. Key words used were "Mobile" and "Trailer". The search failed to yield a single dissertation of use in writing this thesis.

Characterizing Mobile Home Owners

A major effort was undertaken early in the research phase of this thesis to identify, contact, and characterize mobile home owners and their mobile homes. This effort involved obtaining a mailing list; preparing, testing, and mailing a questionnaire; and tabulating the responses received from the mobile home owners.

Obtaining a Mailing List. The first problem in studying the local popularity of mobile homes was to characterize the owners of mobile homes in Bernalillo County. New Mexico law requires that all mobile homes be licensed annually with the State Motor Vehicle Department. The only legal exception involves mobile homes which the owners have elected to place on county tax rolls. However, few owners place their mobile homes in the County's tax records because the County property tax would be significantly higher than the Motor Vehicle Department license fee. Consequently, the great majority of mobile homes in the state are licensed with the Motor Vehicle Department.²

The State maintains a computerized record of all vehicles licensed by the Motor Vehicle Department. This listing is segregated by types of vehicle. Mobile homes and travel trailers are issued 5-digit license plates

² An illegal exception occurs if the owner fails to license his mobile home and fails to have it entered on the County property tax rolls.

preceded by the letter "H". No distinction is made by the Motor Vehicle Department between those two types of units.

A print-out was obtained from the Motor Vehicle Department of all 1970 H license plates that their computerized records showed had been issued prior to February 1970; the date of the print-out. This print-out consisted of 185 pages and 10,689 individual license plate numbers. Next to each license plate number was the name and address of the registered owner, miscellaneous Motor Vehicle Department information, and a letter "L" if the unit had a lien recorded against it. License plate numbers on the print-out ran from H-00002 to H-33890. Less than one third of the sequential numbers were accounted for on the listing, indicating that either the computerized records were somewhat incomplete, or that two thirds of the plates in the series had yet to be issued.

Of the 10,689 license plates listed, only 2,824 were registered in the names of Bernalillo County residents. The names and addresses of these local individuals formed the basic mailing list.

Designing and Testing the Questionnaire. A one-page questionnaire and one-page cover letter were used to obtain information from mobile home owners. The cover letter (Appendix B) was brief, double spaced, and was designed to stimulate the interest of the recipients by announcing immediately that this survey was directed exclusively to mobile home owners. Mobile home owners as a group tend to be very interested in most matters pertaining to mobile homes and are somewhat defensive about mobile home living. It was felt that this direct approach, coupled with the stated purpose of assisting in the author's education, would ensure a high level of response. In drafting the cover letter, it was recognized that there was no satisfactory method of screening the camper or travel trailer owners

out of the mailing list. Therefore, a postscript was added at the bottom of the letter requesting that camper and travel trailer owners return the questionnaire after answering only the first question. Twelve cover letters were typed individually on bond stationery. These were addressed to 12 owners selected at random from the previously described mailing list and were used for a test mailing.

The questionnaire (Appendix C) consisted of 14 questions: 5 concerning the mobile home and its use and 9 dealing with the owner and his attitude toward mobile home living. The questionnaire was worded carefully to avoid misunderstanding and laid out in such a way as to avoid a cluttered appearance. One question dealing with income was considerably more complicated than the others. The particular definition of income and income categories was chosen so that the survey results could be compared with statistical income data available for all of the Albuquerque market area (Table A-7). One Xerox'd copy of the questionnaire was stapled to each of the afore mentioned cover letters to make 12 questionnaire "sets". Each set was then folded and placed in a typed size-10 business envelope. A self addressed, stamped, size-12 business envelope was included for the recipient's use in returning the questionnaire. These envelopes were coded to allow later confidential analysis of the respondents and/or to take follow up action with the non-respondents, if necessary. Each return envelope was addressed to the author at the University of New Mexico School of Business and Administrative Sciences.

The 12 test questionnaire sets were mailed October 5, 1970. The response was encouraging. Eight of the 12 test questionnaires mailed were returned. Of the 8 returned, 6 had been answered in full by owners of mobile homes. The other 2 were returned by owners of travel trailers. The

questionnaire set was considered acceptable in view of this level of response and lack of any evidence of problems in design. Plans were made to reproduce and mail 700 additional sets to names on the mailing list. This represented a sampling of one out of every four local names on the mailing list.

Preparing and Mailing 700 Questionnaire Sets. A local printer printed the 700 questionnaire sets, the addresses on the return envelopes, and the return address on the outside envelopes. White sulfide paper and offset printing were used in preparing the 700 sets. Offset printing was also used on the outside and return envelopes. The date and salutation line were typed on each cover letter; the salutation line as it appeared on the mailing list. When the mailing list showed that the mobile home was listed in the names of a husband and wife, the cover letter and outside envelope were addressed to Mr. or Mrs. ----. The same type stamps were used on the exterior and return envelopes as had been used in the test mailing. The questionnaire sets were mailed in 4 batches over a period of 5 weeks starting October 19, 1971. Five hundred of the 700 questionnaires were coded for the reasons described above. The second batch of 200 questionnaires was deliberately mailed without coding to determine if the coding had any effect on the rate of response achieved.

Tabulating the Response. Table 1 contains specific information concerning the mailing dates, quantities mailed, and responses received from each batch of questionnaires. The coding of the return envelopes had no apparent effect on the response rate achieved.

TABLE 1
QUESTIONNAIRE RETURNS BY BATCH

Batch	Questionnaires			Date Mailed 1970	Cummulative Response (%) Weeks After Mailing			
	Quantity Mailed	Quantity Returned	Percentage Returned					
					1	2	3	4
Test	12	8	66.7	10/5	62.5	87.5	87.5	100.0
1	200	116	58.0	10/19	69.0	88.0	96.6	99.3
2	200	111	55.5	10/26	69.4	96.4	99.1	100.0
3	200	102	51.0	11/9	71.5	91.2	97.0	100.0
4	100	56	56.0	11/16	69.6	92.8	98.2	100.0
Totals	712	393	55.2					

Table 2 describes the types of responses received from the complete mailing. The over-all response rate based on the total of 712 questionnaire sets mailed was 55.2 percent, or 393 returned. Of those, some 225 were disqualified for various reasons listed in Table 2. This left 168 questionnaires that had been completed and returned by mobile home owners. The 168 questionnaires represented a useable response of 23.6 percent, based on the 712 questionnaire sets mailed out (or 42.7 percent based on the 393 questionnaires returned). Nearly all of the mobile home owners who returned the questionnaires answered the questions in full.

TABLE 2
RESPONSE TO QUESTIONNAIRE BY TYPE

Type of Return	Questionnaires Returned	
	Quantity	Percent
Mobile home owners residing in Bernalillo County	168	42.7
Owners of travel trailers	163	41.5
Disqualified for having sold mobile home	4	1.0
Disqualified for having moved out of the county	3	0.8
Returned with no answers	12	3.1
Moved, no forwarding address	37	9.4
Returned for insufficient address	6	1.5
Total	393	100.0

Interviewing Park Owners and/or Managers

The city of Albuquerque defines a mobile home park as any single piece of land having 2 or more trailers on it. Records of the City Building and Inspection Office revealed that as of December 8, 1970 there were 74 mobile home parks within the Albuquerque city limits. This number does not include the occasional mobile home subdivision where the mobile home owner owns the land his home is located on (i.e.: Jade Park).

Bernalillo County defines a mobile home park as any single piece of land having 4 or more trailers (owned by more than one person) on it. Records of the County Clerk's office showed that as of December 8, 1970 there were 44 mobile home parks in the county outside of the city limits.

Managers or owners of 73 of the 118 rental parks in Bernalillo County were interviewed (20 in person and 53 by telephone) between November 16, 1970 and December 6, 1970. This number included 54 parks in the city and 19 parks in the county. The 73 parks contacted included all 55 that were listed in the city telephone directory, all 43 that were listed for the Albuquerque area in the national directory of mobile home parks, and 10 others that were located through general knowledge of the city and county.³ The conduct of this survey was complicated by the fact that many mobile home parks do not advertise either in the telephone book or the national directory. Neither the city nor the county maintains accurate records of the number of spaces in the individual parks. It is believed, however,

³Woodall's Mobile Home Park Directory, (1970 ed.; Highland Park, Illinois: Woodalls Publishing Co., 1969, pp. 669-675.

that the 73 parks surveyed included essentially all of the parks of commercial significance. The balance of the parks (those 45 not located or contacted) are believed to be small in size and probably do not account for more than 300-400 additional mobile home spaces. This estimate is offered in comparison with the 3,423 spaces contained in the 73 rental parks contacted.

In addition, 4 mobile home parks (or subdivisions) were contacted. In these parks, the owner of each mobile home owns the land his home occupies. These 4 subdivisions accounted for an additional 154 spaces.

Interviewing Dealers and Manufacturers

Each of the 30 Albuquerque area mobile home dealers was interviewed in person between October 15, 1970 and November 11, 1970. The interviews included 3 dealers actively manufacturing mobile homes. A prepared questionnaire (Appendix D) was used by the author to guide the interviews, which lasted from 15 minutes to 2 hours in duration. The dealers were very helpful for the most part. A follow-up telephone interview with each of the dealers was made in January 1971 to obtain information on mobile home financing and insurance.

Interviewing Others

Personal and telephone interviews were conducted throughout this research to gain insight on pertinent legislation and regulations affecting mobile home owners, interest rates, insurance costs, and mobile home transportation costs. People contacted included representatives of the Federal Housing Administration, the Veterans Administration, the New Mexico Motor Vehicle Department, banks, savings and loan companies, finance companies, insurance companies, mobile home transport companies, and others.

Comments on Research Effectiveness

Data obtained for the 1965-1969 local mobile home market was found to be fragmented, often incomplete, and was based largely on the recollections of people interviewed. Such data have been interpreted as being only generally descriptive. On the other hand, a great deal of confidence may be placed on historical data taken from published sources describing the mobile home industry as a whole.

CHAPTER III

THE NATIONAL EVOLUTION OF MOBILE HOMES

This chapter discusses the mobile home industry on a national level since its inception in 1930 and comments on the growth of the industry and its contribution since 1965 to the production of new housing units nationally.

Background of the Industry

Modern mobile homes have evolved gradually from what are now referred to as travel trailers. The development of the mobile home can be traced back to January 1930 when the Covered Wagon Company exhibited the first travel trailer (measuring nine feet long by six feet wide) at the Detroit auto show.⁴ The trailer was equipped with windows, folding bunks, and a coal burning stove.⁵ It was immediately popular. By 1936, travel trailers had grown to a maximum length of 23 feet and the Covered Wagon Company reported sales of 6,000 units. This was approximately one sixth of the total number of factory built trailers sold during that year.⁶ The economic posture of the country in the 1930's contributed to the demand for mobile housing. The depression caused many families to look for employment opportunities in other sections of the country. Others engaged in

⁴"200,000 Trailers", Fortune, Vol. XV, (March, 1937), p. 108.

⁵H. I. Phillips, "Home Swift Home", Colliers, Vol. XCIX, (April 24, 1936), p. 29.

⁶"Tin Cannery: Nomads of the Road", The Literary Digest, Vol. CXXII (August 15, 1936), p. 7.

occupations that required them to move frequently from one part of the country to another; e.g. salesmen, farm hands, construction workers and other seasonal laborers.⁷ Some purchased or made trailers to use as temporary housing while enroute.

The war years, 1941-1945, further stimulated the fledgling travel trailer industry. The war build-up required the construction of many new defense plants. The influx of temporary construction workers often doubled the population of a locality. This influx was followed by the arrival of defense workers and/or military personnel needed to staff the new facilities. They all required immediate housing at a time when building materials and manpower requirements not already committed to the war effort were in short supply. Many of these people turned to trailers as substitute semipermanent housing. Officials of the federal government soon realized the potential of trailer dwellings as an adjunct to the defense housing program. Various government agencies purchased trailers for use as temporary housing to minimize the possibility of over building in the new areas of defense or industrial activity.⁸

Trailer quality deteriorated considerably during World War II because manufacturers were required to eliminate as many critical construction materials as possible.⁹ Wooden chassis were substituted for steel ones, some 75 percent of the electrical wiring in trailers was eliminated,

⁷Taylor W. Meloan, Mobile Homes: The Growth and Business Practices of the Industry, (Homewood, Illinois: Irwin, 1954), p. 8.

⁸Meloan, op. cit., pp. 13-14.

⁹"The Use of the Trailer Coach in a Period of National Emergency," Mobile Homes Manufacturers Association (November 15, 1950), p. 13.

the use of plywood was reduced, and canvas duck disappeared as a roof covering. These lowered construction standards resulted in wartime trailers being labeled as substandard housing.¹⁰

Following World War II mobile home sales remained at a high level as returning servicemen increased the demand for housing in many sections of the country to a higher level than it had been during the war years. Production expanded and the quality of mobile homes increased as previously restricted materials again became available.

Increasing Sizes of Mobile Homes

The 8-foot wide trailer of the 1940's gave way in 1954 to the 10-foot wide mobile home.¹¹ By 1961, the 10-foot wide models accounted for 98.5% of all mobile home production. In 1962, demands for more space led to the first substantial appearance of double-wide mobile homes (two units placed together) and expandable models with telescoping sections. Production of double-wides and expandables accounted for 11.8 percent of all production in 1962. Some of 12-foot wide mobile homes also began to appear that year. The 12-foot wide models reached their height of popularity in 1969 when they accounted for 89.7 percent of all mobile homes produced during the first quarter of that year. Fourteen-foot wide models were introduced later in 1969. Although popular in the Albuquerque area, the national sales of 14-foot wide mobile homes have been restricted because laws in many states prohibit their movement on state highways.

¹⁰Meloan, op. cit., pp. 15-16.

¹¹Fredrick H. Blair, Jr. "Mobile Homes and the General Housing Supply," Mobile Homes Manufacturers Association (1970), p. 4.

Increases in length have been as dramatic as increases in width. The average length of new mobile homes doubled between 1947 and 1960, reaching a median length of 55 feet in 1960.¹² Today, mobile homes marketed in Albuquerque range up to 70 feet in length. Table 3 shows the size distribution of mobile homes shipped nationally by the manufacturers during the first quarter of selected calendar years, 1960-1970. Unfortunately, no similar distribution is available for shipments into the Albuquerque market area.

As length and width have increased, there has been a corresponding increase in the average floor space, the variety of models available, the cost, the numbers of people who find mobile homes appealing, and, as will be shown later, an upgrading of the socio-economic level of people who live in mobile homes.

The Mobile Home Industry Since 1965

The national mobile home industry has grown significantly during the past five years. In 1965 and 1966, about 217,000 mobile homes were manufactured each year. Production rose to 240,000 units in 1967, to 317,000 in 1968, and to 413,000 in 1969.¹³ The industry posted a smaller annual gain in 1970 but still managed to set an all-time record by producing 417,000 units.¹⁴

¹²Ibid.

¹³Flash Facts: on Mobile, Sectional and Modular Homes (Chicago: Mobile Home Manufacturer's Association, June 1970), p. 4. Data rounded to nearest thousand.

¹⁴"Business Outlook", Mobile Home and Recreational Vehicle Dealer, Vol. 22, No. 7, (February 5, 1971), p. 8.

TABLE 3

CHANGES IN MOBILE HOME DIMENSIONS; SELECTED
FIRST QUARTER SHIPMENTS, 1960-1970

Width and Length	Per Cent of Total					
	1960	1961	1962	1965	1969	1970
8 feet wide, all lengths	4.3	1.5	1.2	1.2	0.3	1.5
10 feet wide	95.7	98.5	85.4	59.6	0.6	1.8
Under 40 feet	2.2	2.2	2.2	0.5	a	a
40-49 feet	20.5	12.0	10.3	11.1	a	a
50-59 feet	73.0	82.2	69.6	43.9	a	a
60 feet and over	0.0	2.1	3.3	4.1	a	a
12 feet wide	0.0	0.0	1.6	30.9	89.7	83.0
Under 55 feet			0.1	9.9	26.6	21.2
55-59 feet			0.7	8.3	4.7	2.5
60 feet and over			0.8	12.7	58.4	59.3
14 feet wide	0.0	0.0	0.0	0.0	0.0	4.9
50-59 feet						(4.6
60-69 feet						(
70 feet and over						0.3
Expandables and double-wides	0.0	0.0	11.8	8.3	9.4	10.3
Under 40 feet			0.2	0.1	a	a
40-49 feet			1.7	0.6	a	a
50-59 feet			9.6	6.7	a	a
60 feet and over			0.3	0.9	a	a
Expandables			a	a	1.9	2.2
Under 40 feet			a	a	a	a
40-49 feet			a	a	a	a
50-59 feet			a	a	a	a
60 feet and over			a	a	a	a
Double-wides			a	a	7.5	8.1
Under 40 feet			a	a	(2.3	(2.6
40-49 feet			a	a	((
50-59 feet			a	a	2.9	2.3
60 feet and over			a	a	2.3	3.2
Total	100.0	100.0	100.0	100.0	100.0	101.5 ^b

^aNot reported in detail.

^bDoes not equal 100.0% due to rounding.

^cSource: Blair, op. cit., p. 5.

Nationally, mobile homes accounted for 65 per cent of all new single-family housing starts priced below \$15,000 in 1965. By 1969, the last year for which this comparison is available, mobile homes comprised 94 per cent of all new single-family housing starts priced below \$15,000 and one third of all new single-family dwellings being built in the United States.^{15,16}

Mobile Homes Defined

A mobile home is a moveable or portable dwelling designed and built to be towed on its own chassis, connected to utilities, and used for comfortable year-round living without a permanent foundation. It may include sections that can be folded, collapsed, or telescoped to provide easier transportation, and then expanded later to provide additional living space. A mobile home may consist of two or more separately towable units designed to be joined into one integral unit for living, and separated at a later date for repeated towing.¹⁷

The majority of mobile homes being built today are 10 by 40 feet or larger. The single exception to this statement in the Albuquerque market area is a product line of new 8-foot wide mobile homes that range in length

¹⁵ Lawrence A. Meyers, "Mobile Homes Move Into the Breach", Fortune, Vol. LXXXI, No. 3, (March 1970), p. 127-146.

¹⁶ Flash Facts: on Mobile, Sectional and Modular Homes, op. cit. p. 7.

¹⁷ Flash Facts: on Mobile, Sectional and Modular Homes, op. cit. p. 2
This definition excludes units designed as travel trailers, motorized homes, pick-up campers, and tent trailers. Mobile homes should not be confused with travel trailers. A travel trailer is limited in size to 8 by 32 feet, can be operated without utility connections, and is designed to be towed by an automobile and used as a temporary vacation dwelling.

from 37 to 45 feet. Only one dealer in the Albuquerque area handles this product line.

In contrast, a sectional modular home consists of two or more factory fabricated units designed to be transported once to a permanent home site. Upon arrival at the home site the sections are permanently attached to a single foundation and joined together to form a single house.

A double-wide mobile home consists of two (or more) mobile units joined at the home site into a single house, but kept on their separate chassis for repeated towing. Some double-wide mobile homes marketed in Bernalillo County are designed for alternate use as modular houses. In this case, the wheels, axles, and towing hitch are removed from the home before attaching it to the permanent foundation. Sales of double-wide mobile homes intended for use as modular housing are counted as mobile homes after they are permanently attached to a foundation. Triple-wide mobile homes, though manufactured in the United States are not marketed in Bernalillo County.

CHAPTER IV

THE BERNALILLO COUNTY MOBILE HOME

MARKET: 1965-1970

This chapter contains the research findings regarding new and used mobile homes in Bernalillo County, the characteristics of mobile home owners, profiles of typical mobile home parks, a description of local mobile home dealers, and a discussion of the costs associated with mobile home living.

Characteristics of Mobile Homes

Mobile homes are discussed in the following sections in terms of the variations available in new mobile homes being offered for sale by local dealers; and the variations in age, cost, size, use, and location of existing mobile homes owned by individuals.

Variations Available in New Mobile Homes. New single-wide mobile homes offered for sale in Bernalillo County vary in size from 8 x 37 feet to 14 x 75 feet. Double-wides are available in sizes that range from 24 x 32 feet to 24 x 70 feet. These mobile homes typically have a living room; kitchen-dinette or kitchen and dining room; one or two bathrooms; one or more bedrooms; and built in closets and cabinetry throughout. They are normally sold fully equipped with major appliances, furniture, carpeting, draperies, curtains, and lamps, which are all included in the basic price. The buyer is offered a choice of decor that includes Early American, French

Provincial, Mediterranean, Traditional, or Contemporary furnishings. Optional features are available such as refrigerated air conditioning, automatic dishwashers, clothes washers and dryers, and garbage disposals. Some of these options are included in the basic price of the more expensive mobile homes. The typical mobile home in Bernalillo County is heated in the winter by a natural gas forced air furnace and is cooled in the summer by an evaporative cooler.

Age Distribution of Respondent's Mobile Homes. Data contained in the questionnaires returned by mobile home owners was analyzed to determine the model year distribution of the mobile homes that they owned. The average mobile home owned by the respondents was a 1965 model, even though 50 percent of the total owners indicated that their mobile homes were 1968 or newer models. The author divided the respondents into two groups: (1) those who purchased their current mobile homes new, and (2) those whose current mobile homes were used when they purchased them (see Table 4).

In viewing Table 4, it should be noted that the questionnaires were addressed to mobile home owners whose mobile homes were included in the Motor Vehicle Department's registry of February 8, 1970. The mobile home model year varies by manufacturer, but in general, begins in mid-December of the preceding calendar year, e.g. 1971 model mobile homes were being offered for sale in December 1970. Thus, the Motor Vehicle Department listing from which the mailing list was derived would reflect only about the first 6 weeks of 1970 model year sales. This explains the relatively low number of responses from owners of 1970 models as compared to owners of 1969 models. The single owner who responded by saying that his mobile home was a 1971 model is assumed to have traded in an older model mobile home on an early 1971 model sometime before he answered the questionnaire.

TABLE 4
AGE DISTRIBUTION OF MOBILE HOMES
OWNED BY RESPONDENTS

Model Year	Total		Purchased New		Purchased Used	
	Number	Per Cent	Total	Per Cent	Total	Per Cent
1971	1	0.6	1	1.0	0	0
1970	19	11.5	18	18.2	1	1.5
1969	45	27.1	43	43.5	2	3.0
1968	14	8.4	9	9.1	5	7.5
1967	10	6.0	6	6.1	4	6.0
1966	5	3.0	3	3.0	2	3.0
1965	12	7.2	4	4.0	8	12.0
1964	12	7.2	5	5.1	7	10.5
1963	7	4.2	4	4.0	3	4.5
1962	5	3.0	1	1.0	4	6.0
1961	3	1.8	0	0	3	4.5
1960	7	4.2	1	1.0	6	9.0
1959	7	4.2	1	1.0	6	9.0
1958	4	2.4	1	1.0	3	4.5
1957	4	2.4	1	1.0	3	4.5
1956	5	3.0	0	0	5	7.5
1955	1	0.6	0	0	1	1.5
1954	1	0.6	0	0	1	1.5
1953	2	1.2	1	1.0	1	1.5
1952	1	0.6	0	0	1	1.5
1950	1	0.6	0	0	1	1.5
Totals	166	99.8 ^a	99	100.0	67	100.5 ^a
Average Model Year	1965.2		1967.6		1961.8	

^aDoes not equal 100.0 per cent due to rounding.

Source: From mail questionnaire survey conducted by author.

Cost and Size Distribution of Respondent's Mobile Homes. Cost and size distributions were calculated for existing mobile homes based on information supplied by those mobile home owners who responded to the mail questionnaire. These distributions are shown in Tables 5, 6, 7, and 8.

Seventy-six percent of the respondents indicated that they paid between \$3,000 and \$9,999 for their mobile homes (see Table 5). The average price paid by all of the respondents was \$6,525. Those who purchased their mobile home used paid an average price of \$3,943; while those who purchased new mobile homes paid an average price of \$8,328.

Table 6 shows the width distribution of mobile homes whose owners responded to the mail questionnaire. Overall, the 12-foot wide models accounted for the largest percentage of mobile homes. Twelve-foot wide models also accounted for the largest percentage of mobile homes purchased new, whereas the 10-foot wide models were most frequently mentioned by mobile home owners who purchased their units used. This finding supports the information in Table 4 (i.e. used mobile homes tend to be older, and old mobile homes tend to be narrower and shorter).

Table 7 depicts the distribution by length of mobile homes owned by the respondents. Again, this data supports Table 4. The most popular length for all 167 mobile homes was 60 feet (21.6 per cent) and the second most popular length was 55 feet (15.0 per cent). For the 98 mobile homes purchased new, the most popular lengths were 60 and 65 feet, accounting for 29.6 and 16.3 per cent respectively. The 55 and 45 foot lengths were most frequently mentioned by those 69 owners who purchased their units used. Those lengths accounted for 24.6 and 13.0 per cent respectively of the used population.

TABLE 5
PRICE DISTRIBUTION OF MOBILE HOMES

Price	Total		Purchased New		Purchased Used	
	Number	Per cent	Number	Per cent	Number	Per cent
\$1,000-1,999	9	5.5	-		9	13.4
2,000-2,999	11	6.8	-		11	16.4
3,000-3,999	19	11.7	1	1.0	18	26.8
4,000-4,999	17	10.4	7	7.3	10	14.9
5,000-5,999	20	12.3	13	13.5	7	10.4
6,000-6,999	14	8.6	8	8.3	6	9.0
7,000-7,999	18	11.1	16	16.7	2	3.0
8,000-8,999	18	11.1	16	16.7	2	3.0
9,000-9,999	11	6.8	9	9.4	2	3.0
10,000-10,999	8	4.9	8	8.3	-	-
11,000-11,999	6	3.7	6	6.3	-	-
12,000-12,999	3	1.8	3	3.1	-	-
13,000-13,999	2	1.2	2	2.1	-	-
14,000-14,999	3	1.8	3	3.1	-	-
15,000-15,999	2	1.2	2	2.1	-	-
16,000-16,999	-	-	-	-	-	-
17,000-17,999	2	1.2	2	2.1	-	-
Total	163	99.8 ^a	96	100.0	67	99.9 ^a

^aDoes not equal 100.0 per cent due to rounding.

Source: From mail questionnaire survey conducted by author.

TABLE 6
WIDTH DISTRIBUTION OF MOBILE HOMES

Width (feet)	Total		Purchased New		Purchased Used	
	Number	Per cent	Number	Per cent	Number	Per cent
7 ^a	1	0.6	-	-	1	1.5
8 ^a	20	12.0	4	4.1	16	23.2
10	43	25.8	10	10.2	33	47.9
12	78	46.7	62	63.3	16	23.2
14	6	3.6	6	6.1	-	-
20	1	0.6	1	1.0	-	-
24	12	7.2	11	11.2	1	1.5
Expandables	6	3.6	4	4.1	2	2.9
Totals	167	100.1 ^b	98	100.0	69	100.2 ^b

^aClassified as a mobile home because of owner's statement that this was his year round dwelling.

^bDoes not equal 100.0 per cent due to rounding.

Source: From mail questionnaire survey conducted by author.

TABLE 7
LENGTH DISTRIBUTION OF MOBILE HOMES

Length (feet)	Total		Purchased New		Purchased Used	
	Number	Per cent	Number	Per cent	Number	Per cent
24-29 ^a	6	3.6	2	2.0	4	5.8
30-39 ^a	7	4.2	1	1.0	6	8.7
40-49	21	12.6	4	4.1	17	24.6
50-59	66	39.5	35	35.7	31	45.0
60-69	67	40.1	56	57.1	11	16.0
Totals	167	100.0	98	99.9 ^b	69	100.1 ^b

^aClassified as a mobile home because of owners statement that this was his year round dwelling.

^bDoes not equal 100.0 per cent due to rounding.

Source: From mail questionnaire survey conducted by author.

TABLE 8
FLOOR SPACE DISTRIBUTION OF MOBILE HOMES

Floor Space ^a (square feet)	Total		Purchased New		Purchased Used	
	Number	Per cent	Number	Per cent	Number	Per cent
101-200	6	3.6	2	2.0	4	5.8
201-300	6	3.6	2	2.0	4	5.8
301-400	11	6.6	-	-	11	16.0
401-500	21	12.6	5	5.1	16	23.2
501-600	37	22.2	20	20.4	17	24.6
601-700	40	23.9	29	29.6	11	16.0
701-800	25	15.0	20	20.4	5	7.2
801-900	6	3.6	6	6.1	-	-
901-1000	2	1.2	2	2.0	-	-
1001-1100	2	1.2	1	1.0	1	1.4
1101-1200	7	4.2	7	7.2	-	-
1201-1300	-	-	-	-	-	-
1301-1400	3	1.8	3	3.1	-	-
1401-1500	1	1.2	1	1.0	-	-
Totals	167	100.7 ^b	98	99.9 ^b	69	100.0
Averages	580 square feet		712 square feet		477 square feet	

^aFloor space is determined by multiplying length (minus 4 feet for hitch allowance) by width.

^bDoes not equal 100.0 per cent due to rounding.

Source: From mail questionnaire survey conducted by author.

Table 8 presents information on the floor space in the 167 mobile homes reported. It is interesting to note that less than 10 percent of the respondent's mobile homes had over 900 square feet of floor space; the equivalent of a rather small house. The average mobile home purchased new contained 712 square feet of floor space, while the average mobile home purchased used contained only 477 square feet. Regarding cost, the average mobile home purchased new cost \$11.70 per square foot. The average mobile home purchased used cost \$8.26 per square foot. This reflects the decreasing market value of mobile homes as they get older. Depreciation is analyzed in greater detail later.

Use and Location of Existing Mobile Homes. Each recipient of a questionnaire was asked to indicate how he used his mobile home, and where it was located. Choices offered for use included: (a) year round residence, (b) vacation home, and (c) rental property. Choices offered for location were limited to (a) a mobile home court, or (b) other land.¹⁸ Table 9 shows the distribution of answers to these two questions.

Living Area Per Occupant. The typical mobile home surveyed, whether purchased new or used, sheltered 2.5 persons. This figure is considerably lower than the 3.2 persons sheltered in the average housing unit

¹⁸The choices offered for location may have led to some confusion because in some cases a cluster of mobile homes is referred to as a mobile home court or park, even though the mobile home owners own the parcels of land on which their mobile homes are located (i.e.: Jade Park). However, if confusion did in fact occur, it was not evident in the responses. The author therefore assumes that owners who responded by saying that they lived on a mobile home court meant an established court recognized by the county or city, where monthly ground rent is paid. The others are assumed to be living on other privately owned land.

TABLE 9

USES AND LOCATIONS OF EXISTING MOBILE HOMES

Classification	Total		Purchased New		Purchased Used	
	Number	Per cent	Number	Per cent	Number	Per cent
Use						
Year Round Residence	152	90.0	96	97.0	56	80.0
Vacation Home	10	5.9	2	2.0	8	11.4
Rental Property	7	4.1	1	1.0	6	8.6
Total	169	100.0	99	100.0	70	100.0
Location						
Mobile Home Court	112	68.7	74	76.3	38	57.5
Other Land	51	31.3	23	23.7	28	42.5
Total	163	100.0	97	100.0	66	100

Source: From mail questionnaire survey conducted by author.

in Bernalillo County (Table A-1). As was mentioned earlier, respondents who purchased their mobile homes new tend to have larger mobile homes than those owners who purchased their units used (Table 8). Owners of mobile homes in the first group have an average of 286 square feet of floor space available per occupant, while purchasers of used units reported an average of 191 square feet of floor space per occupant. The actual distribution of occupants per mobile home is shown in Table 10.

Characteristics of Mobile Home Owners

As indicated earlier, many mobile home dwellers of the 1930's and 1940's were transients. In the 1930's they frequently comprised a low income group. In the 1940's, they included a moderate income

group forced into mobile homes by the shortage of conventional housing. Many people unfamiliar with the improvements that have been made in mobile home size and construction during the past 15 to 20 years still think of mobile homes as substandard or temporary housing. The answers of those mobile home owners who responded to the questionnaire indicate that this is far from accurate. Mobile homes have been accepted in the Albuquerque market area as an attractive alternate form of housing purchased more for shelter than mobility, and (generally) are thoroughly enjoyed by their owners.

TABLE 10
DISTRIBUTION OF OCCUPANTS PER MOBILE HOME

Number of Occupants	Mobile Homes					
	Total		Purchased New		Purchased Used	
	Number	Per cent	Number	Per cent	Number	Per cent
1	24	14.7	9	9.3	15	22.7
2	81	49.7	53	54.6	28	42.4
3	30	18.4	19	19.6	11	16.7
4	18	11.1	12	12.4	6	9.1
5	6	3.7	3	3.1	3	4.6
6	2	1.2	1	1.0	1	1.5
7	-	-	-	-	-	-
8	2	1.2	-	-	2	3.0
Totals	163	100.0	97	100.0	66	100.0

Source: From mail questionnaire survey conducted by author.

Age Distribution. The age distribution of the heads of the households of mobile home owners responding to the questionnaire is shown in Table 11. The average age for all head-of-household respondents was 47.4 years. There was no significant difference in the average age or age distribution of heads of household who purchased their mobile home new as compared to those who purchased them used.

The double-hump distribution shown in Table 11 largely dispels the popular notion that mobile homes are sold primarily to retired people. The majority of the respondents were clustered in the 21-35 age group and 51-65 age group. The 21-35 age group frequently has pre-school or young grade school children at home and has incomes that are still increasing. The 51-65 age group typically consists of families whose children have left home and who no longer need large conventional houses.

Ethnic Distribution and Chattel Mortgages. Mobile home owners returned 144 of the 512 coded questionnaires. Analysis showed that of those 144, only 11 were returned by owners having Spanish surnames. Two of those 11 indicated that they had purchased their mobile homes used; the remaining 9 had purchased new units. The other respondents had what is popularly referred to as "Anglo" surnames. Of the 133 owners with Anglo surnames, 59 had purchased used units and 74 had purchased new units.

The Motor Vehicle Department registration list showed liens recorded against none of the units purchased used, and 5 of the 9 units purchased new, by persons of Spanish surname. The same list showed liens recorded against 22 of the 59 units purchased used, and 26 of the 74 units purchased new, by persons having Anglo surnames.

The reader might wonder why the response to the questionnaire did not indicate a larger percentage of mobile home ownership by persons

TABLE 11
AGE DISTRIBUTION OF HEADS OF HOUSEHOLDS
OWNING MOBILE HOMES

Age Groups	Total		Purchased New		Purchased Used	
	Number	Per cent	Number	Per cent	Number	Per cent
16 - 20	1	0.6	0	0	1	1.5
21 - 25	16	9.8	9	9.2	7	10.8
26 - 30	15	9.2	11	11.2	4	6.2
31 - 35	17	10.4	11	11.2	6	9.2
36 - 40	8	4.9	4	4.1	4	6.2
41 - 45	15	9.2	9	9.2	6	9.2
46 - 50	10	6.1	8	8.2	2	3.1
51 - 55	25	15.3	14	14.3	11	16.9
56 - 60	17	10.4	13	13.3	4	6.2
61 - 65	17	10.4	7	7.1	10	15.4
66 - 70	13	8.0	7	7.1	6	9.2
71 - 75	6	3.7	4	4.1	2	3.1
70 and over	3	1.8	1	1.0	2	3.1
Totals	163	99.8 ^a	98	100.0	65	100.1 ^a
Average age	47.4 years		46.6 years		48.7 years	

^aDoes not equal 100.0 per cent due to rounding.

Source: From mail questionnaire survey conducted by author.

of Spanish surname. If mobile home living is cost competitive with conventional housing, one would logically expect that 26 per cent of the local persons living in mobile homes would have Spanish surnames.¹⁹

The author suggests that persons of minority groups striving for equality will tend to avoid mobile home living until all real or imagined social stigma associated with mobile home living has been removed.

Occupational and Income Distribution. An attempt was made to classify the respondents by occupation and to compare this information with the occupational distribution provided in Table A-2 for all of Bernalillo County. This attempt was unsuccessful because of many responses that defied categorization.²⁰ The only significant information resulting from this attempt was that most occupational categories listed in Table A-2 seemed to be represented and that 22.4 per cent of all the respondents indicated that they were retired. Retirees included 28 per cent of the mobile home owners who purchased their units used, and 18.5 per cent of respondents who purchased their units new.

An attempt to classify respondents by income was more successful. Surprisingly it showed that the respondents enjoyed a somewhat higher income distribution than is reported in Table A-7 for all of the Albuquerque market area. The exact distribution of the 156 respondents who indicated their income is shown in Table 12. As might be predicted, the data shows a higher income distribution for those owners who purchased new mobile

¹⁹ Twenty-six per cent of the Bernalillo County population in 1960 had Spanish surnames (U.S. Department of Commerce, Bureau of Census, Persons of Spanish Surname, PC(2)-18, August 1963, p. 197).

²⁰ An example is the response of "electrician". This could be placed in any of 4 main categories used in Table A-2: construction, utilities, services, or government.

TABLE 12

COMPARISON OF INCOME DISTRIBUTION; MOBILE HOME OWNERS
VERSUS THE ENTIRE BERNALILLO COUNTY MARKET AREA

Annual Money Income ^a	Income Distribution			
	Bernalillo County Area ^b	Mobile Home Owners ^c		
		Total (156)	Purchases New(91)	Purchased Used(65)
0-\$2,999	14.5	9.0%	5.5%	13.8%
\$3,000-\$4,999	13.7	12.8	5.5	23.1
\$5,000-\$7,999	26.8	30.1	31.8	27.7
\$8,000-\$9,999	15.4	12.8	18.8	4.6
\$10,000 and up	29.6	35.3	38.5	30.8
\$15,000 and up		15.4	16.5	13.8
Total	100.0%	100.0%	100.0%	100.0%

^aEffective buying income or disposable income (including wages, salaries, pensions, properties and rental income, interest, and dividends, less all Federal and State income taxes).

^bFrom Table A-7.

^cFrom mail questionnaire survey conducted by author.

homes than for those who purchased used units.

Years of Living in Mobile Homes and Number of Mobile Homes Lived

In. Owners were asked how many years they had lived in mobile homes and how many mobile homes they had lived in. Fifty per cent of the respondents (purchasers of both new and used mobile homes) indicated that they had lived in mobile homes less than 3 years (Table 13).

Some of the respondents misread the question "How many mobile homes, including this one, have you lived in". This was apparent when some respondents answered (as an example) that they had lived in one mobile home, that it was a 1970 model, and that they had lived in it for three years. It

TABLE 13
NUMBER OF YEARS OF MOBILE HOME LIVING

Years	Percentages		
	Total Respondents (164)	Purchased New (98)	Purchased Used (66)
less than 1	4.9%	1.0%	10.6%
1	26.8	33.7	16.7
2	14.6	12.2	18.2
3	12.2	11.2	13.6
4	4.3	4.1	4.5
5	7.3	7.1	7.6
6	4.9	5.1	4.5
7	3.1	2.0	4.5
8	3.7	3.1	4.5
9	0.6	0	1.5
10	3.6	5.1	1.5
11-15	6.7	7.1	6.1
16-20	3.7	5.1	1.5
21-25	2.4	2.0	3.0
26-30	1.2	1.0	1.5
Total	100.0%	99.8% ^a	99.8% ^a

^aDoes not equal 100.0 per cent due to rounding.

Source: From mail questionnaire survey conducted by author.

seemed apparent to the author that they had lived in one mobile home in addition to the one that they presently occupied. This problem did not occur in the original test mailing. In retrospect, it might have been avoided altogether if the phrase "including this one" had been underlined. The author corrected those obvious errors made by the respondents. The resulting distribution is shown in Table 14. The reader is cautioned, however, that the distribution in Table 14 may still contain some errors which were not apparent to the author.

TABLE 14
NUMBER OF MOBILE HOMES LIVED IN

Mobile Homes Lived In	Number of Respondents					
	Total (164)		Purchased New (98)		Purchased Used (66)	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
1	85	51.8	47	48.0	38	57.6
2	39	23.8	23	23.5	16	24.3
3	23	14.0	15	15.3	8	12.1
4	9	5.5	7	7.1	2	3.0
5	5	3.1	3	3.1	2	3.0
6	1	0.6	1	1.0	-	-
7	1	0.6	1	1.0	-	-
8	1	0.6	1	1.0	-	-
Totals	164	100.0%	98	100.0%	66	100.0%

Source: From mail questionnaire survey conducted by author.

Satisfaction of Owners With Mobile Home Living. The fact that mobile homes are here to stay, not as substitute housing but as an accepted and popular form of housing, is most obvious from the mobile home owners' responses to the last three questions on the questionnaire. When asked, "How much do you enjoy mobile home living?", some 69 per cent indicated "very much". Only 1.2 per cent indicated "not at all". The over all

distribution was highly skewed in favor of mobile home living (see Table 15). Closer inspection of the responses showed that owners who purchased used mobile homes were only slightly less enthusiastic about mobile home living than were purchasers of new units. This slightly lower degree of satisfaction is probably attributable to the smaller size and more compact living conditions encountered in used mobile homes.

TABLE 15

DEGREE OF SATISFACTION EXPRESSED BY MOBILE
HOME OWNERS TOWARD MOBILE HOME LIVING

Degree of Satisfaction	Percentage Response		
	Total (161)	From Purchasers of New Units (98)	From Purchasers of Used Units (63)
Very much	68.7%	71.5%	61.9%
Much	18.0	17.3	19.0
Neutral	11.2	9.2	14.3
Not much	1.9	2.0	1.6
Not at all	1.2	-	3.2
Total	100.0%	100.0%	100.0%

Source: From mail questionnaire survey conducted by author.

In the last two questions, mobile home owners were asked to list those items that they liked and disliked most about mobile home living. The owners gave 217 answers about factors they liked and 113 answers about factors they disliked. Many of the answers were repetitive but all seemed to fall within 13 broad categories (see Table 16).

TABLE 16

FACTORS MOBILE HOME OWNERS LIKE MOST AND
LEAST ABOUT MOBILE HOME LIVING

Responses	Per Cent of Total Responses
<u>Factors Liked Most</u>	
Minimal Maintenance and Housekeeping	41.5%
Low Cost (initial, monthly, and taxes)	23.9
Mobility	17.0
Ownership	9.7
Park Living	5.1
No Vandalism	2.8
Total	100.0%
<u>Factors Liked Least</u>	
Lack of Space	42.5
Parks (layout, rents, restrictions, lack of restrictions)	34.5
Mobile Home Construction	8.8
Prejudicial Attitudes Toward Mobile Home Owners	6.2
Wind Noises	5.3
Depreciation	1.8
Financing	0.9
Total	100.0%

Source: From questionnaire survey conducted by author.

Minimal maintenance and housekeeping was the advantage of mobile home living most frequently mentioned. This was followed by low initial and monthly costs, and mobility. Interestingly, only 17 per cent of the respondents mentioned mobility as one of the things they liked most about mobile home living. Factors liked least appear to be the general lack of space in mobile homes (indicated as more of a problem by owners who bought used units) and dissatisfaction with mobile home parks. Of those respondents who mentioned lack of space as a problem, 42 per cent directed their comments at interior space, 25 per cent at yard space, 22 per cent at storage space, and 11 per cent at the lack of a garage and/or workshop space.

Summary Comments on Bernalillo County Mobile Home Owners. Mobile home owners in Bernalillo County appear to represent all age brackets, although there tends to be fewer in the 36 to 50 year age bracket. Their families are smaller than the average and they apparently feel they need less living area as a result. They are predominantly Anglo, their occupations vary widely, and their income distribution is somewhat higher than the income distribution of the county. Twenty-two per cent are retired and probably live on a fixed income. Half have lived in a mobile home less than three years, but 87 per cent report that they are quite satisfied with mobile home living. As a group, they enjoy mobile homes for a variety of reasons--the most frequently mentioned being minimal maintenance and housekeeping, and low cost. Many indicated that they feel somewhat restricted by the lack of floor space and are unhappy in varying degrees with the mobile home parks in which they live. However, the generally high degree of satisfaction that they expressed toward mobile home living suggests that these objections are of secondary im-

portance.

Profiles of Mobile Home Parks

As mentioned previously, the county defines a mobile home park as any single piece of land having four or more occupied mobile homes (owned by more than one individual) located on it. There are 44 such parks in the county outside of the city. The city defines a park as any single piece of land having two or more occupied mobile homes located on it. The city has 74 mobile home parks. In addition, the author was able to locate four parks where the mobile home owners owned the individual parcels of land on which their units were located. These latter parks are actually mobile home subdivisions, although the owners leave their units on wheels (as do mobile home owners in rental parks) to avoid paying the county property tax.

General. Two thirds of the mobile home owners who responded to the author's questionnaire indicated that their unit was located in a mobile home park. Many of these same people, when asked what they liked least about mobile home living, mentioned mobile home parks. Their comments were directed toward park locations, rental rates, layouts, strict regulations, and lax or nonexistent regulations. Since the comments were not uniform, the reader should not assume that they apply equally to all mobile home parks. Rather, the comments should be interpreted as reflecting that particular individual's attitude toward the park in which he lived.

Evolution of Mobile Home Parks. The evolution of mobile home parks has closely followed the evolution of mobile homes. Early parks were designed to accomodate the standard 8 x 32 foot trailer. Most parks were

built around a community bath, toilet, and laundry facility; recognizing that many early trailers were not equipped with these essentials. Early parks were usually poorly laid out, poorly developed, and in many cases totally devoid of landscaping. The majority of the early "trailer" dwellers were a low income, transient group. Those early mobile home parks were often considered eyesores by their neighbors.

Today, construction standards of new mobile home parks are carefully controlled by zoning ordinances and building regulations. The most modern mobile home parks in Albuquerque offer paved streets, street lighting, landscaping, swimming pools and other recreation facilities, and in one case a 9-hole private golf course.

As mobile homes have increased in size, owners of older mobile parks have been hard pressed to change the layout of their parks to accomodate the newer units. The reader can visualize the work and cost involved in attempting to modify a park to accomodate longer and wider trailers. Underground utilities must be re-routed, concrete patios must be removed and re-poured, roads must be relocated, and frequently landscaping must be completely redone. Parks built in the 1940's were designed for what was then the "large" 8 x 32 foot trailers. By the 1950's mobile homes had increased in size to 10 x 55 feet and prospective buyers were demanding park spaces large enough for those units. The early 1960's saw the introduction of 12 x 60 foot mobile homes, some double-wides, and some expandables. Today, mobile homes being sold in the Albuquerque area range in size up to 14 x 75 feet for single-wides and 24 x 70 feet for double-wides. Triple-wide units, already being marketed in neighboring states, may eventually be sold here.

Manufacturers of mobile homes have gradually shifted production emphasis to larger units as public acceptance of those units has grown. Thus, owners of very old parks have been faced with two choices. They must either modify their parks to accomodate the newer, larger units, or expect that as the smaller, older trailers are retired, their parks will gradually be forced out of business. Short sighted park builders in each of the past three decades have designed their parks to accomodate what they felt was the maximum size mobile home. The frequent complaint about inadequate living area voiced by mobile home owners responding to the author's mail questionnaire indicates that the trend toward more living area will probably continue in the foreseeable future.

Park Rating and Atmosphere. The Woodall Publishing Company publishes an annual national directory of mobile home parks that meet its standards. The company states that its 1970 directory contains descriptive data on nearly 13,000 of the 24,000 mobile home parks in the United States.²¹ The company invites all park owners to request a listing in the directory. Representatives of Woodall's visit each park listed once each year and rate it according to its appearance and management policies. The ratings range from one to five stars (five indicates that Woodall's highest standards are being met). Mobile home parks that fail to qualify for at least one star are not listed in the directory. Appendix E contains the Woodall standards for rating mobile home parks.

The atmosphere of mobile home parks varies from park to park as the construction features and management policies of the parks themselves vary.

²¹Woodall's Mobile Home Park Directory, op. cit., p. 5.

The author believes however that mobile home owners tend to be friendlier toward their neighbors than are people who live in conventional housing. Many mobile home parks are equipped with recreational facilities where park occupants have the opportunity to inter-mingle and get to know each other. Mobile home owners generally make use of their patios on pleasant days to avoid the confinement of their admittedly small homes. The close proximity of their neighbors tends to create situations where they can frequently and conveniently converse. Unlike apartments, most mobile homes have large window areas on all four sides which made the occupants more aware of their neighbors. This also works to the advantage of the owners when they are away from home. Mobile home parks are controlled communities where serious vandalism and professional theft seldom occur. In general, mobile home parks under proper management tend to take on a very "clubby" atmosphere.

Number, Location, and Size of Mobile Home Parks. Woodall's 1970 directory lists 41 mobile home parks in the Albuquerque area.²² The 1970 Albuquerque telephone directory lists telephone numbers for 56 mobile home parks; an increase of 11 over 1965. Ten of the parks currently listed in Woodalls do not have telephone numbers listed in the city telephone directory. City and county use permit records show that there are 118 mobile home rental parks in the local area. Many of these parks are so small that they are considered by the author to be economically insignificant.

The author contacted 73 of the 118 rental parks. Those 73 included

²²Ibid., pp. 669-675.

all of the parks listed in Woodall's, all of the parks listed in the telephone directory, and 7 additional rental parks. The 73 parks contacted ranged in size from 6 to 439 spaces. The average size was 47.2 spaces per park. They included three 5-star parks; five 4-star parks; eight 3-star parks; eleven 2-star parks; fourteen 1-star parks; and thirty-two 0-star parks. Fifty-four of the parks contacted were within the Albuquerque city limits; 16 were in the county but in close proximity to the city; and 3 were located in the Tijeras area 10 miles east of the city.

Age and Other Characteristics of Mobile Home Parks. Each park owner or manager contacted was asked when his park was built. Sixty-six of the 73 were able to respond; the other 7 only knew that their parks were "very old". The distribution of parks by year built is shown in Table 17. Many of the managers or owners mentioned that their parks had been remodeled or enlarged in recent years.

TABLE 17
DISTRIBUTION OF PARKS BY YEAR BUILT

Year Built	Number of Parks	Number of Spaces	
		Total	Average
Unknown-very old	6	275	45.9
Before 1946	10	363	36.3
1946-1950	11	289	26.2
1951-1955	11	269	24.4
1956-1960	17	872	51.3
1961-1965	10	381	38.1
1966-1970	8 ^a	974	121.8
Totals	73	3423	46.9

^aPlus 3 large parks under construction in 1970, size unknown.

Source: From telephone survey and personal interviews conducted by author.

The trend as seen in Table 17 has been toward considerably larger parks since 1966. These larger parks are typically well constructed, have good financing, and are operated by professional managers.

Mobile home parks are built (and remodeled) to accomodate specific sizes of mobile homes. The locations of physical obstructions (e.g. trees, walls, and roads) place definite limitations on the sizes of mobile homes that can be accepted by a mobile home park. Most park owners and managers are painfully aware of these limitations. When asked about the maximum size mobile homes they could accomodate, 70 of the 73 owners and/or managers were able to respond (see Table 18).

Most of the parks contacted had full time managers or resident owner/managers. Usually the manager is a woman who is responsible for sorting mail, collecting rents, and generally seeing that the park functions smoothly. Frequently she is assisted by her husband or a hired man who attends to minor maintenance and supervises the entrance, set-up, and departure of mobile homes. This man frequently is employed elsewhere in addition to his park duties. Larger parks tend to employ full-time husband-wife teams as managers. They are frequently assisted by one or more maintenance employees.

Fifteen of the parks contacted reserved sections in their parks for mobile home owners without children. Some parks further divided these adult sections into sub-sections for adults with pets and adults without pets. Ten of the parks rented to adults only, and five were converting to "adults only" as people with children move out. When asked why they were making this conversion, they generally answered that unless carefully supervised, children tend to cause problems for neighbors and detract from

TABLE 18
 NUMBER OF LOCAL PARKS THAT CAN PARK
 VARIOUS SIZES OF MOBILE HOMES

Maximum Size Mobile Home ^a	Number of Parks
Can park double wides	13
Single wides	
14 x 75	12
14 x 70	15
14 x 68	2
14 x 65	10
14 x 60	6
12 x 65	10
12 x 60	11
12 x 55	1
12 x 50	1
10 x 50	1
8 x 40	1
Unknown	3

^aThese are the maximum sizes that the park can accept for one or more spaces. This does not mean that all spaces in the park can accommodate this size mobile home.

Source: From telephone surveys and personal interviews conducted by author.

the general appearance of the parks. Others mentioned that their parks were not on city water and sewer service, and children increased the load on the park's well and septic tank. Still others said that their parks had no play areas for children.

Rental and Vacancy Rates. Rental and vacancy rates are shown in Table 19 for the 73 mobile home parks canvassed in November and December 1970. Data contained in Table 19 show that rents tend to increase as the quality of the parks increase. Vacancies are essentially non-existent. Figure 1 presents the geographic division of the city.

Most park owners reported that prior to 1968 they found it necessary to advertise to fill their vacancies. Since that time advertising has not been necessary. Those with business telephones listed in the telephone book report that they receive several inquiries each day for vacancies. Many parks have waiting lists. Other parks prefer not to keep waiting lists because they claim that a typical mobile home owner only moves every 3-5 years. Hence, waiting lists frequently are out dated by the time a vacancy occurs.

Several parks reported that they had had their business telephone disconnected to avoid telephone inquiries constantly disrupting their daily work. However, they mentioned that this was only partly successful because non-residents drive through the parks and stop to inquire in person about vacancies.

When a mobile home owner announces his intention to move, the park manager is frequently successful in finding a new tenant before the old tenant vacates his space. In this case, advertising (if necessary) is usually done through word-of-mouth.

TABLE 19

MOBILE HOME SPACES, VACANCIES, AND RENTAL RATES
BY ALBUQUERQUE AREA QUADRANT

Woodall Star Rating	Area Quadrant	Number of Parks	Number of Spaces	Number of Vacancies	Vacancy Rate	Median Rental Rate	
						Single-Wide	Double-Wide
5	NE	1	226	30 ^a	13.5%	\$55.00	\$65.00
	SE	2	552	36 ^b	6.5%	\$47.50	\$60.00
4	NE	2	115	0	0	\$50.00	\$55.00
	SE	3	477	0	0	\$50.00	\$55.00
3	NE	1	43	0	0	\$38.00	-
	NW	7	278	1	0.4%	\$37.50	\$40.00
2	NE	2	51	1	2.0%	\$35.00	-
	SE	4	222	0	0	\$35.00	\$50.00
	NW	4	256	0	0	\$30.00	\$40.00
	SW	1	42	0	0	\$32.50	\$32.50
1	NE	3	94	1	1.1%	\$34.00	\$45.00
	SE	6	153	2	1.3%	\$32.50	-
	NW	4	153	10	6.5%	\$32.50	\$30.00
	SW	1	22	2	9.1%	\$26.50	-
0	NE	6	118	0	0	\$30.00	\$35.00
	SE	9	137	2	1.5%	\$37.50	-
	NW	11	303	1	0.3%	\$28.00	\$30.00
	SW	3	63	1	1.6%	\$26.00	-
	Tijeras	3	118	9	7.6%	\$30.00	\$39.00
Totals		73	3,423	96	3.6% ^c	\$43.50	\$48.75

^aVacancies in new section of park just completed.

^bIncludes 35 vacancies at 1 park just completed.

^cAdjusted for footnotes b & c would yield a vacancy rate of 0.9% for the entire area.

Source: From telephone surveys and personal interviews conducted by author.

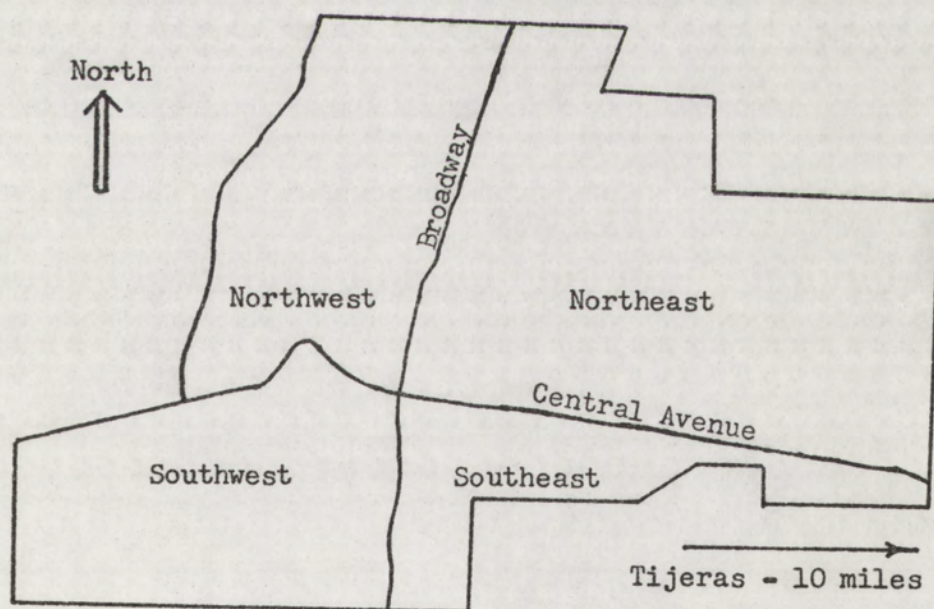


FIGURE 1

GEOGRAPHIC DIVISIONS OF ALBUQUERQUE

None of the 73 park owners reported any working agreement with any mobile home dealer to reserve vacant spaces for that dealer's customers. This is rather surprising to the author in view of the low vacancy rates. The author has personal knowledge that agreements of this type are common in other market areas. Even two parks owned by one of the largest dealers in town are open to any mobile home owner who meets the park's restrictions.

Table 20 contains information on the four mobile home subdivisions or sales parks that the author was able to locate in the Albuquerque area. Three of them are outside the city limits. The newest of the four, though the most expensive, promises to be the nicest. The developers advertise it as a mobile home condominium where land ownership and condominium membership are tied together. A "small monthly charge" (subject to adjustment) pays for natural gas, water, lawn and garden care, property taxes, and maintenance of a club house, pool, and recreation area.

Summary of Comments on Mobile Home Parks. The characteristics of mobile home parks built since 1966 suggest that the evolution in park size, services offered, and management is accelerating.

Large sums of money are finding their way into mobile home park construction. New parks tend to be large parks with professional managers. As late arrivals, they tend to be located farther from business and shopping centers than the older, smaller "Mom and Pop" parks. The new parks are better constructed and offer more recreational facilities and services. They are also more heavily capitalized and must charge higher rental rates. During the 5-10 years required to mature trees and shrubs on the new parks, the older parks with shade may seem more attractive to those mobile home owners familiar with the heat generated by the New Mexico sun beating on

an aluminum roof. Although the trend seems to be toward larger parks, the older parks will probably always enjoy the advantages of central location and lower rental rates.

TABLE 20

MOBILE HOME SITES AVAILABLE FOR PURCHASE
BY ALBUQUERQUE AREA QUADRANT

Area Quadrant	Number of Parks	Number of Spaces	Number of Vacancies	Sales Price		
				Minimum	Maximum	Average
NE	1	115	7	\$4,500 ^a	\$7,500	\$5,600
NW	2 ^b	39	8	\$4,300	\$5,500	\$4,900
SW	1	320	320 ^c	\$4,300	\$9,000	\$6,350

^aPrice dependent on lot size. Lot size varies from 70 x 105 feet to 110 x 110 feet.

^bHalf acre lots throughout. Price varies by location but includes well and septic tank.

^cPrice dependent on lot size. Lot size varies from 40 x 100 feet up to 1 acre. Park under development. Expected to be open by June 1971.

Source: From telephone surveys and personal interviews conducted by author. First sites offered for sale in 1966.

The low vacancy rates shown in Table 19 invite the construction of new mobile home parks. This could lead to over-building. Over building usually triggers price cutting as park owners attempt to attract occupants. This works to the disadvantage of those parks operating on a thin profit margin. Typically this includes new parks as well as old parks under new ownership.

Rental parks make good sense if the person owning the mobile home views himself as being a temporary resident of the community. On the other

hand, information already presented suggests that many mobile homes are being purchased for shelter rather than mobility, and that those mobile home owners are probably no more apt to move than owners of conventional houses. Land ownership makes good economic sense for this non-transient segment of the mobile home population.

Description of Mobile Home Dealers

The following section describes the local mobile home dealers in terms of their numbers, the manufacturers they represent, their annual sales and stock levels, their attitudes toward new and used mobile homes, and the price range and size range of new units that they normally offer for sale.

Number of Sales Organizations and Dealers. The 1965 Albuquerque telephone directory yellow pages listed 23 mobile home sales organizations. That number remained essentially constant until 1969 when it jumped to 31. The 1970 directory lists 42 sales organizations. Of these 42, two had gone out of business by the time the directory was printed. Four others specialized in travel trailers. This left a total of 36 mobile home sales organizations active in Albuquerque as of November 1970, each with its own sales lot. The 36 sales lots are owned by 30 dealers. Three of the 30 dealers are also mobile home manufacturers. All 3 started their manufacturing operations in 1970; one in January, one in July, and one in December.

All 30 dealers were interviewed in person during October and November 1970. Follow up telephone interviews were conducted to clarify certain points throughout the writing of this thesis. Information provided by the dealers concerning earlier years was fragmented, sometimes contradictory, and usually inconclusive. Therefore, the following research findings apply

primarily to the late 1969 and 1970 time period.

Manufacturers Represented. The industry Blue Book lists 580 mobile home manufacturers.²³ None of the three local manufacturers are listed, indicating that the Blue Book is not completely accurate in its listings and that there are probably more than 580 mobile home manufacturers in the country.

The 30 dealers in Bernalillo County as of November 1970 reported during interviews that they actively represented 96 mobile home manufacturers on their sales lots. This number includes four dealers who represent one manufacturer and one very large dealer who represents 21 manufacturers on his single sales lot.

The dealers reported that the manufacturers supplying them shipped from 13 states excluding New Mexico. Texas was the most frequently mentioned state of origin, followed by Kansas, California, Oklahoma, Arkansas, and Nebraska, in declining order. Other states of origin mentioned by 2 or fewer dealers were Alabama, Arizona, Colorado, Florida, Indiana, Louisiana, and Missouri.

The average dealer represents 3.4 manufacturers. This is a considerable number when one realizes that many manufacturers produce mobile homes under more than one brand name. Each brand name is usually available in several widths, lengths, different floor plans, and a variety of interior and exterior decorating schemes.

²³Mary Jane Soderstrom (ed.), "Manufacturers Directory", The Blue Book: of Travel Trailers-Campers-Mobile Homes, (102d ed.; Westchester, Ill.: Judy-Berner, September 1970), pp. 152-183.

It is not unusual to find one manufacturer supplying two or more competing dealers. However, the same brand name (or model) is seldom, if ever, found on competing sales lots. This eliminates the buyer's opportunity to "shop" two or more dealers in an attempt to negotiate a better price. However, a large degree of similarity still remains between competing brands. The author feels that while there are obvious differences between the qualities of equal size mobile homes in different price ranges, these differences become increasingly difficult to detect as the prices of the competing units converge. Once the buyer has settled on a price range, his final selection is usually based on the floor plan and interior decorating that appeal to him the most, and the salesman's persuasiveness.

Annual Sales and Stock Levels of New Units. Table 21 shows the number of new mobile homes shipped into New Mexico to New Mexico mobile home dealers since 1965. A check of the 1970 New Mexico telephone directories revealed that there are 85 mobile home sales lots in the state. The author has concluded from his observations in driving through the state that the 36 sales lots located in Bernalillo County tend to be much larger on the average than the 49 lots located in the other counties. These observations are supported by local dealers' estimates that between 50 and 75 per cent of all new mobile homes shipped into the state are sold by Albuquerque dealers.

Each dealer was asked to estimate his new unit sales over a stated period of time, and his average inventory of new units. Eight of the dealers declined to answer the question concerning sales. The 22 dealers who did answer the question concerning sales represented 25 sales lots. Their individual answers were extrapolated out to 12 months, summed, and discarded as being somewhat inflated when the author realized that by their

individual estimates they sold 2,375 new mobile homes in the preceding 12 months.²⁴ They indicated individual stock turnover rates that ranged from 1.8 to 16.4 times per annum.

TABLE 21
NEW MOBILE HOMES SHIPPED INTO
NEW MEXICO, 1965-1970

Year	Quantity
1965	2,012 ^a
1966	1,824 ^a
1967	1,594 ^a
1968	2,528 ^a
1969	2,679 ^b
1970	3,492 ^b
Total	14,129
Average	2,355

^a19th Annual Survey/Mobile Home Financing, ed., Elrick and Lavidge, Inc., (Chicago: Mobile Homes Manufacturers Association, 1970), p. 9.

^b"Business Outlook", op. cit., 12.

All 30 dealers interviewed provided information concerning their average inventory levels for new mobile homes. Twenty new units per lot was the most frequent stock level mentioned, although a simple average showed that the typical lot stocked 18.7 units. This included two lots that stocked one unit each, one lot that stocked 35 units, and one very

²⁴Twenty-two dealers reported sales of 2,375 new mobile homes. Assuming that these dealers' sales were typical, the 30 dealers in Bernalillo County would have had sales of about 3,240 new units in 1970. This would have left only 252 new units (Table 21) available for sale by the remaining 49 New Mexico mobile home sales lots located outside of the County. This number appears to be too low to be reasonable.

large dealer who reported his single lot stocked an average of 100 new units. Some dealers reported that they kept their stock level uniform year round because their sales were not seasonal. Others stated that their business tended to be seasonal and that they expanded their stock in the summer and allowed it to contract in the winter.

As a group, the 30 dealers reported that they stocked an average of 654 new mobile homes at all times during the year. If they collectively sold 2,620 mobile homes (75 per cent of the State's 1970 total) this would average out to 4.0 inventory turnovers per year. Sales of 1,746 units (50 per cent of the State total) would average out to about 2.7 inventory turnovers per year. Naturally, sales ability and pricing policy greatly influence the inventory turnover rate for any individual lot.

Used Mobile Homes. The dealers' individual attitudes toward used mobile homes varied considerably. Five of the 30 local dealers said that they would not sell used mobile homes, and if they accepted a trade-in, they would wholesale it to another dealer rather than attempt to retail it from their own sales lots. Their reasoning was that (1) used mobile homes taken on trade frequently required extensive clean up and reconditioning, (2) used units are more difficult to floor plan, (3) customers prefer new units, (4) there is more profit in new units, (5) purchasers of new units tend to be a wealthier group and are easier to sell to, and (6) used units have no manufacturers warranties.

On the other hand, 6 dealers actively attempt to purchase used mobile homes for resale, in addition to accepting them as trade-ins on new units. They claimed that (1) there is a better market for used units because prices are significantly lower, (2) the profit margin on used units

is higher, and (3) there are fewer problems with recourse.²⁵ One dealer mentioned that he thought his preference for used mobile homes was probably attributable to his previous experience which had been in the used automobile business until August 1970.

The remaining 19 dealers all indicated that although they preferred to sell new units, they would accept a trade-in when offered and would retail the used mobile home from their own lots unless it was exceptionally dirty. All of the dealers seemed to agree that used mobile homes were generally scarce. The lots that accepted mobile homes as trade-ins reported that they averaged only one used mobile home on their lot in any given month. Only 3 dealers estimated any significant sales inventory of used mobile homes. In the course of a typical month they reported that they would have 9, 12, and 27 used mobile homes respectively on their sales lots.

Sizes, Prices, and Floor Plans of New Units. New mobile homes offered for sale in Bernalillo County during November 1970 varied from 8 to 28 feet in width, from 37 to 75 feet in length, from 272 to 1,584 square feet in floor space, and from \$4,000 to \$24,000 in price. Only one dealer handled 8-foot wide mobile homes, which he considered a specialty item. Only one dealer handled 10-foot wide mobile homes. With the exception of 2 dealer-manufacturers, all the dealers handled 12-foot wide mobile homes. Most handled 14-wides, and only 12 dealers reported that they did not deal in double-wide units. The two dealer-manufacturers mentioned

²⁵ A large percentage of mobile homes are financed "with recourse". Recourse means that the seller agrees to take over the mobile home from the finance company, bank, etc. if the buyer defaults.

produced and sold double-wide mobile homes only.

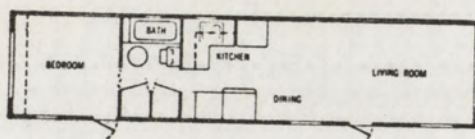
Fourteen dealers said that 12-wides were their best selling or most popular units. Prices for these units ranged from \$5,000 to \$8,000 and their lengths varied from 45 to 65 feet. Seven of the 14 dealers mentioned the 12 x 60 feet size with an average price of \$6,000 as their best seller. Six other dealers said their best selling models were 14-wides varying in length from 60 to 70 feet and in price from \$7,000 to \$10,000. One of the manufacturers stated that his most popular model was 24 x 50 feet and retailed for \$14,500. The remaining nine dealers indicated that their sales distribution curves had no significant peaks that would indicate a "most popular" size.

Mobile home prices quoted include a wide variety of exteriors, interiors, floor plans, furnishings, and decorator touches. Typical mobile home floor plans for 10, 12, and 14 feet widths, expandable, and double wide models are shown in Figure 2. Variations in these floor plans are numerous.

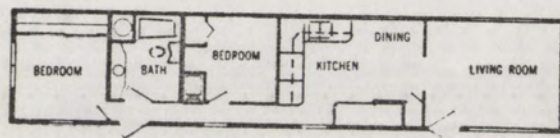
Local Dealer/Manufacturers. There were three manufacturers of mobile homes in the Albuquerque market area as of November 1970. None had been in business one year.

One manufacturer's plant is located in a hanger at an abandoned air field. It had been in operation less than 30 days at the time of the interview. Initial production was single-wide mobile homes which the owner indicated would be marketed through one of his 3 local retail sales lots.

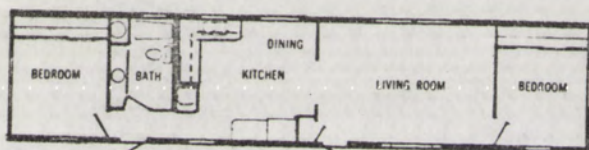
Both of the other manufacturers had extensive experience in the construction of conventional homes before entering the mobile home field.



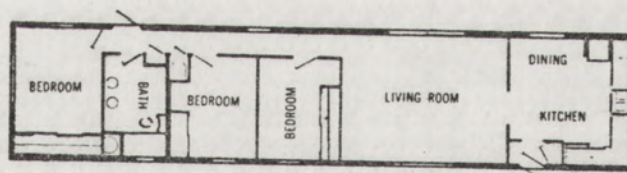
8 Foot Wide



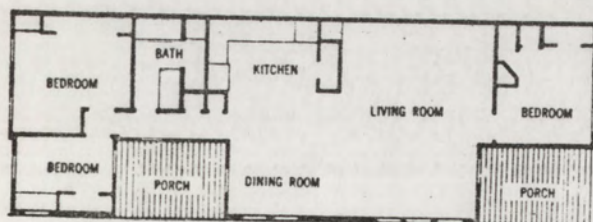
10 Foot Wide



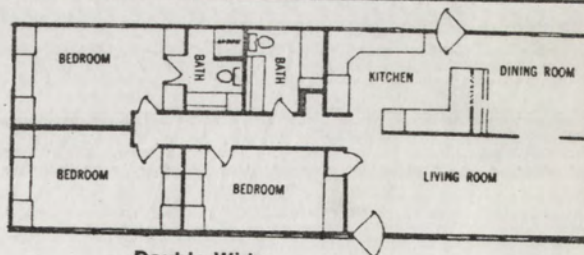
12 Foot Wide



14 Foot Wide



Expandable



Double Wide

FIGURE 2

TYPICAL MOBILE HOME FLOOR PLANS

Source: 19th Annual Survey/Mobile Home Financing, op. cit., p. 11.

Both produce double-wide units only which, in the authors opinion, are essentially assembly line constructed conventional houses built in two sections, each on its own chassis and wheels. Both manufacturers build outside, using nearly conventional building techniques, wooden siding, and pitched asphalt or shake shingle roofs. These homes would satisfy the definition of modular homes, if the buyer chose to use them that way. The sales reports of both companies indicated that they had managed to capture a sizeable share of the local double-wide mobile home market in the short time they had been in business.

The author assumed initially that Albuquerque would be an ideal location for a mobile home manufacturing plant. Mobile home dealers typically pay the cost of moving a mobile home from the manufacturer's plant to their sales lots. This is a significant expense that ranges from \$0.45 to \$1.10 per mile for single-wide units, and twice that for double-wide units. The author felt that a dealer buying from a local manufacturer would enjoy a significant price advantage in the local market because he could avoid the high shipping costs associated with moving the finished product several hundred miles from the point of manufacture to his sales lot. However, many dealers pointed out that an Albuquerque manufacturer's cost of bringing in component parts from the nearest supply points (e.g. Dallas or Denver) would force the manufacturer to increase his sales price. They expressed the opinion that this increased price would more than offset their savings of not having to transport the finished mobile home a significant distance to their sales lots. They substantiated their statement by naming several companies that had made abortive attempts in recent years to establish mobile home manufacturing plants in Bernalillo County. It will be interesting to observe if the 3 local manu-

facturing companies are able to survive.

Dealers-General. The average local mobile home dealer has been a dealer for 5.9 years. This average includes two who have been dealers 20 years or more, and eight who had been dealers for less than one year at the time of interview. On an average, the 30 dealers have been associated with mobile homes for 8.4 years. Three have been in the mobile home business 20 years or more, and seven for less than one year.

Eleven of the dealers reported that they had never lived in a mobile home. Only two of the 30 stated that they did not attend the industry's mobile home shows. As a group, they reported that 29 per cent of their customers paid cash for their mobile homes. They explained that this surprisingly high figure included many middle age buyers moving out of conventional housing to avoid high taxes or gain more leisure time. These buyers use the equity in their conventional house to pay cash for their new mobile homes. Data from the Motor Vehicle Department listing supports this claim. That listing shows that only 37 per cent of the 144 mobile home owners who responded to the author's mail questionnaire had liens recorded against the titles of their mobile homes.

Twenty of the 30 dealers felt that the lack of vacant mobile home spaces in mobile home parks restricted their sales. They mentioned the need for more 2-3 star parks charging \$30-\$35 rent per month per lot, and for more parks that could accommodate double-wides. As a group, they estimated that 27 per cent of their customers were currently locating their mobile homes on private land. A number of dealers also volunteered that this percentage was increasing noticeably in recent months. The two local manufacturers of double-wide units reported that 85 per cent of their combined sales were delivered to land owned by the mobile home

purchasers.

Costs of Mobile Home Living

This section contains general statements concerning the costs of mobile home living (including depreciation, taxation, and transportation) and a fair and reasonably complete comparison of the specific costs that an individual would encounter if he purchased and lived in a mobile home or conventional home of the same approximate size.

Depreciation. When discussing the costs of living in mobile homes, dealers prefer to ignore depreciation. Mobile homes do depreciate, however, and at rather high rate. The Blue Book shows that the wholesale value of most 5-year old mobile homes is approximately 50 per cent of the manufacturer's original suggested retail price. The book advises that the wholesale value is approximately 75 per cent of the fair market value.²⁶ Using this explanation, a 5-year old mobile home that originally sold for \$10,000 would have a wholesale value of \$5,000 and a fair market value of about \$6,700. The depreciation shown in the Blue Book is reflected by insurance coverage offered by such major insurance companies as Allstate, State Farm, and Foremost. Their coverage and premiums for an individual mobile home drop an average of 10 per cent during each of the first five years.

Mobile home depreciation continues after the first five years, but at a more gradual rate. The amount of depreciation after the first five years is dependent on the care given the mobile home and the demand for that particular style of housing. For example, there has been very little

²⁶Soderstrom, op. cit., p. 3

demand for used 8-wide units since larger units became available. Hence, their resale value has suffered. The author can find no good reason why the resale values of large, well maintained units should fall significantly below their original unfurnished, uncarpeted price.

Taxation. New Mexico mobile home owners enjoy a significant tax advantage over owners of conventional homes. Mobile homes in New Mexico are taxed as motor vehicles by the state Motor Vehicle Department. Upon first registration, the owner pays an excise tax equal to two per cent of the value of the unit.²⁷ This can be equated to the closing costs that the home owner pays when purchasing a conventional house. The mobile home owner must also buy an annual license plate. This plate costs \$20.00 for small mobile homes having two axles and \$25.00 for large mobile homes having three or more axles.²⁸ The mobile home owner is able to legally avoid all other property taxes on his unit by buying and displaying a current \$20-\$25 license plate. This significant tax advantage has influenced many families to purchase mobile homes; especially those people whose children are grown and who no longer need all of the space in their conventional home. Unhappily for them, the present tax advantage promises to be temporary.

The State Finance Committee has recommended that the 1971 New Mexico legislature re-write the laws governing mobile home registration. They have recommended that the annual registration fees of mobile homes be

²⁷New Mexico Department of Motor Vehicles, Title and Registration Manual, October 1970, Part 1, Section 1, p. 64.

²⁸Ibid., p. 53.

determined by weight rather than by the number of axles. The proposed basic fee would be \$5.00, plus \$1.00 for each 100 pounds of unladen weight. Thus, a large double-wide mobile home that weighs as much as 38,000 pounds would be assessed \$385 for its annual license, rather than the present \$25 fee. This recommendation, if adopted, will yield significant revenue to the state, but would be less than ideal for the mobile home owners, the mobile home industry, and the counties for the following reasons:

1. The license fees on mobile homes would be higher than the equivalent property tax on conventional homes of equal value.
2. The license fee would not reflect the depreciating market value of mobile homes and would tend to reduce mobile home sales.
3. While license fees are used by the state primarily to maintain roads, mobile homes rarely use the roads. The counties and local governments provide the services that mobile home owners use. Consequently they are the ones who should receive revenues generated from mobile home licensing or taxation; not the highway departments.

Members of the New Mexico Mobile Home Dealer's Association have indicated to the author that they expect changes in the existing laws governing mobile home registration fees. However, they have asked for a one year moratorium on the proposed legislation to give them time to propose a more equitable alternative. The alternative will attempt to (1) raise more revenue for local governments, (2) be fairer to existing mobile home owners, (3) tax mobile homes in proportion to their market value, and (4) be compatible with mobile home taxation policies in neighboring states.

Transportation. As mobile homes increase in size, they become increasingly more expensive to move. Intrastate rates are set by the New Mexico Commerce Commission and must be approved by the Interstate Commerce Commission. Table 22 shows the costs an owner would incur in moving various sizes of mobile homes within the state of New Mexico. Double-wide units being moved within the state are considered as two single-wides for purposes of calculating transportation costs.

Interstate rates are regulated by the Interstate Commerce Commission and vary by the distance involved and the size of the trailer. Double-wide units receive a reduced rate on some interstate shipments. Regulations governing the movement of mobile homes vary from state to state. Some states require double escort cars for the larger mobile homes on all routes. Other states require double escort cars only on certain routes. The cost of escort cars averages 25 to 30 cents per mile per car. In addition, some states require that 14-foot wide coaches be loaded onto a low boy trailer for hauling. All of these costs tend to make mobile homes rather expensive to move, and somewhat immobile. The exception occurs in the case of an individual being moved by his employer, where the employer pays all or most of the moving costs.

General Comparison with Conventional Houses. Mobile homes generally cost less than conventional houses of equal size and quality. However, they depreciate in value whereas the average conventional house appreciates. They are financed over shorter time periods, taxed at lower rates, and their insurance costs are slightly higher. Because of these differences, one must be quite careful in estimating the cost of living in either type of housing. Table 23 contains an estimate of the costs of buying a double-wide mobile home and a conventional house of approximately

TABLE 22
TYPICAL COSTS OF MOVING MOBILE HOMES
WITHIN THE STATE OF NEW MEXICO

Distance (miles)	Size (feet)				
	8 x 40	10 x 50	12 x 60	14 x 70	Double-wides
0-10	\$25.00	\$35.00	\$50.00	\$75.00	Considered as two Single-wide units
11-25	30.00	40.00	55.00	85.00	
26-50	40.00	50.00	75.00	100.00	
51-100	48.50	70.00	102.00	124.00	
Over 100 miles					
Flat Rate or	59.00	86.00	108.00	134.00	
Rate Per Mile	0.45	0.57	0.82	1.10	
(whichever is greatest)					
Trip Permit	2.50	2.50	2.50	2.50	\$2.50
Services ^a					
Unblocking	5.00	7.50	10.00	15.00	b
Reblocking	20.00	25.00	30.00	45.00	b
Packing & Unpacking	70.00	70.00	70.00	70.00	70.00
Escort (per day)	N/A	N/A	c	25.00	as two units

^aIf performed by the transport company. Other services such as removing and replacing skirting, unhooking and reconnecting water, sewer, and electricity can be performed for \$12.50 per hour plus parts. Company does not remove or replace awnings or carports or disassemble or reassemble double-wide mobile homes.

^bTypical Albuquerque labor costs are \$275.00 for disassembling a double-wide mobile home and making it ready for transportation (includes unblocking the mobile home and unhooking the utilities), and \$400.00 for re-assembling the units at the new home site (includes reblocking and reconnecting water, sewer, and electricity).

^cTwelve-foot wide units require escort service on some New Mexico roads. Escort services typically cost \$0.25 per mile with a 40 mile minimum charge.

Source: Information received February 6, 1971 from Mrs. Virginia Thompson, National Trailer Convoy, Inc., Albuquerque, New Mexico. Rates are set for distance by the New Mexico Commerce Commission and do not include 4% sales tax. These rates are for mobile homes owned by individuals, not dealers.

TABLE 23

COST COMPARISONS OF DOUBLE-WIDE MOBILE AND
CONVENTIONAL SINGLE-FAMILY HOMES

Competitive Information	Double-Wide ^a Mobile Home	Conventional ^b Single Home
<u>Specifications</u>		
Living Space	1,344 sq. ft.	1,370 sq. ft.
Land included	No	Yes
Garage	No	Yes
Carpeted	Yes	Partial
Draperies & furnishings	No	No
Appliances	c	d
Simple interest rate on loan or mortgage	12%	8%
Term of loan or mortgage	10 years	30 years
<u>Cost</u>		
Selling price	\$14,700	\$20,800
New Mexico excise tax	294	0
Closing costs	0	300
Total	\$14,994	\$21,100
<u>Initial Cost</u>		
Downpayment	\$2,600	\$1,030
Sales tax	can be financed	0
Closing costs	0	300
Total	\$2,600	\$1,330
<u>Monthly Payments</u>		
Years 1 - 10		
Principal & interest	\$177	\$138
FHA loan insurance	0	8
License or taxes	2	36
Insurance	14	6
Park rent	65	0
Total	\$258	\$188
Years 11 - 30		
Principal & interest	0	\$138
FHA loan insurance	0	8
License or taxes	2	36
Insurance	7	6
Park rent	65	0
Total	\$74	\$188
30-year Total Cost	\$51,320	\$78,960

^aInformation from Nationwide Homes (dealer/manufacturer) 1/30/71.^bInformation from Dale Bellamah Corp. sales representative 1/30/71.^cIncludes stove, refrigerator, and dishwasher.^dIncludes stove and garbage disposal.

the same size. Both units were available for purchase in Albuquerque as of January 30, 1970.

The comparison in Table 23 is imperfect for several reasons. First, the final value of each unit (reflecting depreciation and appreciation) is not included because it is indeterminable for the 30 year period. The projected costs do not include changes in park rent, license fees, or property taxes; nor do they include monthly maintenance costs. Nevertheless, Table 23 does provide a reasonably valid comparison of the monthly out-of-pocket costs associated with living in both types of housing.

CHAPTER V

THE BERNALILLO COUNTY MOBILE

HOME MARKET: 1971-1975

The following sections describe the influence that conventional building activity and legislation will have on the demand for mobile and modular homes through 1975, and the demand that will develop for spaces on which these mobile homes may be located.

Impact of Conventional Housing Sales

Albuquerque area builders of conventional housing increased their production of housing units 112% in 1970 (Table A-4). During this same time period shipments of new mobile homes to New Mexico dealers increased nearly 40 percent (Table 21). If the conventional housing boom continues at its recent pace it will eventually result in higher vacancy rates in rental houses and apartments, as well as lower prices for used houses. This would adversely effect the five-year demand for mobile homes that are used as substitute housing in the area. It would have no effect on those people who buy mobile homes to gain more leisure time through freedom from conventional house maintenance.

Impact of Legislation

New Mexico Taxation. The New Mexico mobile home owners, manufacturers, dealers, and park owners are watching Santa Fe to see what changes, if any, will be enacted in the laws governing registration and licensing

fees for mobile homes. Any increases in fees will be reflected in higher monthly costs for mobile home owners. If the increases are significant, they will probably tend to lessen the demand for mobile homes, unless those increases are offset by other increases in the costs of conventional homes (e.g. increased property tax).

VA Financing. Legislation was enacted in 1970 that allows the Veterans Administration to insure loans made to qualified veterans for the purpose of purchasing mobile homes and mobile home sites. The veteran must intend to occupy the mobile home as his residence at a fixed location. The loan may include the price of the mobile home (up to \$10,000), the land on which it will be located (up to \$5,000), and appropriate site preparation costs such as utility connections, sanitary facilities, driveways, and patios (up to \$2,500). No downpayment is required. A loan on a mobile home may be financed over 12 years and 32 days at up to 10.75 per cent per annum simple interest. A loan covering the cost of the mobile home and the land on which it will be located, as well as site preparation (if applicable) can be financed for 15 years and 32 days. The maximum simple interest rate that can be charged is 10.75 per cent on the mobile home, 7.5 per cent on the land, and 10.75 percent on the site preparation costs.²⁹

As of January 31, 1971, the Veterans Administration had not released guidelines to its area offices on how the new legislation was to be implemented. The terms of the loans (long maturity, relatively low simple

²⁹U.S., Federal Register, Vol. 36, No. 18, January 27, 1971, Part 36-Loan Guaranty, (Washington: General Services Administration, 1971), pp. 1253-1262.

interest, and no down payment) promise to be much more appealing than any financing currently available. The author expects that when implemented (probably before June 1971) this legislation will stimulate national and local sales of mobile homes. This stimulation should at least partially offset the adverse effects on sales of increased local taxation of mobile homes.

FHA Financing. The Housing Act of 1969, signed by the President in December 1969, authorized the FHA to insure mobile home loans under its Title I program. Single-wide mobile homes costing up to \$10,000 can be financed for a maximum period of 12 years and 32 days. Double-wides costing up to \$15,000 can be financed for 15 years and 32 days. The downpayment required by the Act is low by conventional standards: 5 per cent of the first \$6,000 and 10 per cent of any amount over \$6,000. No provisions are made in the Act for the purchase of land. The buyer must intend to occupy the mobile home as his primary residence and locate the mobile home in an FHA-approved mobile home park or on land which he owns.

Implementing regulations were distributed by FHA to the local area offices in March 1970. Unfortunately, these regulations have had no effect on mobile home sales to date because the legislation limited the legal interest rate to a figure that has been below the current market rate.³⁰

A 12-year mobile home loan for \$10,000 insured under FHA Title I would earn a 7.94 per cent annual interest rate over the life of the loan.

³⁰"FHA-Insured Mobile Home Loans," Banking: Journal of the American Bankers Association, Vol. LXIII, No. 4, (October 1970), p. 36.

If other interest rates reach that level, then the mobile home provisions of FHA Title I will take hold and will stimulate mobile home sales.

Further, there is the distinct possibility that Congress will pass new legislation that will allow FHA to consider mobile homes as conventional homes, insure their loans at the same interest rate, collect the same minimal down payment, and include the price of land in the total purchase price. This legislation may occur during the 92nd. Congress.

Demand for New Mobile and Modular Homes

The Department of Housing and Urban Development (HUD) has forecast that mobile home sales will peak at 475,000 units in 1971 and begin to decline in 1972. HUD believes that by then the U.S. will be building housing at the rate of 2.6 million units a year and that mobile homes will no longer be the only type of inexpensive single family housing with widespread availability. The department feels that modular or sectional housing will be well on its way to filling the low cost housing need.³¹

Local mobile home sales will probably peak in the 1970-71 time period and show a gradual contraction through 1975. This contraction will be influenced by the advent of the modular home; improved FHA, VA, and conventional financing of modular homes; and adverse state taxation of mobile homes which will eliminate their present tax advantages. Recognizing this trend, dealers will begin to show more modular homes on

³¹"Mobile Home Industry," The Value Line Investment Survey, Edition 6 (New York: Arnold Bernhard, August 21, 1970), p. 765.

their sales lots.

Even though the author expects new mobile home sales to decline by 1975, the combined dollar sales volume of modular and mobile homes can be expected to increase as a result of inflation and increasing production costs. Modular homes (which are all double-wide units and have more living space than single-wide mobile homes) will probably gain in popularity and eventually all but eliminate the sale of new double-wide mobile homes. They will most likely enjoy better financing and will avoid normal mobile home depreciation if permanently attached to owned land. They will also enjoy some price advantages over small conventional single family houses because of lower labor costs and more efficient production techniques used in their construction.

New mobile homes will be sold primarily to people interested in mobility. Used mobile homes, which are lower in price due to depreciation, will probably remain popular forms of basic shelter with people who cannot afford modular or conventional homes, and who prefer not to live in apartments.

Many of the materials that go into building mobile homes are specialty items not available through local distributors. On the other hand, modular homes use essentially the same locally available materials as are used in building conventional housing. Thus, local manufacturers of modular homes may enjoy a significant price advantage over their competitors who will have to absorb the transportation costs of shipping their product several hundreds of miles into this market area.

Demand for New Rental Parks

Thirty per cent of the mobile home owners who responded to the

author's mail questionnaire indicated that their mobile home was located on private land. The mobile home dealers indicated that 30 per cent of their sales were delivered to private land rather than rental parks-- and that this percentage was growing.

The dealers reported that 50 to 75 per cent of all new mobile homes shipped into New Mexico are sold by Bernalillo County dealers. They also reported that many of their sales are delivered outside of the county. Thus the author has assumed that one third of all new mobile homes shipped into New Mexico stay in Bernalillo County.³² It is further assumed that the inflows and outflows of all used mobile homes balance each other.

If 33 per cent of all new mobile homes sold in New Mexico stay in Bernalillo County, and if 69 per cent of the mobile home owners elect to locate their mobile homes on rental parks (Table 9), then mobile home rental spaces in the county should be increased by 23 per cent (0.33×0.69) of the total new mobile homes shipped annually to New Mexico dealers for the next year or two. The percentage should be increased gradually as modular homes increase in popularity and cause a relative decrease in the sales of mobile homes. The assumption here is that the people who will be buying new mobile homes in five years will be primarily interested in mobility and will therefore desire to rent rather than buy the space their unit is parked on.

Advent of Modular Home Parks and Subdivisions

In the author's opinion, it makes good economic sense for mobile

³² This assumption seems reasonable since one third of the New Mexico population resides in Bernalillo County.

home owners who are not interested in mobility to own the property on which their unit is parked. With this in mind, and with a knowledge of the imminent implementation of VA financing, the author predicts a growing trend toward condominium parks. The land in these parks will be owned by the occupants rather than rented. Maintenance of the grounds and recreational facilities will be accomplished by professional maintenance people hired jointly by the owners. These parks will probably cater to mobile homes in the beginning. However, the mobile home owners will gradually convert to modular homes as modulars gain in popularity.

The author also predicts the advent of modular home subdivisions in single family (R-1) residential areas. In this case, a developer may open up a large parcel of land and invite dealers of modular homes to set up show homes on the land, in much the same way that conventional builders now build model homes. The difference between modular condominiums and modular subdivisions will be that in the subdivisions there will be no professional maintenance and no central recreational facilities owned jointly by the land owners.

CHAPTER VI

SUMMARY AND GENERAL CONCLUSIONS

Material was presented in the preceding chapters which, in the author's opinion, satisfied the objectives of this thesis. That material is summarized briefly in this chapter. Conclusions concerning the original hypotheses are then drawn.

Summary

1. The mobile home industry traces its beginning back to 1930 when the first travel trailer was manufactured. Early mobile homes or travel trailers were small, cramped units which were owned primarily by low income transients. Early mobile home parks tended to be eyesores in the community. As a result, the majority of people looked at mobile homes as a form of substandard housing.

Mobile homes and mobile home parks have improved dramatically since the early 1950's. Today they appeal to persons in nearly all income groups as an attractive type of year-round housing. Unfortunately, some stigma against mobile home living still remains. That stigma will tend to disappear as more and more people become aware of what modern mobile home living actually represents.

2. The average used mobile home in Bernalillo County in October 1970 was a 1965 model that contained about 600 square feet of living space and cost the owner about \$6,500. Mobile homes in Bernalillo County ranged

from 1950 to 1971 models. Their sizes varied from less than 200 to more than 1,400 square feet of living space, and their costs (as reported by owners or dealers) varied from \$1,000 to \$24,000. Mobile home owners represent essentially all job categories. Their disposable incomes vary from less than \$3,000 to more than \$15,000 per annum and, as a group, they enjoy a higher income distribution than has been reported for all of Bernalillo County. Owners tend to be clustered in the 21-35 and 51-65 year-old age groups. Half of the owners have lived in mobile homes less than three years and the majority of all owners are very satisfied with mobile home living.

3. Mobile home parks in Bernalillo County have an occupancy rate in excess of 96 per cent. The rental rates they charge range from \$26.00 to \$65.00 per month per space (plus utilities) and generally tend to increase with the quality of the individual park.

There were 30 mobile home dealers in Bernalillo County as of November 1970. The typical dealer represented three manufacturers, stocked 19 new mobile homes in his sales lot, and had been in the mobile home business in excess of 8 years. Three of the 30 dealers also manufacture mobile homes locally.

Due to the approximate 10-year limitation in financing mobile homes, the monthly out-of-pocket cost associated with living in a large mobile home is greater during the first 10 years than similar costs experienced by owners of conventional houses of equal size financed for 30 years. The owner of any mobile home experiences a significant reduction in monthly expense after his mobile home is paid for. Most mobile homes are smaller than conventional houses. Generally, the monthly out-of-pocket expense

incurred by mobile home owners decreases as the size and price of the mobile homes decrease.

4. Demand for mobile homes through 1975 will be influenced by (a) the competitive pressure of builders of conventional single- and multiple-family housing, (b) the impact of legislation affecting the financing of mobile homes and the tax rate on mobile homes and competing forms of shelter, and (c) the market acceptance of modular homes.

Demand for new mobile home parks through 1975 is tied closely to the demands for mobile and modular homes. The author estimates that there will be a need to provide new rental spaces within the county for 23 per cent of all new mobile homes shipped into the state during the next two years. Demand for park spaces after 1972 will be a function of mobile home sales and the reasons for which mobile homes are purchased.

General Conclusions

Research results support the original hypotheses that mobile homes have increased in popularity in Bernalillo County since 1965 and that the majority of mobile homes are purchased for features other than mobility. The hypothesis that mobile home sales in the county will increase annually through 1975 cannot be supported. The growing popularity of modular homes, proposals for higher taxation of mobile homes being considered by the legislature, and the increased activities in 1970 of builders of conventional single- and multiple-family housing units all suggest that annual mobile home sales may actually decline between now and 1975.

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APPENDIXES

APPENDIX A

DESCRIPTION OF BERNALILLO COUNTY MARKET

AREA AND HOUSING SITUATION

The area for the year 1970 was estimated at 1,789,000. The 1970 census showed that the county had a population of about 316,000 people, of which 281,000 live within the Albuquerque city limits. The rest of the county is made up of 35,000 people living in the surrounding areas. The average number of occupants per household in the area has declined slightly from 3.4 in 1960 to 3.2 in 1970. This trend may or may not continue in the next five years. A report released by the Census Bureau in 1970 estimated that the county population would reach 352,000 by 1975 (Table A-1). That projected population growth is shown in terms of its effect on the demand for housing.

Population Projections for Bernalillo County

Estimates of the county's 1960-1975 population are indicated in Table A-2. These estimates were published in 1970 in the Bernalillo County Planning Report.

The following material describes the economy of Bernalillo County, New Mexico in general and the economic availability of conventional single- and multiple-family housing within that area in particular.

Market Location and Population

Albuquerque, centrally located in the State of New Mexico, is the major population center of Bernalillo County and of the state. The nearest major cities are El Paso, Texas, 270 miles south; Amarillo, Texas, 290 miles east; Denver, Colorado, 430 miles north; and Phoenix, Arizona, 465 miles to the south west. Bernalillo County encompasses an area of 1,169 square miles. Table A-1 provides population and housing data for the area for the years 1960 and 1970 with population estimates for 1965 and 1975. The 1970 census revealed that the county has a population of about 316,000 people, of which 244,000 live within the Albuquerque city limits. The vast majority of the other 72,000 people live within close commuting distance of the city. The average number of occupants per household in the area has declined slightly from 3.42 in 1960 to 3.2 in 1970. This trend may or may not continue in the next five years. A report released by the Census Bureau in 1969 estimated that the county population would reach 352,000 by 1975 (Table A-1). That projected population growth is discussed later in terms of its effect on the demand for housing.

Employment Patterns in Bernalillo County

Estimates of the county's 1960-1975 employment patterns are indicated in Table A-2. Those estimates, developed in 1967 and published in

TABLE A-1

MARKET AREA POPULATION AND HOUSING DATA
AND ESTIMATES, 1960-1975

AREA	1960	1965 ^b	1970	1975 ^b
Bernalillo County Population	262,199 ^a	288,000 ^b	315,774 ^a	352,000 ^b
Albuquerque Population	201,189 ^a	-	243,751 ^a	-
Bernalillo County Housing Units	76,809 ^c	-	98,638 ^d	-
Occupants per Housing Unit	3.42	-	3.20	-

^aU.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, New Mexico Final Population Counts, Advance Report PC(VI)-33, October 1970, p. 3-5.

^bEstimate of the U. S. Department of Commerce, Bureau of the Census, as reported in: "Fastest-Growing Cities, Latest Census Estimates", U.S. News & World Report, Vol. LXVI, No. 13, (March 31, 1969), 55-57.

^cU.S. Department of Commerce, Bureau of the Census, United States Census of Housing: 1960, New Mexico: State and Small Areas, Final Report HC(1)-33, May 1, 1961, P.33-36.

^dU.S. Department of Commerce, Bureau of the Census, Census of Population and Housing: 1970, New Mexico, First Count Tape, File B, October, 1970.

TABLE A-2. PROJECTIONS OF EMPLOYMENT DISTRIBUTION BY INDUSTRY GROUP, BERNALILLO COUNTY, 1960-1975

A-4

Industry Group	1960	1965	1970	1975
Agriculture, Total	1.4%	0.9%	0.6%	0.5%
Mining, Total	0.2	0.2	0.2	0.2
Construction, Total	7.7	7.9	8.1	7.3
Manufacturing, Total	8.1	8.3	8.4	8.9
Lumber, Furniture, Wood Production	0.6	0.6	0.5	0.6
Stone, Clay, & Glass	1.3	1.1	0.9	1.0
Metal Fabrication	0.4	0.4	0.4	0.4
Electrical Machinery	0.2	0.6	0.9	0.9
Scientific Instruments	0.1	0.1	0.1	0.2
Food	1.8	1.5	1.4	1.5
Apparel	0.2	0.2	0.3	0.3
Printing, Publications, Etc.	0.7	0.6	0.6	0.6
All Other Manufacturing	3.0	3.2	3.3	3.5
Transportation, Communications & Utilities, Total	7.3	7.0	6.7	6.6
Trade, Total	20.1	20.1	20.1	20.0
Finance, Insurance, Real Estate Services, Total	5.5	6.1	6.5	6.2
Business and Repair	22.9	23.8	24.5	25.1
Personal Services	9.5	10.0	10.1	10.2
Entertainment	5.9	6.0	6.2	6.4
Professional Services	0.6	0.7	0.8	0.9
Government, Total	6.9	7.2	7.4	7.6
Federal Except Military	26.9	25.7	24.8	25.2
Military	10.9	9.8	9.0	8.9
State and Local	7.7	6.8	6.2	5.4
	8.3	9.1	9.6	10.9
Total	100.0%	100.0%	100.0%	100.0%

Source: Kirschner Associates, Inc., Albuquerque Area 1960-2000: Economic, Population and Housing Characteristics (Place of Publication and Publisher Unknown: January 1968), p. 18. Note: The information contained in this table was originally presented in terms of absolute numbers of people expected to be employed in each year shown. These figures were converted to percentages to show the estimated employment mix by industry group. The interested reader is referred to the original report for arguments supporting the development of the basic data.

1968, are believed to be reasonable estimates of the present distribution of the work force and the best published, composite estimates for 1975. The report in which the original estimates were published reviewed employment in terms of the absolute numbers of employees in each occupational category. Those figures were based on known Census Bureau data for 1960 and employment trends and population estimates for subsequent years. The absolute numbers in the original report have been converted to percentages in Table A-2 to facilitate comparison and reduce the impact of inaccuracies associated with the total number of people originally projected to be employed in each of the years shown.

One category in which the estimated 1975 employment distribution may be quite vulnerable is in manufacturing employment (see Table A-2). Albuquerque has a very aggressive program that is actively attempting to attract industry to the city. Mr. Jarvin of the Albuquerque Chamber of Commerce Industrial Aids Group, while describing that program in mid-1970, estimated that present manufacturing employment would double in the next three to five years. He based this estimate solely on new companies that in the preceding six months had announced their intentions to build manufacturing plants in the Albuquerque area. Jarvin inferred that additional announcements by new manufacturing employers could be expected to occur periodically in the future on a more or less continuing basis. If his optimism proves to be correct, the growth rate of Albuquerque will accelerate and the distribution of employment shown in Table A-2 may be altered significantly. An accelerated growth rate would tend to substantiate the 1975 Census Bureau population estimate for the county (Table A-1). For the time being, however, it is worth noting from Table A-2 that while the economy is diversifying slowly, the major contributors

to the economy are still the federal, state and local governments. The single most important area employer has been and continues to be the federal government with its expenditures for defense-related activities. Any forecasts of the local market must consider the economy's dependence on this major financial mainstay, especially now when most federal priorities and all defense related expenditures are under careful scrutiny. The projections made in this thesis assume that the over-all level of government spending between 1970 and 1975 will remain essentially constant. Furthermore, it is assumed that the employment mix shown in Table A-2 will not change substantially. Any favorable improvement in terms of total employment would of course improve the general demand for housing and the specific demand for mobile homes.

Demand for Housing

While the present popularity and future market for mobile homes in Bernalillo County is the focus of this thesis, it should be obvious that the demand for mobile homes is but one portion of the over-all demand for housing. Total demand for new housing in any area is a function of at least two basic factors: (1) the growth in population, and (2) the attrition rate of existing housing. Using the 1960-1975 population estimates (Table A-1) and certain assumptions (explained later) the total annual demand for new housing through 1975 has been projected. Similarly, by analyzing city and county building records, an assessment has been made regarding how well builders of conventional housing units have been able to satisfy that demand in past years.¹

¹For purposes of this thesis, conventional housing units are defined as houses or apartments that are built on-site, using conventional building techniques, by either a licensed contractor or the owner of the housing unit.

In 1960 there were about 76,800 housing units in Bernalillo County. Each unit housed an average of 3.42 persons. Preliminary data for 1970 indicate that there are now about 98,600 housing units in the County, and that each unit houses an average of 3.20 persons. This decrease in loading per housing unit can be attributed to the general rise in income and standard of living for the economy as a whole. It is conceivable that the loading figure would have been lower than 3.20 if additional lower-priced housing had been available. The housing demand calculations that follow assume that the trend established between 1960 and 1970 will continue through 1975. Specifically, it is assumed that by 1975, each housing unit within the county will shelter an average of 3.09 persons. Using this assumption and the population projections contained in Table A-1, the number of housing units required to house the population through 1975 has been estimated.

An assumption concerning attrition must be made to calculate the over-all demand for new housing. Existing housing units disappear for a multitude of reasons. Among these are age, inadequate maintenance, urban renewal, fire, and natural disaster. In many instances the availability or non-availability of economical replacement housing influences the actual attrition rate. This rate is consequently very hard to predict accurately for any given time period. For purposes of this thesis it will therefore be assumed that in any five year period there is a potential demand to retire five per cent of the housing that was available in the total inventory at the beginning of that particular five year period. This amounts to an effective attrition rate of about one per cent per year. In a static community that had experienced no population growth for 100 years, this would be equivalent to saying that each house had an effective life of 100 years.

In actuality, it is probably a rare house in Bernalillo County that has a life expectancy of anywhere near 100 years, but on the other hand the population of the County has shown steady and constant growth in the past 100 years. Consequently, the assumed one per cent annual attrition rate calculated on the number of housing units existing at the start of any five year period is estimated to be an effective attrition rate of about 2 to 2½ per cent per year if the actual age of each housing unit were considered. This effective attrition rate would reflect a normal or desirable life of about 40 or 50 years for each housing unit.

Finally, it must be emphasized that demand resulting from attrition is a potential demand only. The normal usable life of the average housing unit can and will be extended significantly if replacement housing is not economically available. Any such extension will obviously widen the gap between the potential demand and actual demand. Table A-3 provides estimates of the estimated yearly housing demands for each year through 1975. These estimates are based on the stated assumptions concerning occupancy loading population growth, and housing attrition.

Supply of Housing

The next significant factor in analyzing the local housing market is to determine how well the builders of conventional housing have been able to satisfy the potential demand for new housing units. Records were examined showing the building permits issued by the Albuquerque City Engineer's Office between January 1965 and December 1970, and by the State Construction Board in Santa Fe for Bernalillo County between January 1969 and December 1970. All construction outside of the Albuquerque city limits but within the county has required a state building permit by law only since November, 1968. Previously, construction in the county was uncontrolled

TABLE A-3

ESTIMATED DEMAND FOR NEW HOUSING UNITS, ALBUQUERQUE MARKET AREA, 1960-1975.

	1960	1965	1970	1975
Population (from Table A-1)	262,199	288,000	315,774	352,000
Average Occupancy per Housing Unit	3.42	3.31 ^a	3.20	3.09 ^a
Housing Units Required to House Population	76,809	87,009 ^b	98,638	113,916 ^b
5-Year Increase in Housing Units Required to House Increased Population	-	10,200	11,629	15,278
Yearly Supply of New Housing Units Required to House Increased Population	2,040	2,326	3,056	-
Potential Housing Demand Due to Attrition	-	3,840	4,350	4,932
Estimated Attrition: Number of Houses in 5-Year Period (i.e. 76,809 x .05 = 3,840)	-	3,840	4,350	4,932
Yearly Supply of New Housing Units Required to Compensate for Potential Attrition	768	870	986	-
Total Potential Housing Demand for Each 5-Year Period	-	14,040	15,979	20,210
Annual Housing Starts Required to Meet Potential 5-Year Demand	2,808	3,196	4,042	-

^aEstimated by author using a straight line approximation from known data for 1960 and 1970.^bCalculated by author. (Population divided by Average Occupancy per Housing Unit).

and was not recorded. State records for November and December 1968 were not reviewed because additional information concerning building activity in the county for the balance of 1968 was unavailable.

The numbers of building permits issued for new single family and multiple family conventional housing units in Albuquerque between 1965 and 1970, and in Bernalillo County outside of Albuquerque for 1969 and 1970, are shown in Table A-4. Table A-4 includes estimates of the building activity in the county for the years 1965 through 1968. Those estimates are provided by the author and are based on the numbers of building permits issued for new single family housing units to be built within the City of Albuquerque for the particular year under consideration, multiplied by 0.136.^{2,3}

In comparing the estimated total number of housing units built (supplied) in the 1965-69 period with the potential annual demand for housing (Table A-3) some imbalances are obvious. Specifically, the average estimated production of new conventional housing units between 1965 and 1969 fell short of meeting the demand for (1) housing required for the increasing population by 713 units per year, and (2) the total demand for new housing by 1,583 units per year.

Building permit records for calendar year 1970 show a definite increase in the number of housing units being built. This increase occurred in spite of record high mortgage interest rates that were in effect during most of the year. The record building rate apparently resulted from (1)

²The ratio between the county and city building permits issued for new single family housing units in 1969 is 0.136; the only year in the 1965-1969 period for which complete records are available. The year 1970 was not used for this comparison because of the unusually large number of permits issued for new construction within the city.

³For lack of better data, it has been assumed that a building permit issued for a given year represents a housing unit built in that same year.

TABLE A-4
CONVENTIONAL HOUSING BUILDING PERMITS ISSUED
IN BERNALILLO COUNTY, 1965-1970

Year	Within Albuquerque		Other in County		Estimated Total in County		
	Single Family Units	Multiple Family Units	Single Family Units	Multiple Family Units	Single Family Units	Multiple Family Units	Total Units
1965	1,286	203	175 ^a	0 ^a	1,441	203	1,664
1966	748	211	102 ^a	0 ^a	850	211	1,061
1967	800	506	109 ^a	0 ^a	909	506	1,415
1968	867	1,086	118 ^a	0 ^a	985	1,086	2,071
1969	992	716	135	0	1,127	716	1,843
Average 1965-69	938	546	128	0	1,066	586	1,613
1970	2,162	1,566	166	0	2,328	1,566	3,894

^aEstimated, based on known ratios between county and city for 1969, provided by author.

Source: Building permit records made available by Mrs. Sanchez, Albuquerque City Engineer's Office (January 8, 1971) and Mrs. Byas, State of New Mexico, General Construction Board Office, Santa Fe (January 13, 1971).

the builders recognition of the potential demand for single family housing in all price ranges, (2) the impact of FHA Section 235 on housing sales to low income families, (3) the influx of large sums of money for the construction of apartment houses, and (4) a generally optimistic outlook for the economic future of Albuquerque. In viewing Table A-4, the reader should note the trend toward building multiple family units (apartments) in place of single family units (houses).

Price Trends In Housing

Additional analysis of the building permit records indicated that the prices of single family housing units have increased steadily during the 1965-1970 period. Building permits reflect the cost of the improvements added to the land without including the value of the land itself. Thus, a new house offered for sale by the builder for \$20,000 would not have a \$20,000 building permit associated with it. If the house is fairly priced, the building permit would equal approximately \$20,000 less the price of the lot on which it is located. With this in mind, the author recorded the value of the improvement authorized by each building permit for each new single family dwelling built during the six year period, so that an estimate could be made of the total annual number of new houses built by price category, e.g. \$0 to \$9,999 and \$10,000 to \$14,999.

These individual prices were then increased by twenty per cent to allow for the cost of the lot in the total value assigned to the property. Thus, it was assumed that all \$10,000 houses would by definition be built on \$2,000 lots, thereby giving them a market value of \$12,000; \$20,000 houses would be built on \$4,000 lots, giving them a market value of \$24,000; etc. While it is true that lot prices in the Albuquerque

market area vary substantially depending on the location of the land, the author has concluded that the twenty per cent estimate is uniform and seems to be an equitable way to account for typical lot prices for the purposes of this study.

Table A-5 shows the price distribution and increase in prices for houses built in the City of Albuquerque between 1965 and 1970, and for the remainder of Bernalillo County for 1969 and 1970. While the records for the rest of Bernalillo County are less conclusive, it has been assumed that the same upward trend in price was in effect there. In analyzing the building permits it was determined that nearly all of the city and county permits for housing units with a market value of under \$10,000 were issued to the owner/builder rather than to a licensed contractor. This was also true in a significant number of houses in the under \$15,000 price range.

Cost of Buying a House

Information presented in the preceding paragraphs shows that builders in the Albuquerque market area are building fewer houses each year that are priced in the \$20,000 or under price range. As can be seen by comparing Tables A-6 and A-7, this creates a hardship for those low-to-medium income families who might otherwise be in the market for a new house. Table A-6 shows the typical monthly payments (principal, interest, taxes, and insurance) and the qualifying net income required to buy a new house in Bernalillo County today. Table A-7 shows the approximate annual net money income distribution for all of the households in the county as of December 31, 1969 (figures for 1970 were not available at the time of this writing). The distribution of income in 1969 did not change significantly from 1968.

TABLE A-5
PRICE DISTRIBUTION OF NEW SINGLE FAMILY HOUSING UNITS
BUILT IN THE ALBUQUERQUE MARKET AREA.

Year	Total Number of Units	Within the Albuquerque City Limits						Per Cent Under \$30,000	Per Cent Above \$30,000
		Per Cent Under \$10,000	Per Cent Under \$15,000	Per Cent Under \$20,000	Per Cent Under \$25,000	Per Cent Under \$30,000			
1965	1,286	2.2	22.2	58.6	84.7	94.7	5.3		
1966	748	1.1	12.9	51.2	82.8	94.1	5.9		
1967	800	0.1	8.9	50.3	77.4	92.3	7.7		
1968	867	0.5	9.6	42.4	68.9	90.0	10.0		
1969	992	0.2	13.2	40.2	60.6	78.9	21.1		
1970	2,162	0.1	6.1	35.5	64.2	77.2	22.8		
Outside the Albuquerque City Limits									
1969	135	5.2	20.0	36.3	60.7	78.5	21.5		
1970	166	8.4	28.9	50.0	72.3	80.7	19.3		
Total Albuquerque Market Area Distribution									
1969	1,127	0.8	14.0	39.7	60.5	78.8	21.2		
1970	2,328	0.7	7.7	36.6	64.8	77.5	22.5		

Source: Information developed by author from Albuquerque and Bernalillo County building permit records.

TABLE A-6

QUALIFYING NET INCOME REQUIRED TO BUY A NEW HOUSE IN
BERNALILLO COUNTY, JANUARY 1970.

Total Cost of the House	FHA Minimum Move in Cost ^a	Monthly Payment ^b	Qualifying Net Annual Income ^c
\$10,000	\$600	\$99	\$5,200
\$15,000	\$750	\$145	\$7,600
\$20,000	\$1,520	\$191	\$10,000
\$25,000	\$2,550	\$233	\$12,200

^aIncludes the minimum down payment required by law and all legal closing costs normally borne by the purchaser.

^bIncludes principal, 7 $\frac{1}{8}$ % simple interest, and typical property taxes and insurance. The term of the loan is assumed to be 360 months.

^cIncome (wages, self-employment, pensions, interest, dividends, rental income, and assistance) remaining after Federal and State income taxes, life insurance, and any monthly obligations running more than 1 year.

Source: Information provided by Mr. Domenici of the Albuquerque National Bank on January 18, 1971. A good credit rating was assumed. Provisions of FHA Section 235 do not apply.

TABLE A-7

ANNUAL INCOME DISTRIBUTION OF FAMILIES IN THE
BERNALILLO COUNTY MARKET AREA, 1969

Annual Money Income ^a	Percentage of Families	Cummulative Percentages
0 - \$2,999	14.5	14.5
\$3,000 - \$4,999	13.7	28.2
\$5,000 - \$7,999	26.8	55.2
\$8,000 - \$9,999	15.4	70.4
\$10,000 and up	29.6	100.0
Total	100.0%	100.0%

^aEffective buying income or disposable income (includes wages, salaries, pensions, properties and rental income, interest, and dividends, less all Federal and State income taxes).

Source: Sales Management, The Marketing Magazine (New York City, Sales Management, Inc., June 1970), Vol. 104, No. 14, D-109.

Hence, the 1969 income distribution data are considered to be good approximations for 1970.

Thus, apparently some 28 per cent of the families living in Bernalillo County as of December 31, 1969 couldn't qualify for even a new \$10,000 house; and new houses priced at or below \$10,000 were essentially non-existent (Table A-5). Approximately fifty per cent of the population was unable to qualify for a \$15,000 house; and 70 per cent of the families had a net income of less than the \$10,000 required to qualify for the purchase of a \$20,000 house. In terms of the price distribution of houses presented in Table A-5, this means that the majority of new houses being built are economically available to only the upper-income minority of the local population. Many families who might otherwise be interested in purchasing new housing are kept out of the market because of the apparent inability of builders to offer new conventional housing at a price that allows the family to qualify for a loan.⁴ As a result, medium and medium-to-low income families (those with an annual income of less than \$10,000) are increasingly being forced to seek other types of housing. This pattern is being duplicated across the United States.⁵ Thus, reasons for the increasing popularity of other types of housing are becoming evident.

Conclusions Regarding Housing

The number of new housing units built each year is the end result of a number of influencing factors. Among them are demand caused by increases in population, normal attrition of existing housing, the income

⁴Provisions of FHA Section 235, signed into law in 1968, may help this situation somewhat for certain low income families.

⁵"Coming: Federal Aid in Housing for 24 Million," U.S. News & World Report, Vol. LXVIII. No. 24, (June 15, 1970), 74-76.

level of the potential buyers, and the availability of mortgage money. Available data (Tables A-3 and A-4) indicate that between 1965 and 1969 supply failed to keep pace with demand. The increased building activity in 1970 (Table A-4) indicates a partial correction is beginning to occur. Emphasis, however, is increasingly being placed on the construction of multiple family rather than single family housing units. This is a continuation of a trend established between 1965 and 1969. The continuation of this trend occurs at a time when the vacancy rate for rental housing in Albuquerque is extremely low, resulting in high rents, very high occupancy rates, and lucrative investment opportunities for those willing to build and operate apartments.⁶ Trends manifested in Table A-5 indicate that the progression toward higher priced single family housing units and more apartments will continue in the foreseeable future and probably at least through 1975.

⁶ Department of Housing and Urban Development, Federal Housing Administration, Albuquerque, New Mexico Apartment Occupancy Survey-May, 1970. Released by Albuquerque FHA Office Sept, 1970.

APPENDIX B
QUESTIONNAIRE COVER LETTER MAILED
TO MOBILE HOME OWNERS

October 19, 1970

Dear Mr. or Mrs. Doe,

I am a graduate business student at the University of New Mexico doing research on mobile home owners living in Bernalillo County. I urgently need a few minutes of your time to answer the questions on the attached one-page questionnaire. The purpose of the questions is to gather statistical information about mobile homes and the people such as yourself who own them.

Please take the time today to complete the questionnaire and return it to me. I have enclosed a self-addressed, stamped envelope for your convenience. There is no need for you to identify yourself when answering. Your assistance will help me greatly in completing my work at the University. Thank you very much.

Sincerely,

Bob Clark
Graduate Student
School of Business & Admin.
Sciences, University of New Mexico

P.S. If by chance yours is a camper or travel trailer, then I have reached you by mistake. If so, please answer the first question only and return the questionnaire to me. Thank you.

APPENDIX C
QUESTIONNAIRE MAILED TO
MOBILE HOME OWNERS

QUESTIONS ABOUT YOUR MOBILE HOME

1. What is the year and size of your mobile home?
 - a. My mobile home is a 19_____ model.
 - b. The size is _____ feet wide by _____ feet long.
2. What was the approximate cost of your mobile home when you purchased it? \$ _____

(IN QUESTIONS 3, 4, AND 5, CIRCLE THE LETTER THAT BEST ANSWERS THE QUESTION ASKED)

3. For what purpose do you use your mobile home?
 - (a) year round residence; (b) vacation home; (c) rental property.
4. Was your mobile home new or used when you purchased it? (a) new; (b) used. If used, who did you purchase it from? (a) a dealer; (b) an individual.
5. Where is your mobile home located? (a) a mobile home court; (b) on other land.

QUESTIONS ABOUT YOU AND YOUR FAMILY

1. What is the age of the person who is the head of your household? _____
2. What is that person's main occupation? _____
3. How many people live in your mobile home? _____ adults, _____ children.
4. How many mobile homes, including this one, have you lived in? _____
5. How many years have you lived in mobile homes? _____
6. What is your approximate yearly family income (from all sources) after paying all income taxes? Income could include wages, self-employment, pensions, social security, rental income, interest, dividends, and/or assistance.

(Circle a, b, c, d, e, or f)

- | | | |
|---------------------|---------------------|-----------------------|
| (a) \$2,999 or less | (c) \$5,000 - 7,999 | (e) \$10,000 - 14,999 |
| (b) \$3,000 - 4,999 | (d) \$8,000 - 9,999 | (f) \$15,000 or more |
7. How much do you enjoy mobile home living? (CIRCLE a, b, c, d, or e)
 - (a) very much; (b) much; (c) neutral; (d) not much; (e) not at all.
 8. What do you like most about mobile home living? _____
 9. What do you like least about mobile home living? _____

APPENDIX D
QUESTIONNAIRE USED IN INTERVIEWING
MOBILE HOME DEALERS

NEW UNITS

1. Manufacturers that you actively represent? _____
2. States from which they supply you? _____
3. Number of new units that you normally stock? _____
4. Cost range of the new units you normally handle? _____
5. Size of the new units that you normally handle? _____
6. Approximate number of new units sold, Jan. - Sept. 1970? _____
7. Most popular size? _____, Cost of that size? _____

USED UNITS

1. How do you get them? Trade-ins _____, Outright purchase _____
2. How do you sell them? Retail _____, Wholesale _____
3. Average number of used units you have for sale in any given month? _____
4. Do you prefer to sell new or used units? new _____, used _____
Why? _____

GENERAL

1. How long have you been a dealer? _____
2. How long have you been in the mobile home business? _____
3. Have you ever lived in a mobile home? _____
4. Do you attend the mobile home shows? _____
5. What percentage of your customers pay for their mobile home by:
paying cash? _____, financing with a bank or Savings & Loan? _____,
financing with a finance company? _____, financing with a credit
union? _____.
6. Do you think that your sales are hampered by a lack of vacancies in
available mobile home parks? Yes _____, No _____
7. What percentage of your customers locate their mobile home on pro-
perty other than a mobile home court? _____
8. What percentage of your customers have trade-ins? _____

APPENDIX E
WOODALL'S 1970 STANDARDS FOR
MOBILE HOME PARKS

Source: Woodall's Mobile Home Park Directory, op. cit., pp. 6-12.

ONE STAR PARK

The most important consideration for a one star park is overall appearance. If it is not a decent place to live, it will not be listed in Woodall's Directory.

The following are general requirements:

1. Fair overall appearance.
2. Patios on most lots. May be concrete, asphalt, wood, or some suitable material.
3. Grass, rock or shell to cover ground.
4. Streets fair to good. May be dirt, asphalt or gravel in reasonable condition.
5. Restrooms clean, if any.
6. Adequate laundry or laundromat nearby.
7. If fences allowed, must be neat.
8. Mail service.
9. Homes may be old models but show evidence of care.
10. Manager available some hours of each day.

TWO STAR PARK

In addition to the requirements for a one star park, a two star park will have the following:

1. Landscaping-some lawns and shrubs.
2. Streets in good condition. Must be dust free of crushed rock, gravel or shell minimum.
3. Near storage.
4. Well equipped laundry or laundromat nearby.
5. 220 volt connections available.

6. If children accepted, park should have play area.
7. Park free of clutter, such as old cars and other abandoned equipment.
8. Well maintained and managed.

THREE STAR PARK

What a three star park does it does well but not as uniformly as higher rated parks. Many three star parks were once higher rated, but original construction does not allow for today's 10-foot, 12-foot, and double-wides or the 55-foot and 60-foot lengths. If children are allowed, there should be adequate play area. However, the disarray caused by children may at times be the determining factor that keeps a three star park at that level when it otherwise could be rated higher.

In addition to the requirements for a one and two star park, a three star park must have the following:

1. Attractive entrance.
2. All mobile homes must be in good condition.
3. Awnings and cabana rooms on some homes in southern areas.
4. Some spaces for large mobile homes.
5. Paved or hard surfaced streets.
6. Off-street parking or streets wide enough for safe on-street parking.
7. Good lawns or substitute throughout, shade trees, some shrubs where climate permits.
8. Concrete patios or the equivalent on all lots.
9. All lots neat and attractive.
10. All park buildings in good repair.
11. Good management.

FOUR STAR PARK

(There are two categories. See item 11.)

Four star parks are luxury parks. In addition to the requirements for a one, two and three star park; a four star park must have the following:

1. Good landscaping.
2. Most homes skirted with metal skirts, concrete block, ornamental wood and stone.
3. Paved streets, edged or curbed.
4. Uncrowded lots.
5. Underground utilities if permitted by local conditions and authorities.
6. Most tanks, if present, concealed.
7. Any hedges or fences must be attractive and uniform.
8. Awnings, cabanas, or porches on most homes in southern areas. (Excepting double-wide units.)
9. Most lots to accommodate large mobile homes.
10. Where row parking of homes exists, all must be lined up uniformly.
11. Community hall and/or swimming pool and/or recreation program. If a park is four star in all but this requirement, the fourth star will be printed as an open star indicating a four star park without park-centered recreation.
12. Excellent management.

FIVE STAR PARK

Five star parks are the finest. They should be nearly impossible to improve. In addition to the requirements for a one, two, three and four star park, a five star park must have the following:

1. Well planned and laid out spacious appearance.

2. Good location in regard to accessibility and desirable neighborhood. In some locations park should be enclosed by high hedge or ornamental fence.
3. Wide paved streets in perfect condition. Curbs or lawns edged to streets, sidewalks, street lights, street signs.
4. Homes set back from street.
5. Exceptionally attractive entrance and park sign.
6. Patios at least 8 x 30 ft. (Excepting double-wide units.)
7. Paved off-street parking such as carports or planned parking.
8. All homes skirted.
9. All hitches concealed. Any existing tanks concealed.
10. Recreation, some or all of the following: swimming pool (excepting areas with long, cold winters), shuffleboards, horseshoe pitching, golf course, hobby shop, hobby classes, games, potlucks, dances or natural recreational facilities.
11. Beautifully equipped recreation hall with kitchen. Room for community gatherings, tiled restrooms, etc.
12. Uniform storage sheds or central storage facilities.
13. All late model homes in excellent condition.
14. At least 60% occupancy in order to judge quality of residents which indicates park's ability to maintain a five star rating between inspections.
15. All empty lots grassed, graveled or otherwise well maintained.
16. If pets or children allowed, there must be a place for them to run and play without cluttering the streets and yards. (Most five star parks are for adults only.)
17. Superior management interested in comfort of residents and maintenance of park.